

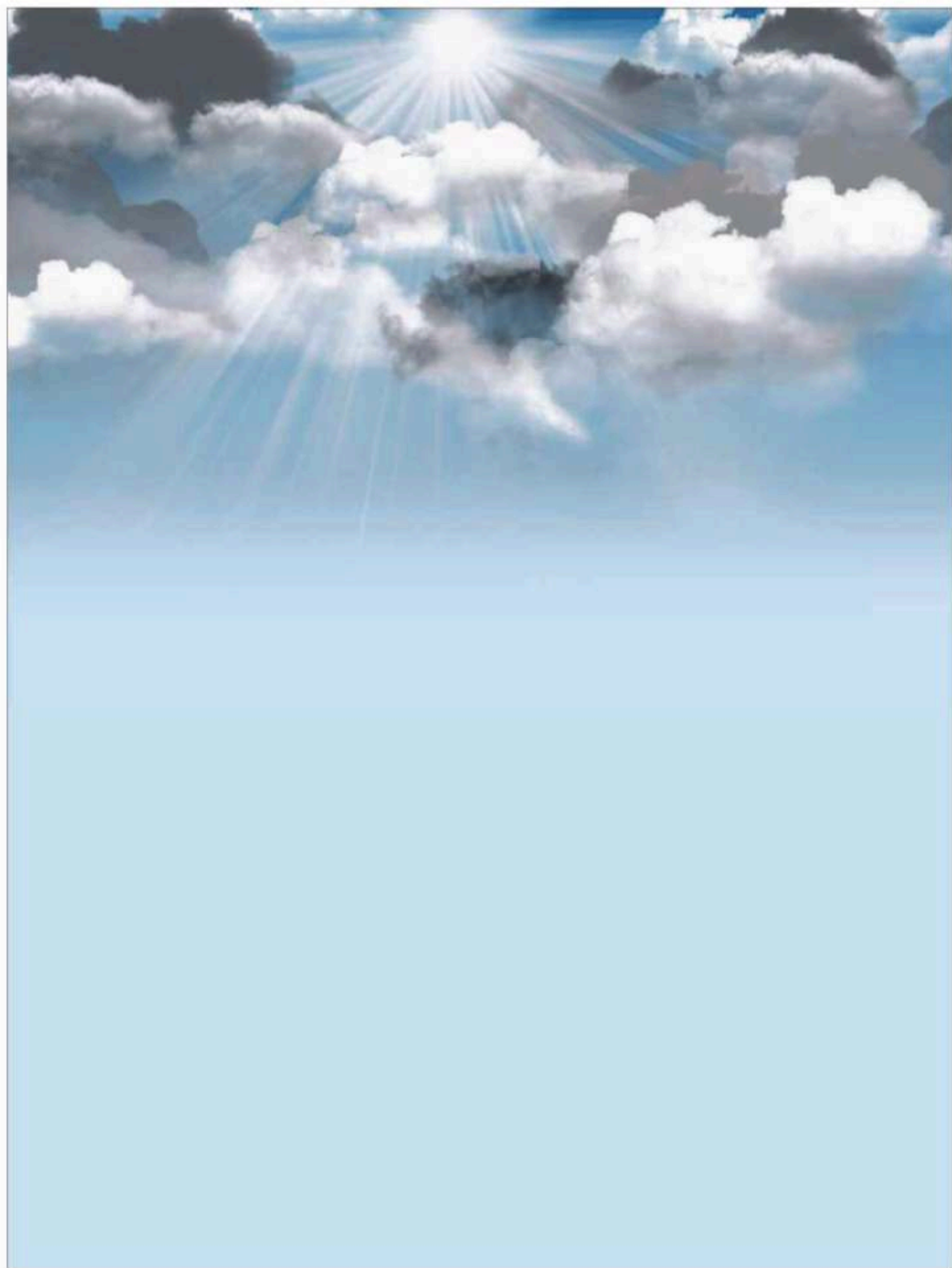


# OGRA

Oil & Gas Regulatory Authority



## Annual Report 2007-08





# *Mission Statement*

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





## The Authority



**M.H. Asif**  
Member Finance

**Rashid Farooq**  
Member Oil/Vice Chairman

**Munir Ahmad**  
Chairman

**Syed Hadi Hasnain**  
Member Gas



## Senior Officers

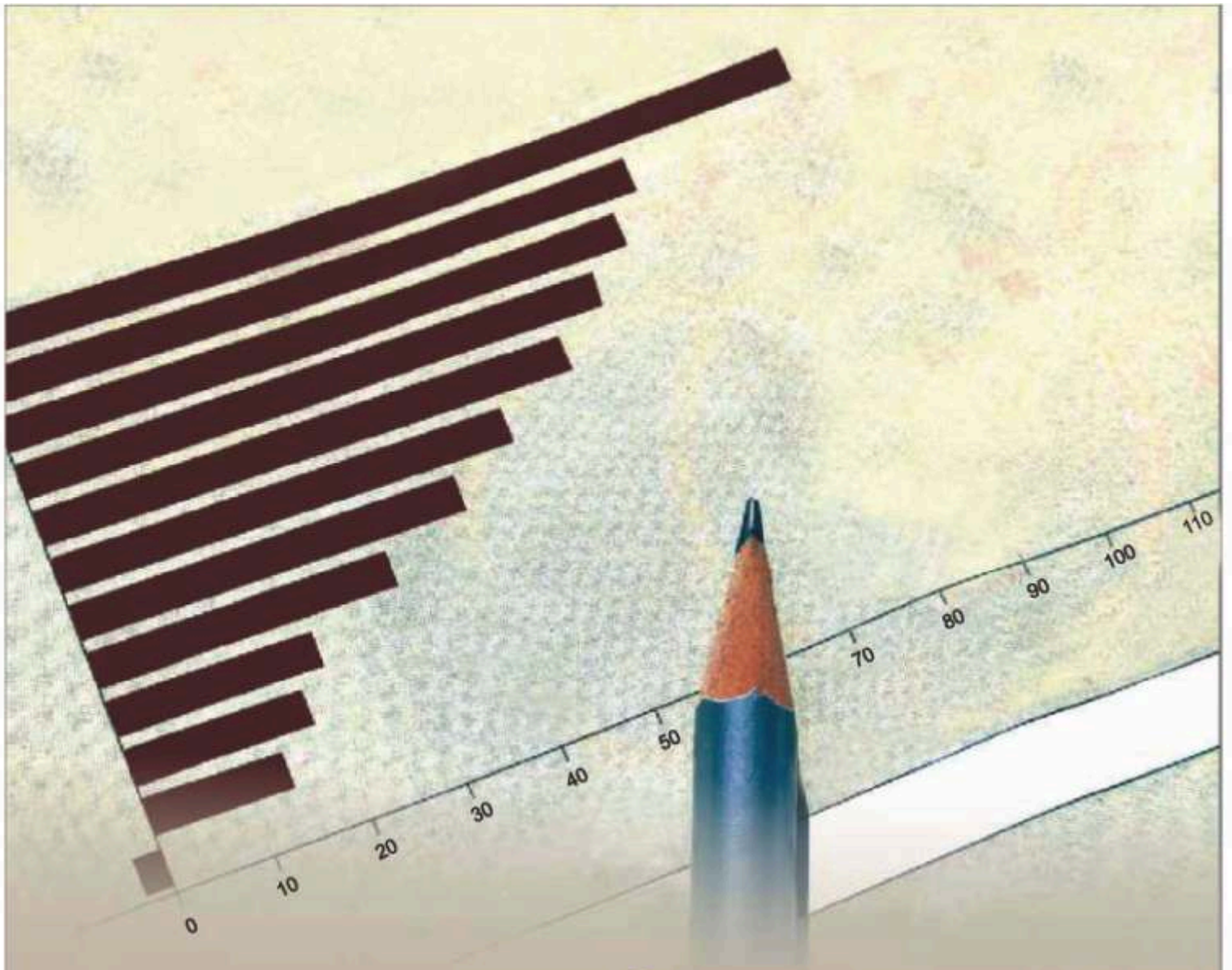


### **Left to Right (Sitting):**

Misbah Yaqub (Joint Executive Director), Muhammad Yasin (Executive Director), Syed Jawad Naseem (Senior Executive Director), Brig. (R) Tariq Mahmud (Secretary/Senior Executive Director), Sarfraz Ali Sheikh (Senior Executive Director), Shahzad Iqbal (Executive Director), Muazzam Hussain Ch. (Executive Director)

### **Left to Right (Standing):**

Osman Mahmood (Project Director), Zain ul Abideen Qureshi (Executive Director), Aamir Nusrat (Joint Executive Director), Lt. Col. (R) Iqbal Qureshi (Principal Law Officer), Anwar Ali Sheikh (Joint Executive Director), Sarmad Aslam (Executive Director), Lt. Col. (R) Farrukh Nadeem (Joint Executive Director), Imran Akhtar (Joint Executive Director), Sohail Ahmed Tariq (Joint Executive Director), Amjad Khan (Joint Executive Director)



*Report*  
*on Conduct of*  
**OGRA**  
*Affairs*



Oil & Gas Regulatory Authority

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## Abbreviations and Acronyms

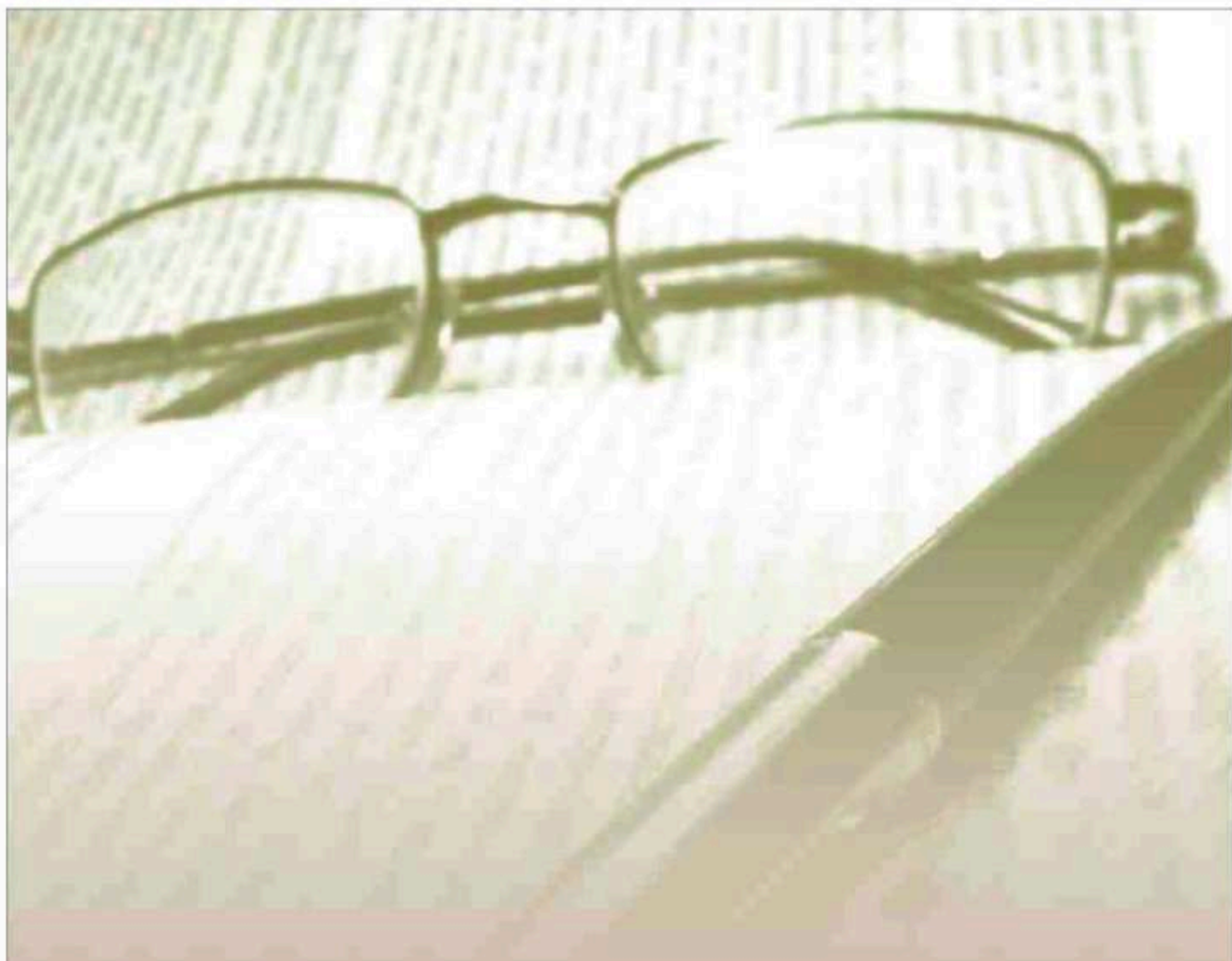
ACPL	Attock Cement Pipeline Limited
AGPL	Admore Gas Pvt Ltd.
AJK	Azad Jammu & Kashmir
ANSI	American National Standards Institute
API	American Petroleum Institute
APL	Attock Petroleum Ltd.
ARAMCO	Arabian-American Oil Company (now known as Saudi Aramco)
ARL	Attock Refinery Limited
ASME	American Society of Mechanical Engineers
BBL	Barrels
BBTU	Billion British Thermal Unit
BHP	Billion Petroleum Pakistan
BJV	Bolan Joint Venture
BOPL	Bosicor Oil Pakistan Limited
BPL	Bosicor Pakistan Limited
BPP	BP Pakistan Exploration and Production Inc.
BTU	British Thermal Unit
C&F	Cost and Freight
CBP	Capacity Building Project
CDA	Capital Development Authority
CEO	Chief Executive Officer
CNG	Compressed Natural Gas
CP	Contract Price
CPGCL	Central Power Generation Company Limited
CRL	Coastal Refinery Limited
CRPR	Complaint Resolution Procedure Regulations
DCO	District Coordination Officer
DFRR	Determination of Final Revenue Requirement
DHCL	Dawood Hercules Chemicals Limited
DWP	Development Working Party
ECC	Economic Coordination Committee
ECPL	Engro Chemicals Pakistan Limited
ERP	Enterprise Resource Planning
ERR	Estimated Revenue Requirement
FATA	Federal Administered Tribal Areas
FFCL	Fauji Fertilizer Company Limited
FG	Federal Government
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
GIREP	Gas Infrastructure Rehabilitation and Expansion Project
GoP	Government of Pakistan
GSA	Gas Sale Agreement
HDIP	Hydrocarbon Development Institute of Pakistan
HITE	Hub Industrial Trading Estate
HOBC	High Octane Blending Component
hp	Horsepower
HR	Human Resource
HSD	High Speed Diesel
HSFO	High Sulfur Fuel Oil
HSPL	Hascombe Storage Pvt Ltd.
ICMAP	Institute of Cost and Management Accountants of Pakistan
IFEM	Inland Freight Equalization Margin
ILBP	Indus Left Bank Pipeline
IPP	Independent Power Producer
IRBP	Indus Right Bank Pipeline
IRL	Indus Refinery Limited
ISA	International Standards for Automation
ISGSL	Inter State Gas Systems (Pvt.) Limited
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
MGCL	Mari Gas Company Ltd.
MMBTU	Million British Thermal Unit
MMcfd	Million Cubic Feet per Day
MMscfd	Million Standard Cubic Feet per Day
MP&NR	Ministry of Petroleum & Natural Resources
MS	Motor Spirit



MT	Metric Tons
MTDF	Medium Term Development Framework
NFPA	National Fire Protection Association
NGRA	Natural Gas Regulatory Authority
NOC	No Objection Certificate
NWFP	North West Frontier Province
OCAC	Oil Companies Advisory Committee
OGDCL	Oil and Gas Development Company Limited
OGRA	Oil and Gas Regulatory Authority
OMC	Oil Marketing Company
PAFL	Pak American Fertilizer Ltd
PARCO	Pak-Arab Refinery Company
PDL	Petroleum Development Levy
PKR	Pakistan Rupee
PPL	Pakistan Petroleum Ltd
PRA	Petroleum Regulatory Authority
PRB	Petroleum Regulatory Board
PSCBP	Public Sector Capacity Building Project
RERR	Review of Estimated Revenue Requirement
RLNG	Re-gasification of Liquid Natural Gas
RON	Research Octane Number
ROW	Right of Way
RR	Revenue Requirement
Rs.	Rupees
SBM	Single Buoy Mooring System
SKO	Superior Kerosene Oil
SMS	Sales Meter Station
SNGPL	Sui Northern Gas Pipelines Ltd
SPGL	Star Power Generation Limited
SSGCL	Sui Southern Gas Company Ltd
TARL	Trans Asia Refinery Limited
TPPL	Total- Parco Pakistan Ltd.
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



# *Chairman's Review*

—— *Historical Perspective*





## 1. CHAIRMAN'S REVIEW

It gives me immense pleasure to present the sixth consecutive annual report of Oil & Gas Regulatory Authority (OGRA). It will also be my last as I shall be retiring on 7<sup>th</sup> September, 2008 after completing my second and final tenure. Before appointment to the present position in the year 2000, by the Federal Government, I have had the opportunity of working with the Ministry of Petroleum and Natural Resources (MP&NR) for over 33 years. This long association with the petroleum sector prompts me to avail this opportunity to briefly narrate, for the posterity, the chequered history of OGRA, an independent regulator, its importance in protecting the interest of public at large by judiciously balancing the interest of all stakeholders and the trials and tribulations experienced on the way.

2. Building a new institution is always a challenging task, more so when it is to be carved out of the well-entrenched bureaucracy, taking away some of the powers enjoyed by the existing hierarchy. Adequate resources have to be found; physical infrastructure has to be put in place; suitable human resource is to be hired, and retained; organization's culture has to be envisioned wisely and nurtured notwithstanding the diverse background of the personnel; organization's internal rules and policies have to be developed; functions-related rules and regulations have to be conceived; and, above all, prudent and dynamic strategies have to be adopted for carrying out the assigned functions efficiently and transparently aiming to gain confidence of all stakeholders. In case of OGRA, it was not just a new institution. It was part of the process of a new paradigm of powers, functions and responsibilities in the oil and gas sector. Independent regulator was being introduced, while in the past, Federal Government's relevant ministry i.e. MP&NR had been the policy maker, the regulator and also, to a great extent, the owner of the operating entities as those was predominantly in public sector.

3. The concept of establishing regulatory bodies in the country was first mooted in early 1990s when privatization of WAPDA and gas utilities was envisaged. In the Petroleum Sector, the first such move was made when the 1994 Petroleum Policy stipulated creation of a Petroleum Regulatory Board (PRB) independent of the MP&NR. However, due to conflicting interests of various stakeholders, its establishment did not materialize.

4. In the year 1995, the Federal Government, by an executive order, established Natural Gas Regulatory Authority (NGRA) with the declared objective of speeding up the process of privatization of the country's two major gas utilities viz SNGPL and SSGCL. However, after over a year, it was wound up, probably due to lack of legislative backing and also expertise in regulatory matters.

5. The Federal Government then initiated a bill for the establishment of NGRA, which was passed by the National Assembly in mid-1999. However, before it could be approved by the Senate, there was a change of administration at the national level, in October, 1999, and, once again, the Authority could not see the light of the day.

6. The new Government's Economic Reforms Agenda also attached high priority to privatization of the gas companies and promulgated the NGRA Ordinance on 11<sup>th</sup> January, 2000 paving, finally, the way to bring NGRA into existence.

7. The Federal Government established the Authority on 31<sup>st</sup> August, 2000 through an order under the NGRA Ordinance and on the same date appointed the chairman and two members viz Member (Technical) and Member (Finance), all selected through an open competitive process.

8. At this point, the conduct of the Government reflected that it was fully supportive of the concept that "the presence of law by itself does not guarantee a well governed state, it is the access to justice and





the interpretation of the statutes leading to proper enforcement and implementation of laws and regulations that makes them accepted and effective and encourages people to accept rules of law. Institutions that are free from political influence, bureaucratic and other pressures tend to be more productive than the others. The principle of non-interference is necessary to provide regulatory bodies that level of space needed to perform their functions properly in an efficient and effective manner.” This principle was reiterated in the Medium Term Development Framework (MTDF) issued by the Federal Government in May, 2005.

9. The Government adopted a globally accepted practice, designed to ensure that the regulatory authorities operate independently within the framework of their specific law and without being unduly influenced by the line Ministry, and placed NGRA with the Law & Justice Division. Soon thereafter, all the regulatory authorities including NGRA were placed with the Cabinet Division for the purpose of interaction with the Federal Government in order to allow them to operate independent of the line ministry.

10. I, alongwith Mr. Jawaid Inam, Member (Technical), former Managing Director, SNGPL, and Mr. Muhammad Shoaib Ansari, Member (Finance), the then Accountant General, Pakistan Revenue, were assigned by the Federal Government, the responsibility of establishing this new institution.

11. In order to accomplish this challenging task single-mindedly and without any conflict of interest, it was extremely important to concentrate wholly on achieving the objective of creating this new institution. Therefore, immediately upon my appointment as Chairman, NGRA, I opted for voluntary pre-mature retirement from the Government's service, where my last appointment was Director General (Gas).

12. The interesting story of NGRA began on 7<sup>th</sup> September, 2000 when I assumed charge as its Chairman. At point zero, there was no money and no roof to sit under. It was with the courtesy of Mr. Abdullah Yusuf, the then Secretary MP&NR, that we continued to use the office facilities of the Directorate General (Gas) for a couple of months.

13. The first and foremost challenge was to get the seed-money of Rs. 50.0 million from the Government for establishment of the Authority as provided in the Ordinance. It were Mr. Shoaib Ansari's tremendous efforts in the backdrop of his long experience of dealing with the financial matters that, after going through a rather long rigmarole of procedures, the fund was finally released by the Federal Government towards the end of November, 2000.

14. The second priority before us was to secure a suitable office accommodation and bring on board some experts on financial and legal matters so that drafting of rules and regulations could be taken in hand. A gracious gesture came from M/s. Liberty Power Limited who made available to us about 6-7 rooms in Razia Shariff Plaza, Blue Area, Islamabad, with all office facilities as a stop-gap arrangement. This was indeed a great help.

15. Right from the beginning, it was consciously decided that progressive corporate culture would be promoted attracting fully qualified and highly experienced professionals in the field of engineering, finance, law etc. by offering them market-based compensation and also keeping the strength to minimum. There were difficulties in finding the right persons as Islamabad is not a popular destination for professionals who, normally are based in commercial cities. However, the Authority, through concerted efforts and totally transparent process, was able to overcome this problem.

16. It is worth mentioning that the Government had provided only seed money of Rs. 50.0 million and beyond this, the Authority was required to be self-financing. The funds were to come from fees and



charges to be levied on the limited number of licensees/entities falling within its jurisdiction at that time, i.e. those carrying out transmission, distribution and sale of natural gas. Therefore, we attached top priority to framing the Natural Gas Licensing Rules, a fundamental enabling document, for issue of licences to the gas utilities. On one hand, efforts were being made for locating proper accommodation for the Authority and on the other, the members were dedicatedly working for formulating the Rules. For professional support in this task, services of prominent legal experts were hired with the help of a World Bank's grant.

17. The Authority managed to complete an extensive process of consultation with the stakeholders including MP&NR, Privatization Commission and World Bank within three months, finalizing the Natural Gas Licensing Rules and approached the Federal Government requesting (and hoping) for early approval. However, in spite of our best efforts, the hopes were dashed. The Government's approval took almost two years, mainly because various quarters persisted with raising issues. I would not question their bonafides. Perhaps, it was the fear of unknown, the apprehensions of what would happen if total Government control was allowed to give way to independent regulation and, may be, reluctance to let go the powers enjoyed so far. The Licensing Rules, as approved by the Federal Government, were finally notified by the Authority in the official gazette on 26<sup>th</sup> February, 2002.

18. It was a major step forward and paved the way for the Authority to start performing its regulatory functions. It also ensured financial solvency. In accordance with these rules, the two gas companies namely SNGPL and SSGCL, already carrying out the regulated activities of transmission, distribution and sale of natural gas, became "deemed licensees" liable to pay prescribed fees to the Authority. This injection of funds provided the much needed funds to ensure steady growth of the new organization.

19. During the intervening period, from December, 2000 to February, 2002, while the Authority was making all out efforts to secure approval of the Licensing Rules from the Federal Government, it was also engaged by MP&NR in working on an alternative concept of substituting NGRA with a Petroleum Regulatory Authority (PRA) to cover regulation of entire midstream and downstream oil sector as well as upstream petroleum sector to a certain extent. Later, the Federal Government decided to review this concept in consultation with all concerned through the Cabinet Division.

20. The Cabinet Division, in consultation with NGRA and other concerned ministries, formulated a new proposal, for establishing of Oil and Gas Regulatory Authority (OGRA), to regulate the midstream and downstream oil sector, partially modifying the concept of PRA. It was thought that including regulation of a part of upstream sector in this Authority's purview would be detrimental to investment in exploration and production sector.

21. The process of finalizing the legal framework of OGRA took about two years and ultimately the OGRA Ordinance (No. XVII of 2002) was promulgated on 28<sup>th</sup> March, 2002 establishing OGRA, subsuming NGRA in it. Its regulatory responsibilities covered the entire midstream and downstream petroleum sector. However, the transfer of powers from MP&NR took place gradually. Gas sector regulation came simultaneously with promulgation of OGRA Ordinance on 28<sup>th</sup> March, 2002. LPG and CNG sectors were transferred on 15<sup>th</sup> March, 2003 and oil sector on 15<sup>th</sup> March, 2006. In April, 2006, the function of pricing of petroleum products was also transferred to OGRA and recently the Federal Government has decided that CNG prices too would be regulated by OGRA and necessary amendments in the law are being processed.

22. OGRA Ordinance provided that the Authority would comprise one chairman and three members viz. Member (Gas), Member (Oil) and Member (Finance). The existing Chairman, Members and other employees of NGRA, at the time of establishment of OGRA, continued on the existing terms &





conditions.

23. The Authority has since been established on sound foundations. It has a relatively flat and thin structure with professionals in the fields of engineering, economics, law and finance forming the core. At the same time, the provincial quota requirements as prescribed by the Federal Government are being observed. On 30<sup>th</sup> June, 2008, the Authority had 76 professionals, 24 other executives and 108 support staff with low officer-subordinate ratio of 1:1. The budget expenditure of the Authority for FY 2008-09 is Rs.463.45 million, which exceeds the estimated revenue by Rs. 213.05. The deficit will be met from the substantial savings by the Authority in its earlier years.

24. The Authority is presently housed in three different hired buildings in G-6 Markaz, Islamabad. This arrangement, obviously, is temporary in nature and can not continue indefinitely. Therefore, the Authority is embarking on construction of its Head Office Building. After prolonged effort, CDA has allotted us two adjacent plots of land measuring 1555 sq. yds each, with the approval of the Prime Minister, in Mauve Area, G-10/4, Islamabad. PC-I of this building has been approved and a prominent consulting firm has been appointed for planning, designing and supervising its construction. CDA has approved the design and the foundation stone is expected to be laid before the year 2008 is out. The project is expected to be completed by mid 2011.

25. Over the years, OGRA has successfully developed and enforced rules and regulations necessary for carrying out its responsibilities effectively and efficiently. It has granted non-exclusive integrated licences for natural gas transmission, distribution and sale to SNGPL and SSGCL, and for sale of gas to three gas producers namely Oil and Gas Development Company Limited (OGDCL), Pakistan Petroleum Limited (PPL) and Mari Gas Company Limited (MGCL), who sell gas directly to bulk consumers like power and fertilizer producers. Licences for transmission of natural gas from the gas producers' delivery points have also been granted to four fertilizer and power producers namely Engro, Fatima Fertilizer, Fauji Fertilizer, WAPDA Guddu Power Plant.

26. Grant of licences to SNGPL and SSGCL took place smoothly. However, gas producers were reluctant to apply for licences from the Authority, thinking that they fell in the upstream sector which was not within the Authority's jurisdiction. After long drawn, patient dialogue, they realized that selling gas directly to the bulk consumers was a regulated activity and applied for licence. The Authority issued the same, effective from the date of promulgation of the OGRA Ordinance.

27. A significant achievement, worth special mention, is introduction of efficiency benchmarks in case of natural gas companies, thereby restricting their line losses (unaccounted for gas) and HR costs to reasonable levels. These efficiency benchmarks have proved extremely useful inasmuch as the gas companies are incentivized to make serious efforts to contain national resource loss and minimize these elements of operating costs to a minimum. An amount of almost Rs.10.0 billion, representing expenditure in excess of benchmarks, has been borne by the gas companies from their own resources during the last six years benefiting the consumers at large.

28. Another noteworthy consumer-friendly initiative is establishment of an adequately staffed and dedicated Complaint Resolution Department, headed by an Executive Director. It entertains the consumers' complaints against the gas, LPG, CNG and oil companies without any fee and with almost no formalities. The complaints are resolved expeditiously and the public is largely appreciative of the efficient and judicious manner in which this department is providing remedy against the errant service providers. During last five years, 3,668 complaints have been resolved. An important aspect of complaint resolution procedure is that the persons, not satisfied with the orders of the Designated Officer, deciding the complaint in the first instance, have the right to appeal to the Authority. Such appeals are



normally disposed of by the Authority within a maximum period of ninety days, after providing opportunity of hearing to the parties. Under the OGRA law, any person aggrieved by a decision of the Authority may approach the High Court. The Authority has so far decided 72 appeals whereas 14 recent appeals are under process. In two cases, the gas companies approached the respective high courts against the decisions of the Authority. In one case, the Sindh High Court decided the matter in favour of SSGCL. However, on the Authority's petition, the Supreme Court of Pakistan suspended that decision. The other case is pending in the Lahore High Court.

29. The Government's strategy of providing financial and operational independence to regulatory bodies was based on the experience of developed and emerging economies. The letter and spirit of the law was, and is, that OGRA should function independently, within the bounds of law, and in policy matters, Government could issue policy guidelines to OGRA with the approval of the Cabinet or a committee thereof, such as are not inconsistent with the OGRA law. There have been quite a few Government functionaries who appreciated the wisdom of this distribution of powers and without their support, OGRA would not have been where it is today. However, there have been others, who would like to undermine this body by undue interference in matters falling in its jurisdiction. They put the Government's well-considered policy of separating policy and regulatory functions under stress. Even in the case of Cabinet Division, which, quite justifiably, is expected to strengthen the system as intended by the law maker, there have been instances of adoption of intrusive approach, conflicting with the Government policy and law.

30. The regulatory authorities are constantly faced with the hard choice of functioning within the framework of law, their main protection or succumb to unfair pressures. It would be in the long term national interest that these bodies are allowed to function independently in accordance with their respective laws - in fact strengthened - and as and when policy directions need to be given, that be done by issuing formal policy guidelines. It goes without saying that public interest lies in the observance of law by all, more so by those who wield more power. The Federal Government must support and strengthen the regulatory authorities and their independent decision-making system within the framework of the law and policy guidelines to derive maximum benefit out of these establishments in the larger public interest.

31. Coming to the FY 2007-08, highlights are given below:

- Issued two licences for transmission of natural gas and gas storage facility
- Approved four natural gas sale/supply agreements between producers and licensees and seven between licensees and retail consumers
- Processed and decided eleven petitions of revenue requirements of both the natural gas utilities, after public hearings.
- Completed three determinations of prescribed prices for natural gas and notified the same for each category of consumers.
- Determined and notified eighty-seven well-head gas prices in respect of forty-six gas fields
- Achieved savings of Rs 3.5 billion (Rs 3.81/MMBTU) benefiting the gas consumers, on account of enforcement of UFG and HR benchmarks and scrutiny of other operating expenses, which works out to 30.96% of claimed operating costs.
- Issued twelve licences for marketing and three for construction of LPG storage and filling facilities resulting in investment of Rs 0.75 billion in LPG supply infrastructure.
- Monitored LPG prices closely and intervened when necessary to ensure prevalence of reasonable price in the market.
- Issued 674 licences for construction of new CNG stations and 764 for CNG marketing,



involving investment of about Rs.12.0 billion and creating 20,000 direct and indirect new employment opportunities.

- Issued 27 notifications of petroleum product prices in consultation with the Federal Government
- Registered five lube oil blending/reclamation plants.
- Three applications for oil refineries with the combined capacity of 315,000 barrels per day were received which are at different stages of processing. These refineries would bring estimated investment of US\$ 1.54 billion.
- Observance of technical standards by all natural gas, CNG, LPG and oil companies is ensured through constant monitoring and periodical/surprise inspections
- Resolved 1,154 complaints which resulted in provision of 409 stuck up new gas connections and relief of Rs.26.77 million in gas billing cases

### Acknowledgements

32. I must place on record and acknowledge the valuable support of the World Bank, the Ministry of Petroleum & NR, the Privatization Commission, and the Cabinet Division. In particular, the active support and guidance provided to the Authority by the then Secretary of the Cabinet Division Mr. Javed Masud and subsequently Mr. Ejaz Rahim was invaluable. Without it, the task of establishing a successful organization could not have been accomplished. The dedication of the retired members of the Authority namely Mr. Jawaid Inam, and Mr. M. Shuaib Ansari (since expired), and the present members namely Mr. Rashid Farooq, Member (Oil)/Vice Chairman, Mr. M. H. Asif, Member (Finance) and Syed Hadi Hasnain, Member (Gas) in setting the processes, procedures and operating standards of the Authority, has no match. I have indeed enjoyed working with them and am indebted to them all.

33. I would also like to pay tribute to our employees who are the most precious resource of the organization. It was their integrity, 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 exhibit passion to excel, 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 successfully.

34. Due to relentless pursuit of quality and efficiency, OGRA has earned reputation of being an impartial and effective regulator. I am confident that this institution will continue to strive for financial and operational efficiency 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.

35. I wish greater success to the organization and pray for the health and prosperity of all its members and employees.

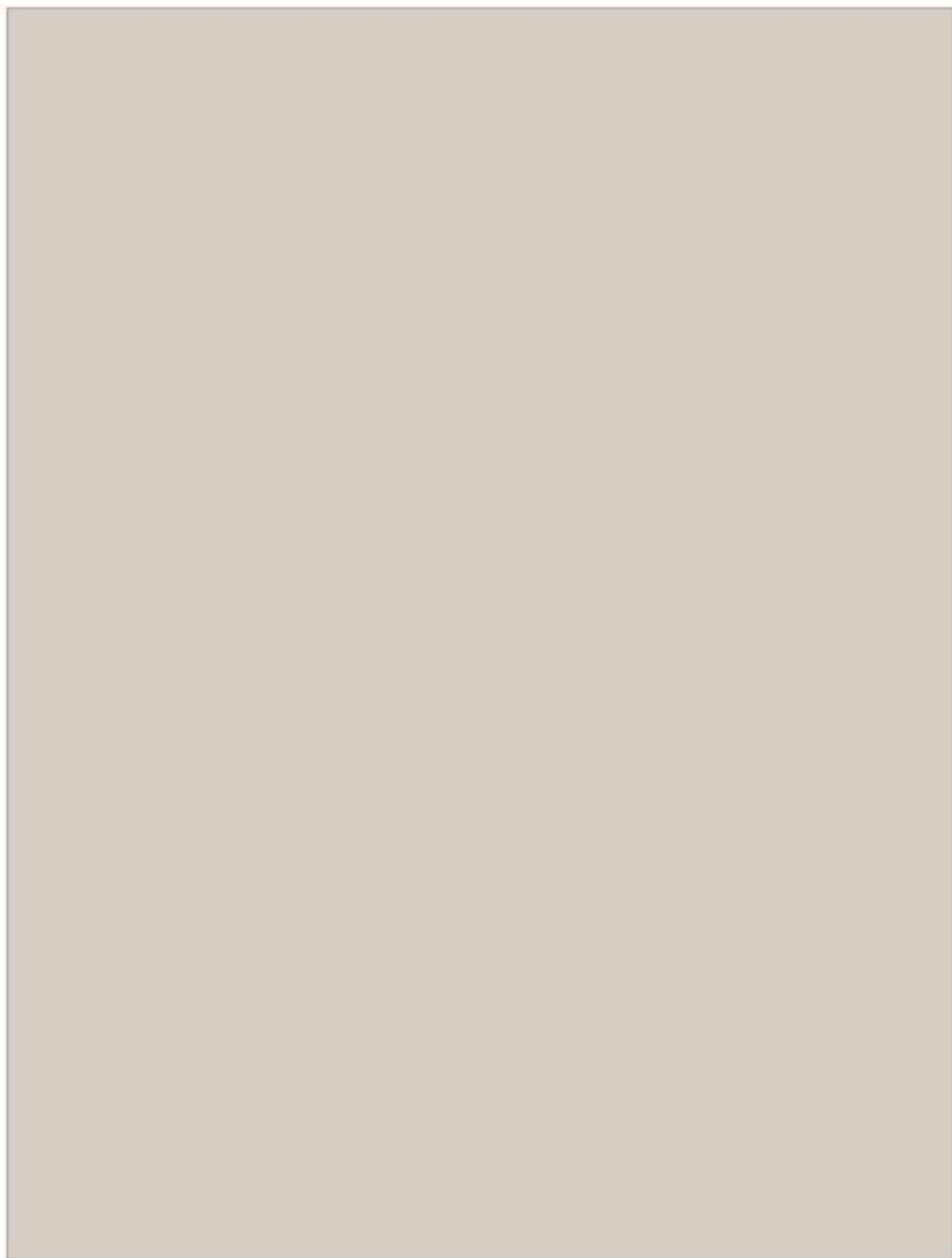
Islamabad  
September 5, 2008

(Munir Ahmad)  
Chairman





## 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 Chairman, Member (Oil), Member (Finance) and Member (Gas). The incumbents are selected by the Federal Government through open competition and appointed on tenure basis. The qualifications and other terms & conditions of their appointment, 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, petroleum technology, public administration and management.
- 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 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 over forty years extensive experience of dealing with the economic, operational, policy 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. He has also presented a number of technical papers at national and international moots. 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 had 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, UK. He has thirty four years' experience in regulatory and policy matters of the petroleum sector. He had 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 for a number of years. He attended various international seminars, conferences and training programmes on themes related to the downstream oil sector, Petroleum Management and Environment, and obtained post-graduate certificates in Petroleum Management from University of Pittsburgh, USA, Canadian Petroleum Institute, Canada, Business Management from the University of Surrey, 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 for a second term of 4 years effective October 09, 2005.





### **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 when he will attain the retirement age of 65 years. 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 five years' exposure in leadership positions in the fields of finance, management, marketing, planning, insurance, 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 governing council of the ICMAP for a long time, in various honorary positions including President/CEO. Currently, he is Chairman of its Research, Ethics and Quality Assurance Committee. He has served for two years as Technical Advisor to the Public Sector Committee of the International Federation of Accountants, engaged in developing International Accounting Standards for public sector entities. He is widely travelled, and 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 a speaker and writer on technical, human resource development and social issues.







#### **2.1.4 Member (Gas)**

##### **Syed Hadi Hasnain**

Syed Hadi Hasnain was appointed as Member (Gas) on August 03, 2007. He holds Bachelor's Degree in Petroleum Engineering from Engineering University Lahore, Master's Degree in Energy Engineering from UK and MS in Management from USA.

His career spans over thirty-three years in regulatory, policy and technical matters of the petroleum sector. Mr. Hasnain has worked in the Ministry of Petroleum & Natural Resources at various positions for twenty one years. He also has worked with BP Pakistan Exploration and Production Inc. (BPP) for ten years at senior management levels. He has a unique blend of exposure both of the public as well as corporate sectors in the petroleum industry.

He has attended various international seminars and conferences as participant and guest speaker. He has also attended various training programmes and professional courses including "Alternative Energy Sources" from Italy, "Petroleum Exploration, Production & Reservoir Management" from Canada and "CNG as Automotive Fuel" from Thailand.



## 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 services 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 the revenue requirement of gas utilities covering the cost of gas, transmission and distribution cost and the prescribed return.

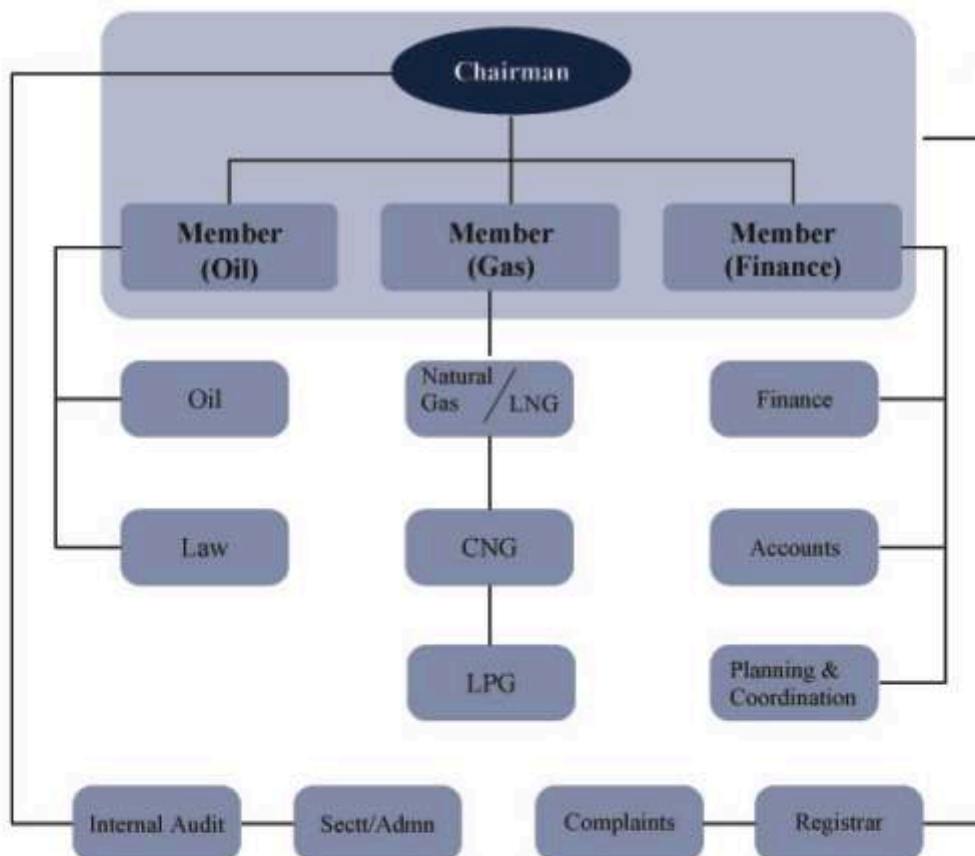
- Resolution of complaints and disputes between a person and a licensee or between licensees.
- Enforce standards and specifications for refined oil products as notified by the Federal Government.
- Implement policy guidelines of the Federal Government, issued under Section 21 of the OGRA Ordinance subject to their being consistent with the provisions of the Ordinance.

## 2.3 Organizational Structure

### 2.3.1 Organogram

The Authority is organized as reflected by Fig 2.1.

Fig 2.1:





### 2.3.2 Human Capital

The Authority attaches Human Resource Management the utmost importance, fully recognizing that the quality of its human capital determines the quality of its performance. With this strategic focus, the Authority works to achieve excellence in HR practices, based on progressive thinking on the subject.

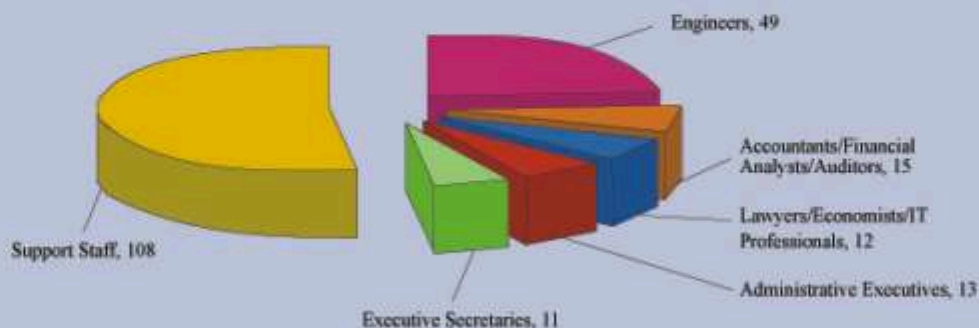
The following core values play key role in achieving synergy in OGRA:-

- Integrity
- Positive Response to Change
- Continuous Improvement
- Open Communication
- Personal and Professional Development
- Team Work

Since its inception, the Authority has been keen to hire a team of professionals with competence, experience and vision so that the regulatory processes are well thought out, can address the potential obstacles and can compete with the regulatory regimes around the world. A team of such professionals having versatile experience has been congregated in OGRA which has taken valuable and far reaching steps to regulate the Oil and Gas sector and is working for continuous improvement. This is a promising sign for the organization and the petroleum sector at large.

OGRA is a lean organization with a fine blend of human resource both from public and private sector. It has a flat structure where emphasis is on establishing optimal work environment for obtaining sustained high productivity, continuous improvement and perpetual organizational renewal. The departments/sections are essentially small teams of highly motivated individuals. Discipline-wise break up of employees is given in Fig 2.2.

Fig 2.2: Employees-Discipline-wise:





OGRA proactively develops and maintains policies and procedures that allow recruitment and retention of high quality employees and developing them through continuous motivation, broad-based training and performance based rewards. OGRA has developed and notified Service Regulations in 2005, which provide the framework for day-to-day decision making fairly and indiscriminately.

The compensation policy and performance based rewards provide the required impetus for growth. The system establishes a strong link between the employees and the organization. The market based salaries and attractive terminal benefits provide great incentive to the employees. The synergy, so achieved promotes the culture of OGRA as a highly motivated and professional body.

### **2.3.3 Capacity Building Project**

Enhancing the capacity (skills, knowledge, and attitude) of regulators was one of the core objectives of the World Bank's funded Public Sector Capacity Building Project (PSCBP). OGRA's component of this Project was oriented towards improvement in regulatory functions through an intensive professional development project (trainings) and institutional strengthening studies to meet the challenges of the dynamic oil & gas sector. The aim of the Capacity Building Project (CBP) is to develop OGRA as a more effective and viable organization.

During the year under report, three officers attended foreign training programmes, two senior officers participated in international conferences as "guest speakers", and one officer has been sent to University of Dundee-UK for specialized degree programme in "Energy Studies with specialization in Energy Regulation". The officers submit post-training/visit report followed by a presentation for the benefit of other officers. As far as training in local institutions is concerned, 17 officers attended local training programmes. A comprehensive customized in-house training programme has also been organized for staff development with focus on communication skills and team building.

### **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 are connected to Local Area Networks (LAN) enabling each computer to access the World Wide Web and send and receive messages in electronic form. The Authority is continuously striving to reduce paper usage and achieving efficiency through more intense use of Information Technology.

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 frequently accessed in the country as during the past one year over One Million visits were recorded which proves its popularity and usefulness. A comprehensive database and ERP design, development and implementation project is currently under consideration.

the *Journal of the American Medical Association* (JAMA) and the *New England Journal of Medicine* (NEJM).

As a result of the *Journal of the American Medical Association* (JAMA) and the *New England Journal of Medicine* (NEJM) being the most cited journals in the field of medicine, the authors of the study used these two journals as the primary source of data for their study.

The authors of the study used a computer program to search the JAMA and NEJM databases for all articles published between 1980 and 1999 that contained the word "pharmaceutical" in the title or abstract.

The authors of the study found that the number of articles published in the JAMA and NEJM that contained the word "pharmaceutical" in the title or abstract increased significantly over the period from 1980 to 1999.

The authors of the study concluded that the increase in the number of articles published in the JAMA and NEJM that contained the word "pharmaceutical" in the title or abstract was a result of the increasing importance of pharmaceuticals in the field of medicine.

The authors of the study also found that the number of articles published in the JAMA and NEJM that contained the word "pharmaceutical" in the title or abstract was significantly higher than the number of articles published in the JAMA and NEJM that contained the word "pharmaceutical" in the title or abstract in the period from 1980 to 1999.

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*6*  
*Years of*  
*Excellence*







### 3. 6 Years of Excellence

#### 3.1 Regulatory Framework

##### 3.1.1. Rules, Regulations, Standards in Place

OGRA, since its inception in March 2002, has put in place a comprehensive regulatory framework as given below (Tables 3.1 & 3.2):-

**Table 3.1: Rules, Notified and Adopted**

Sr. No.	Rules	Notification/ Adoption Date
(i)	Natural Gas (Licensing) Rules, 2002 <sup>*</sup>	February 26, 2002
(ii)	Natural Gas (Tariff) Rules, 2002	November 14, 2002
(iii)	Compressed Natural Gas (Production and Marketing) Rules, 1992 <sup>*</sup>	March 15, 2003
(iv)	Liquefied Petroleum Gas (Production and Distribution) Rules, 2001 <sup>*</sup>	March 15, 2003
(v)	Budget Committee Rules, 2004	December 30, 2004
(vi)	Pakistan Petroleum (Refining, Blending & Marketing) Rules, 1971 <sup>*</sup>	March 15, 2006
(vii)	Amendments in LPG (Production & Distribution) Rules, 2001	March 10, 2007
(viii)	Liquefied Natural Gas (LNG) Rules, 2007	May 26, 2007

*Note<sup>?</sup>: Inherited from Natural Gas Regulatory Authority*

*Note<sup>\*</sup>: Rules No. (iii), (iv) and (vi) notified by the Ministry of Petroleum and Natural Resources, are adopted under section 44(3) of the Ordinance*

**Table 3.2: Regulations/Standards Notified**

Sr. No.	Rules	Notification Date
(i)	Complaint Resolution Procedure (Natural Gas, CNG, LPG and Oil) Regulations, 2003	September 3, 2003
(ii)	Performance and Service Standards for Gas Utilities	September 3, 2003
(iii)	Natural Gas Uniform Accounting Regulations, 2003	February 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



### **3.1.2 Safe Operations of Regulated Activities**

OGRA prescribes/enforces the following:

- Performance and Service standards and other operating conditions.
- Standards for equipments and materials to be used in undertaking regulated activities.
- Technical standards for transmission and distribution of natural gas.
- Standards and specifications for refined oil products.
- CNG and LPG Rules.
- Codes of Technical Standards for construction of terminals/storages.

OGRA carries out regularly the following:

- Testing of quality of petroleum products.
- Site visits and inspections.

### **3.1.3 Rules/Regulations under Process**

- Gas Theft Rules
- Technical standards for oil refineries, oil pipelines, oil storage/terminals, retail outlets, oil road transportation
- Technical and Performance Standards relating to LPG
- The Pakistan Oil (Refining, Blending, Transportation, Storage and Marketing) Rules
- Fines and Recovery Rules
- Producer's Price Determination Rules

## **3.2 Natural Gas Sector**

### **3.2.1 Licences Issued**

OGRA has issued 14 licences to entities engaged in transmission, distribution, storage and sale of natural gas (Table 3.3) and during the process 09 public hearings were also held.

**Table 3.3: Natural Gas Licences issued by OGRA**

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
(xiii)	Star Power Generation Company Limited	Transmission of Natural Gas	January 30, 2008
(xiv)	Sui Northern Gas Pipelines Limited	Gas Storage Facility at Lilla Town-Punjab	April 30, 2008

### 3.2.2 Notification of Well-head Gas Prices

In accordance with Section 6(2)(w) of OGRA Ordinance, 2002, Authority is empowered to determine the well-head gas prices for the producers of natural gas in line with the relevant agreements or contracts, and notify the same in the official gazette. Since FY 2004-05, Authority has issued 352 well-head price notifications.





### 3.2.3 Determination of Revenue Requirement of SNGPL and SSGCL

OGRA is mandated to determine the revenue requirement of both gas utilities i.e. SNGPL and SSGCL. From FY 2002-03 to FY 2007-08, the Authority has conducted 23 Public hearings for Determination of Revenue Requirement, issued 87 determinations, 45 prescribed price notifications and 17 sales price notifications. Summaries of Revenue Requirement of SNGPL & SSGCL are given below (Tables 3.4 & 3.5):-

**Table 3.4: Summary of Revenue Requirement - SNGPL**

(Rs./MMBTU)

PARTICULARS	2003-04 Actual	2004-05 Actual	2005-06 Actual	2006-07 Actual	2007-08 Actual	2008-09 Estimates
Volume (BBTU)	426,636	505,543	539,099	541,589	559,954	597,306
Cost of Gas	123.35	140.82	170.67	183.11	194.84	256.83
T&D Cost and Depreciation	20.19	17.59	18.51	17.94	19.36	25.75
Return on Assets	11.32	10.70	10.66	11.13	12.12	12.60
Other Income	(4.37)	(4.18)	(3.55)	(4.33)	(4.60)	(5.21)
Average Prescribed Price	150.49	164.93	196.35	207.85	221.72	289.96
Average Sale Price*	150.66	167.56	200.14	225.49	220.38	290.98
Gas Development Surcharge*	0.17	2.63	3.79	17.64	(1.34)	1.02

\*Decided by Federal Government.

**Table 3.5: Summary of Revenue Requirement - SSGCL**

(Rs./MMBTU)

PARTICULARS	2003-04 Actual	2004-05 Actual	2005-06 Actual	2006-07 Actual	2007-08 Actual	2008-09 Estimates
Volume (BBTU)	310,628	329,359	338,126	335,363	351,733	383,833
Cost of Gas	124.63	142.13	176.40	188.56	196.85	267.85
T&D Cost and Depreciation	16.40	16.89	18.21	16.84	21.81	15.79
Return on Assets	8.23	8.40	9.37	11.10	12.42	15.31
Other Income	(5.64)	(7.63)	(13.47)	(16.61)	(18.10)	(19.02)
Additional RR for LPG Air Mix	-	-	-	-	0.20	0.06
Average Prescribed Price	143.62	159.80	190.66	199.89	213.17	279.98
Average Sale Price*	152.45	165.10	196.83	221.48	213.22	296.10
Gas Development Surcharge*	8.83	5.30	6.17	21.59	0.05	16.12

\*Decided by Federal Government.

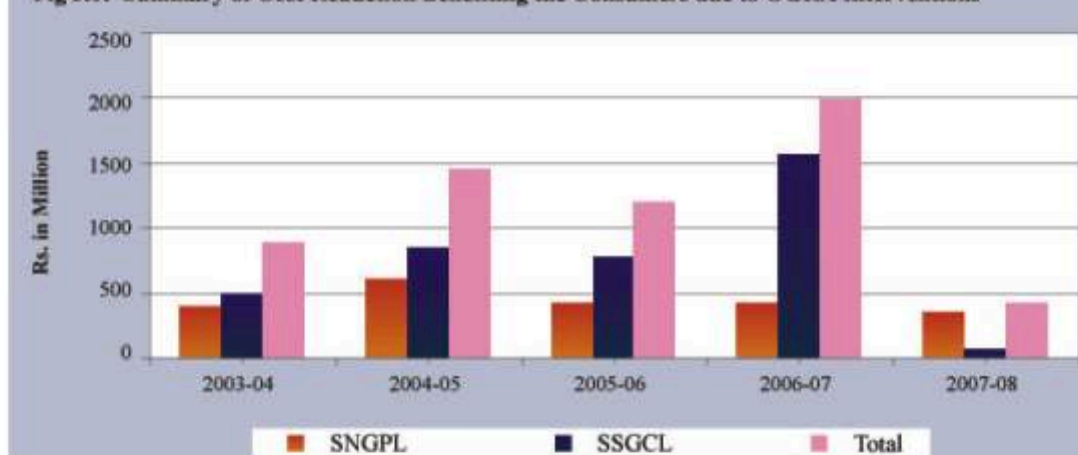
The revenue requirement excluding cost of gas, which is a pass through item, demanded by both the gas utilities and savings to consumers, due to OGRA's regulatory intervention are shown below in **Table 3.6 and Fig 3.1:-**

**Table 3.6: Summary of Cost Reduction Benefiting the Consumers (Excluding Cost of Gas)**

(Rs. in Million)

	2003-04		2004-05		2005-06		2006-07		2007-08	
	SNGPL	SSGCL	SNGPL	SSGCL	SNGPL	SSGCL	SNGPL	SSGCL	SNGPL	SSGCL
Demanded	13,836	8,144	14,900	9,181	16,182	10,151	16,179	10,934	17,982	12,178
Allowed	13,440	7,652	14,297	8,330	15,756	9,374	15,754	9,369	17,628	12,108
Saving	396	492	603	851	426	777	425	1,565	354	70
Total Savings	888		1,454		1,203		1,990		424	
%	4.0		6.0		4.6		7.3		1.4	
Rs./MMBTU	1.2		1.74		1.37		2.28		0.47	

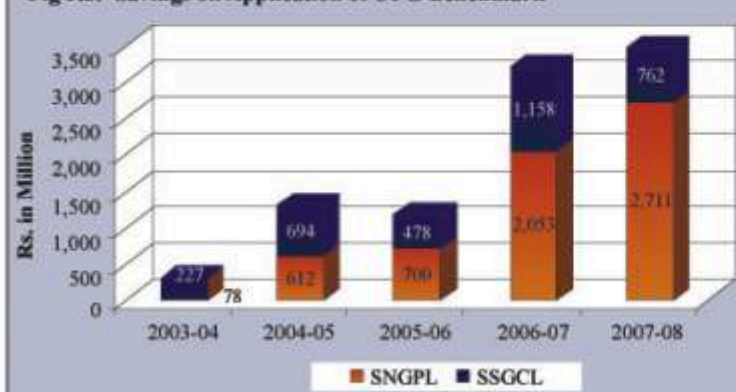
**Fig 3.1: Summary of Cost Reduction Benefiting the Consumers due to OGRA Interventions**



### 3.2.4 Unaccounted For Gas (UFG)

“Unaccounted For Gas (UFG)” commonly known as line losses, cover operational losses including leakages, measurement losses, gas theft etc. of the gas utility. OGRA, for the first time in Pakistan, has undertaken yardstick regulation through the introduction of effective benchmarks for UFG. UFG of both the companies was hovering around 8% prior to OGRA's establishment. OGRA introduced UFG benchmarks for the gas utilities in line with international trends and giving allowance for local conditions, which have been refined over time. Presently, the utility bears the entire revenue loss in excess of the upper limit, and retains 100% revenue gains (over and above its guaranteed

**Fig 3.2: Savings on Application of UFG Benchmark**

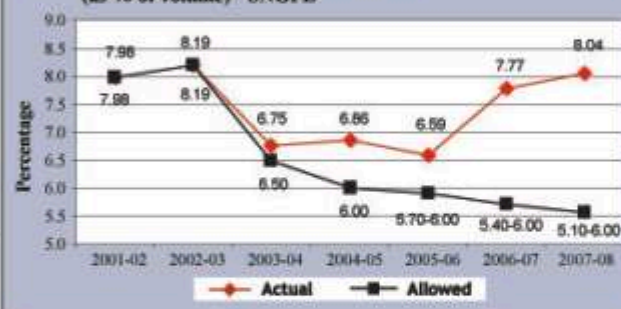




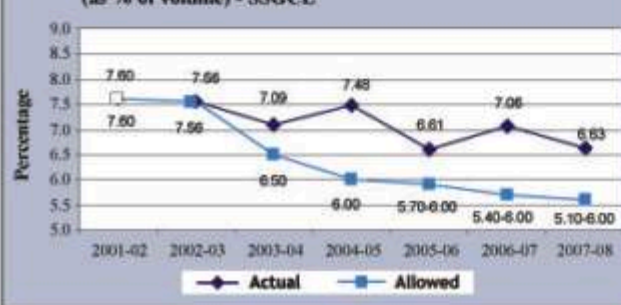


return) for the portion below the lower limit. However, if the actual UFG is between the prescribed upper and lower limits, then 50% of the revenue loss above lower limit has to be borne by the utility. The performance of the two companies before and after the application of UFG targets can be seen from Figs 3.2, 3.3 & 3.4. The disallowances on account of UFG benchmark have benefited the consumers to the tune of Rs. 2.02/MMBTU (total Rs.9,473 million) during FY 2003-04 to FY 2007-08. If OGRA had not intervened to fix the UFG targets and allowed the two utilities to operate at 2000-2001 level, the recurring expenditures on account of UFG would have been on average amounting to Rs. 1.7 billion per annum.

**Fig 3.3: Application of UFG Benchmark Savings (as % of volume) - SNGPL**



**Fig 3.4: Application of UFG Benchmark Savings (as % of volume) - SSGCL**



### 3.2.5 HR Benchmark

With a view to minimize the need to look at micro details, OGRA has introduced benchmarks for HR cost of both the utility companies on an experimental basis, for a period of 3 years, i.e. 2005-06 to 2007-08. This measure has helped to contain the expenditure on this major expenditure head.

### 3.2.6 Gas Sale/Supply Agreements

The Authority has approved 35 Agreements between Producers & Licensees, 40 between Licensees & Consumers and 03 between associated companies under Rule 20 of Natural Gas (Licensing) Rules, 2002. Their detail is given in Table 3.7.

**Table 3.7: Gas Sale/Supply Agreements**

Gas Sale Agreements	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	Total
Gas Sales Agreements between Producers & Licensees	2	4	11	7	7	4	35
Gas Supply Contracts between Licensees & Retail Consumers	2	-	18	5	8	7	40
Gas Supply Contracts between Associated Companies	-	1	1	-	1	-	3
<b>Total</b>	<b>4</b>	<b>5</b>	<b>30</b>	<b>12</b>	<b>16</b>	<b>11</b>	<b>78</b>



### 3.2.7 Infrastructure Development

One of the important aspects of OGRA's functions is to prescribe procedures and standards for investment programmes of the gas companies and ensure prudence in technical, economic and financial features of the capital outlays of the two natural gas transmission and distribution companies. Towards that end OGRA, in accordance with Rule 16 of Natural Gas (Licensing) Rules, 2002, also ensures effective utilization of all the assets with a view to prevent avoidable expenditure and saving the public and national resources from cost of inefficiencies. OGRA oversees the capital expenditure related to their regulated activities. Further, OGRA promotes and ensures the observance of efficient practices where applicable, in the transmission, distribution, processing, refining, marketing, storage of petroleum and transportation of petroleum by pipelines.

Over the years of its existence, the Authority has approved a number of transmission pipeline projects of SNGPL and SSGCL for bringing in additional gas from new gas fields and carrying it to consumption centres. OGRA has also allowed expansion of distribution network to new areas and new consumers and consequently, the consumer base of these companies has increased considerably. The details of these developments are given below:

#### 3.2.7.1 Transmission Network and System Capacity

The transmission network of SNGPL & SSGCL, the two gas utilities, expanded by 1,335 Km and 568 Km during FY 2003-08 respectively. The transmission network of SNGPL and SSGCL as of FY 2007-08 stood at 6,533 Km and 3,290 Km respectively. The transmission system capacity of SNGPL and SSGCL increased by 744 MMCFD and 592 MMCFD respectively during FY 2003-08. Year-wise details are given in Table 3.8 & Fig 3.5.

**Table 3.8: Transmission Network (Cumulative)**

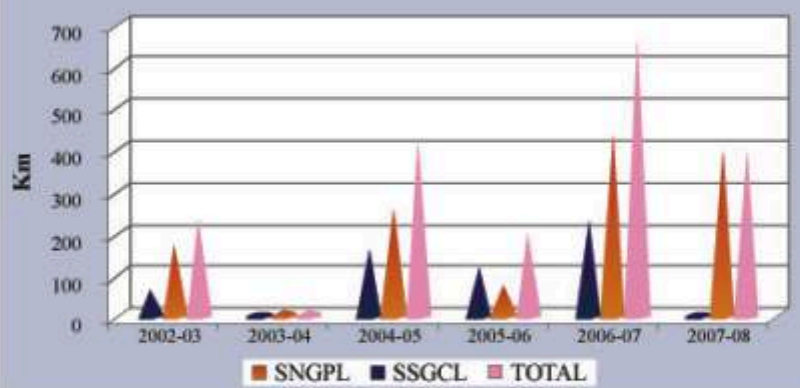
(Km)

Financial Year	SNGPL			SSGCL			Grand Total
	Punjab	NWFP	Total	Sindh	Balochistan	Total	
2001-02	4,711	487	5,198	2,115	607	2,722	7,920
2002-03	4,858	508	5,366	2,179	607	2,786	8,152
2003-04	4,861	523	5,384	2,179	607	2,786	8,170
2004-05	5,103	537	5,640	2,304	639	2,943	8,583
2005-06	5,152	563	5,715	2,423	639	3,062	8,777
2006-07	5,312	830	6,142	2,605	685	3,290	9,432
2007-08	5,570	963	6,533	2,605	685	3,290	9,823

Source: SNGPL and SSGCL



**Fig 3.5: Addition to Transmission Network**



### 3.2.7.2 Distribution Network

The distribution network of SNGPL & SSGCL increased during FY 2003-08 by 25,767 Km and 9,040 Km respectively. The cumulative distribution network of SNGPL and SSGCL as of FY 2007-08 stood at 59,951 Km and 31,930 Km respectively. Details are reflected in Table 3.9 and Fig 3.6.

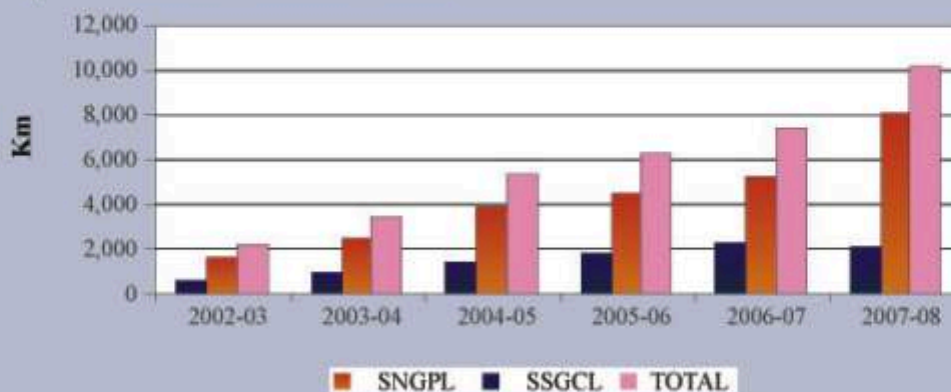
**Table 3.9: Distribution Network (Cumulative)**

(Km)

Financial Year	SNGPL			SSGCL			Grand Total
	Punjab/AJK	NWFP	Total	Sindh	Balochistan	Total	
2001-02	28,964	5,220	34,184	19,191	3,699	22,890	57,074
2002-03	30,385	5,429	35,814	19,599	3,817	23,416	59,230
2003-04	32,570	5,714	38,284	20,231	4,109	24,340	62,624
2004-05	36,001	6,191	42,192	21,144	4,620	25,764	67,956
2005-06	39,992	6,679	46,671	22,293	5,250	27,543	74,214
2006-07	44,490	7,376	51,866	24,021	5,770	29,791	81,657
2007-08	51,533	8,418	59,951	25,738	6,192	31,930	91,881

Source: SNGPL, SSGCL

**Fig 3.6: Addition to Distribution Network**



### 3.2.7.3 Investment in Gas Infrastructure

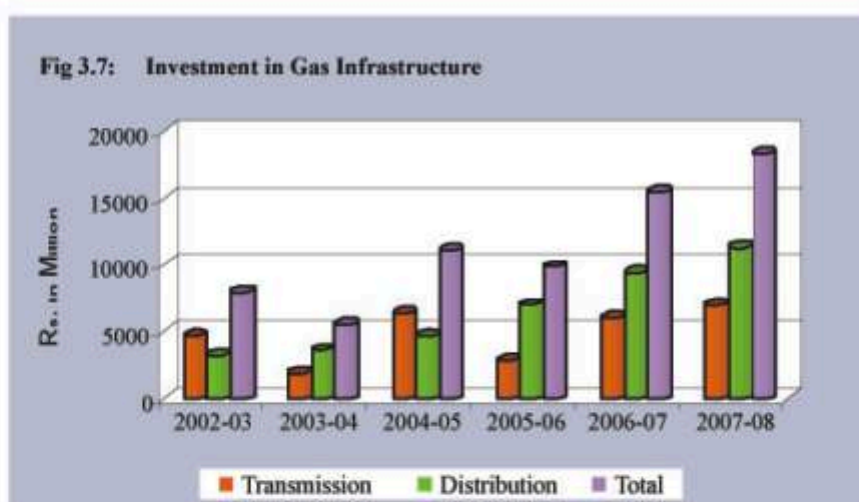
SNGPL & SSGCL invested sum of Rs. 29 billion and Rs. 39 billion in gas transmission and distribution networks during FY 2003-08. Year-wise details are given in **Table 3.10** and **Fig 3.7**.

**Table 3.10: Addition in Gas Infrastructure Investment**

(Rs. in Million)

Financial Year	SNGPL		SSGCL		TOTAL	
	Transmission	Distribution	Transmission	Distribution	Transmission	Distribution
2002-03	3,582	2,020	1,075	1,236	4,657	3,256
2003-04	1,687	2,359	227	1,247	1,914	3,606
2004-05	4,274	2,890	2,109	1,785	6,383	4,675
2005-06	1,300	4,041	1,558	2,921	2,858	6,962
2006-07	3,228	6,223	2,810	3,180	6,038	9,403
2007-08	6,634	6,498	350	4,800	6,984	11,298
<b>Total</b>	<b>20,705</b>	<b>24,031</b>	<b>8,129</b>	<b>15,169</b>	<b>28,834</b>	<b>39,200</b>
<b>GRAND TOTAL</b>					<b>68,034</b>	

Source: SNGPL, SSGCL



### Major Gas Infrastructure Projects

The major component of development expenditure of gas utilities are infrastructure development projects. The Authority thoroughly examines the feasibility study on the touch stone of technical and financial prudence. After Authority's approval, the two gas utilities have undertaken main infrastructure projects during last six years as given in **Table 3.11**.





**Table 3.11: Major Gas Infrastructure Projects**

Financial Year	SNGPL		SSGCL	
	Project Name	Cost (Rs. Million)	Project Name	Cost (Rs. Million)
2002-03	<b>Project – VIII (Advance)</b> 36" diameter x 33 Km (from Sidhani to Shorkot)	627	Bhit Bajara Gas Pipeline 24" x 40 Km	592
	Laying of 16" diameter x 143 pipeline between Sahiwal to Lahore	573	Rehabilitation of 16" diameter x 558 Km ILBP	273
	Laying of 8" diameter x 23 Km between Kurianwala and Jaranwala	99	Interlink Pipeline Khadeji-FJFC 18" diameter x 22 Km	212
	Laying of 16" diameter x 61 Km up-lifted pipeline between Bhai Pheru and Dawood Hercules off take point	275	IRBP modification for reverse flow to SNGPL	44
2003-04	<b>Project-VIII</b> 330 MMCFD gas supplied primarily to power plants and fertilizers industry from Qadirpur, Sawan, Kanhkot and Rehmat gas fields. It involved laying looplines of assorted diameters ranging from 16"-36" and relocation of some of the existing compressor packages.	4,038	<b>Gas Infrastructure/Rehabilitation and Expansion Project-II</b> Transmission of 175 MMCFD additional gas from Khipro, Sanjhero, Zarghoon, Miano and Sawan gas Field. Some of the major components commissioned in successive years are as below:	12,000
2004-05	C-Leg Augmentation Plan (Replacement of 12" diameter pipe with 30" diameter pipe.	1,150		
2005-06	Laying of 16" diameter x 62.5 Km Loopline from Hattar to Abbottabad/Mansehra.	701	(i) Loopline from Bhit/Bajara to Karachi Terminal 24" diameter x 200 Km	4,724
	Supply of gas to Lilla Town through mother daughter stations (CNG) System	-	(ii) Loopline from Masu to HQ3 (Hyderabad) 24" diameter x 14 Km	333
	Supply of gas from Salsabil Gas field to Tie -in Point at Mangrotha by laying 12" diameter x 18.2 Km	144		
2006-07	<b>Project-IX (Phase-I)</b> Laying of 24" diameter main line from Gurgury gas fields to Kohat-Nowshera Pipeline to make direct gas availability to Northern demand nodes.	2,754	(iii) Pipeline from Zarghoon to Quetta 12" diameter x 64 Km	967
			(iv) Loopline from HQ2 (Nawabshah) to Tando Adam 24" diameter x 86 Km	1,100
			Quetta Pipeline Capacity Expansion Project-III	2,563
2007-08	<b>Project-IX (Phase – II)</b> 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 consumption primarily of IPPs.	8,209	20" diameter x 21 Km ACPL Phase-II medium pressure pipeline	352

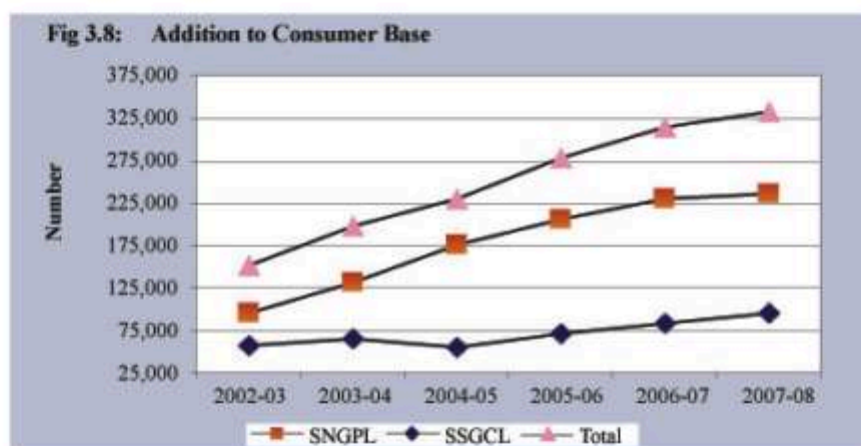
### 3.2.7.4 Consumer Base

SNGPL & SSGCL have added 1,076,334 and 428,229 consumers respectively to their respective networks during FY 2003-2008. The consumer base of SNGPL and SSGCL at the end of FY 2007-08 stood at 3,190,181 and 2,040,202 respectively. Year-wise details are given in **Table 3.12** and **Fig 3.8**.

**Table 3.12: Consumer Base (Cumulative)**

Financial Year	SNGPL			SSGCL			Grand Total
	Punjab/AJK	NWFP	Total	Sindh	Balochistan	Total	
2001-02	1,864,385	249,462	2,113,847	1,487,216	124,757	1,611,973	3,725,820
2002-03	1,948,788	260,180	2,208,968	1,539,159	129,556	1,668,715	3,877,683
2003-04	2,063,132	277,740	2,340,872	1,597,002	136,941	1,733,943	4,074,815
2004-05	2,217,509	299,286	2,516,795	1,641,844	146,845	1,788,689	4,305,484
2005-06	2,400,694	322,531	2,723,225	1,704,329	156,082	1,860,411	4,583,636
2006-07	2,599,616	354,202	2,953,818	1,778,148	166,105	1,944,253	4,898,071
2007-08	2,806,141	384,040	3,190,181	1,862,596	177,606	2,040,202	5,230,383

Source: SNGPL and SSGCL



### 3.2.7.5 New Towns and Villages Connected

SNGPL and SSGCL connected 707 and 1,181 new towns and villages respectively to their network during FY 2002-03 to FY 2007-08. The cumulative connections to new town and villages by SNGPL and SSGCL in FY 2007-08 stood at 1,224 and 1,914 respectively. Year-wise details are given in **Table 3.13** and **Fig 3.9**.

**Table 3.13: New Towns and Villages Connected (Cumulative)**

Financial Year	SNGPL			SSGCL			Grand Total
	Punjab/AJK	NWFP	Total	Sindh	Balochistan	Total	
2001-02	383	134	517	680	53	733	1,250
2002-03	405	138	543	700	58	758	1,301
2003-04	513	154	667	733	118	851	1,518
2004-05	563	165	728	823	228	1,051	1,779
2005-06	653	165	818	953	308	1,261	2,079
2006-07	832	184	1,016	1,073	433	1,506	2,522
2007-08	983	241	1,224	1,281	633	1,914	3,138

Source: SNGPL, SSGCL





Fig 3.9: Addition in New Towns and Villages

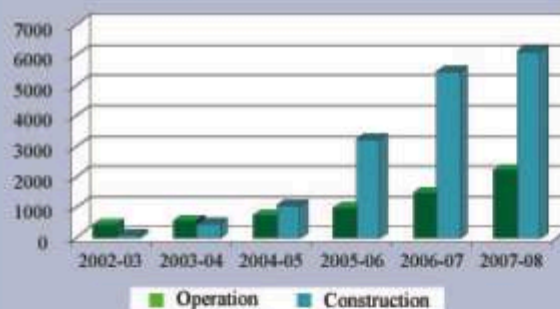


### 3.3 CNG Sector

#### 3.3.1 Licences for Construction & Operation of CNG Stations

Government of Pakistan introduced CNG in the country in the year 1992. To promote it as an environment-friendly and cheaper alternate auto fuel, the Government offered certain policy incentives including wide price advantage vis-à-vis motor gasoline, duty free import of CNG kits and cylinders, deregulated consumer pricing mechanism etc. 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. GoP transferred regulation of CNG sector to OGRA w.e.f March 15, 2003.

Fig 3.10: Cumulative CNG Licences Issued

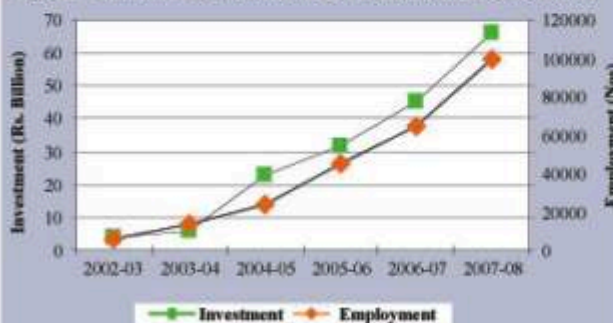


There were about 370 operational CNG stations in the country prior to the transfer of regulatory functions to OGRA. Total number of operational CNG stations in the country for which marketing licences were issued was 2,214 as of June 30, 2008 (Fig 3.10). Further, OGRA has so far issued 6,115 licences for construction of CNG stations and therefore more stations will become operating as time passes.

#### 3.3.2 Cumulative Investment and Employment in CNG Sector

Pakistan has emerged as one of the largest CNG users in the world and in developing CNG infrastructure due to investor friendly policy and regulatory framework. This sector has attracted investment of about Rs. 66 billion in the last six years creating 100,000 direct and indirect jobs. Year-wise cumulative position is given in Fig 3.11. Conducive policy and regulatory framework including easy availability of

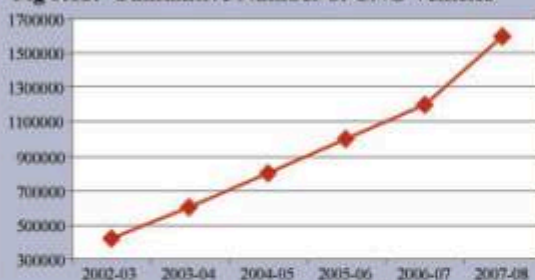
Fig 3.11: Cumulative Investment & Employment in CNG Sector





CNG kits and cylinders at economical & competitive prices and the consumer's confidence on the reliability and safety of CNG fuel has resulted in increase in number of CNG vehicles to about 1.6 million. Year-wise picture of CNG vehicles is given in Fig 3.12.

**Fig 3.12: Cumulative Number of CNG Vehicles**

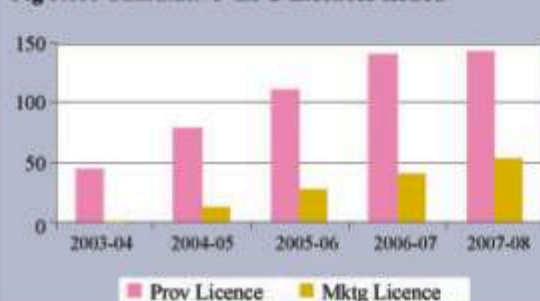


### 3.4 LPG Sector

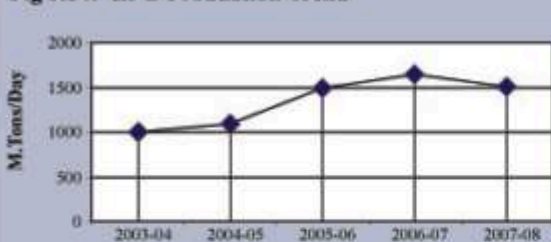
#### 3.4.1 Licences issued and Production Trend of LPG Sector

During the period FY 2003-04 to FY 2007-08, OGRA has issued 143 provisional licences for construction of LPG Storage and Filling plants and 53 marketing licences to those who completed the construction. As a result of Government's investment friendly policies and OGRA's facilitative role, production of LPG has increased from 1,000 M.T per day to 1,503 M.T per day during the last five years and current annual production is around 600,000 M.T. Year-wise position is reflected in Figs 3.13 & 3.14.

**Fig 3.13: Cumulative LPG Licences Issued**



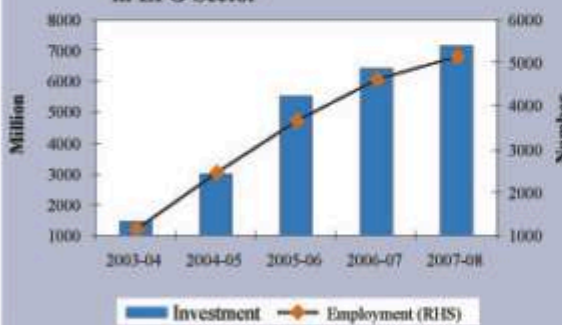
**Fig 3.14: LPG Production Trend**



#### 3.4.2 Cumulative Investment and Employment in LPG Sector

An investment of approx Rs. 7.2 billion has been made in the LPG during last 5 years and about 5,150 persons have been employed during the period under review. Year-wise information is reflected in Fig 3.15.

**Fig 3.15: Cumulative Investment and Employment in LPG Sector**





### 3.5 Midstream and Downstream Oil Sector

Federal Government transferred the powers to regulate the midstream and downstream oil sector to OGRA with effect from 15<sup>th</sup> March 2006. OGRA has endeavoured to enhance quality and provide level playing field to the investors in the oil sector by prescribing international technical standards and enforcement of quality benchmark set by the government to ensure fair competition.

#### 3.5.1 Licensing and Registration

##### (i) Oil Refineries

During the last two years, following three companies applied for licences to install refineries. These refineries are designed to bring cumulative investment of around US\$ 1.54 billion and add about 315,000 barrels/day refining capacity:

- M/s Boscor Oil Pakistan Limited
- M/s Trans Asia Refinery Ltd
- M/s Indus Refinery

##### (ii) Oil Marketing Companies

M/s. Fateh Petroleum Ltd has shown interest for establishing a new Oil Marketing Company (OMC) and its request is under process.

##### (iii) Lube Oil Blending/Reclamation Plants

Thirteen investors requested for registration of their Lube Oil Blending/Reclamation plants in accordance with rule 16 & 17 of the Pakistan Petroleum (Refining, Blending and Marketing) Rules 1971. The Authority has registered eleven of these plants after certification by HDIP of the conformity of the plants with the mandatory technical requirements according to the aforementioned Rules. The remaining two applications are under process.

##### (iv) Licence for Offshore Loading/Unloading Facility

M/s. Boscor Pakistan Limited (BPL), in collaboration with M/s. Coastal Refinery Limited (CRL), intends to install a Single Buoy Mooring System (SBM) for loading/unloading of crude oil and furnace oil near Khalifa Point at Hub, Balochistan and has applied for grant of licence under section 23(3) (a) of OGRA Ordinance. The request is under process.

##### (v) Renewal/Extension of Licences for Oil Marketing Companies

The Authority renewed marketing licence of Admore Gas Pvt. Ltd., provisional licences of M/s Hascombe Storage Pvt. Ltd., and M/s Overseas Oil Trading Company Ltd, who have so far invested Rs. 1,738 million in the storage and retail outlet infrastructure development.

#### 3.5.2 Construction of Oil Storages

Following four OMCs and a refinery have been issued licences for construction of oil storages under the

Pakistan Petroleum (Refining, Blending & Marketing) Rules, 1971. All these will collectively add approximately 180,000 M.Tons to the petroleum storage capacity of the country

Company/Refinery	Storage Capacity (M.Tons)
• M/s Admore Gas Pvt Ltd.	8,530
• M/s Attock Petroleum Ltd.	10,000
• M/s Total- Parco Pakistan Ltd.	5,400
• M/s Hascombe Storage Pvt Ltd.	8,700
• Boscior Pakistan Ltd.	147,000

### 3.5.3 Quality Control Measures

In order to ensure the supply of quality products, the Authority, under section 6(2)(x) of the OGRA Ordinance, has initiated the quality testing of petroleum products through Hydrocarbon Development Institute of Pakistan (HDIP), which submits the quality testing reports to OGRA on regular basis. The testing is carried out on bi-annual/quarterly basis at the following:-

- OMCs' Depots/Terminals
- Blending/Reclamation Plants

Similarly, under advice of the Authority, the OMCs carry out product testing inspections at their respective retail outlets on regular basis and submit quarterly report to OGRA.

The Authority has also enforced through HDIP the monitoring and quality testing of the imported petroleum products on vessels (before unloading) in light of the GoP policy guidelines.

Further, in order to check/curb illegal activity and ensure public safety, Chief Secretaries of the provinces have been requested to issue necessary instructions to the concerned DCOs for taking strict action for removal of illegal (daba) stations and carry out random quality checks at petrol pumps to eliminate adulteration.

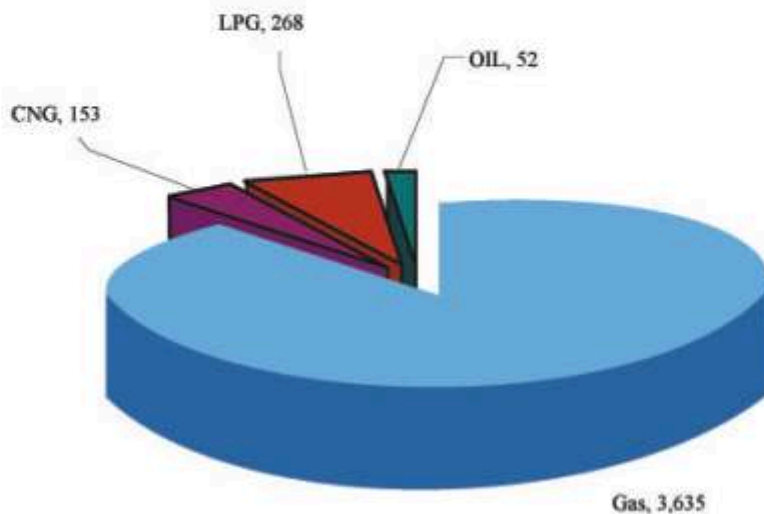
### 3.6 Complaint Resolution

Redressal of consumers' complaints is another very important aspect of OGRA's functions. The Authority attaches great importance and high priority to resolution of public complaints against the entities carrying out regulated activities, improving their quality of service and compliance of performance and service standards. There is growing satisfaction in the public about OGRA's endeavors in this respect. Figs 3.16, 3.17 and 3.18, reflect factual information about complaint resolution activities.

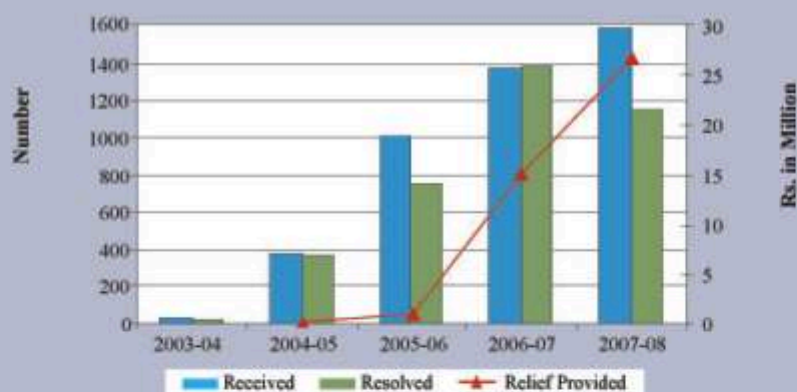




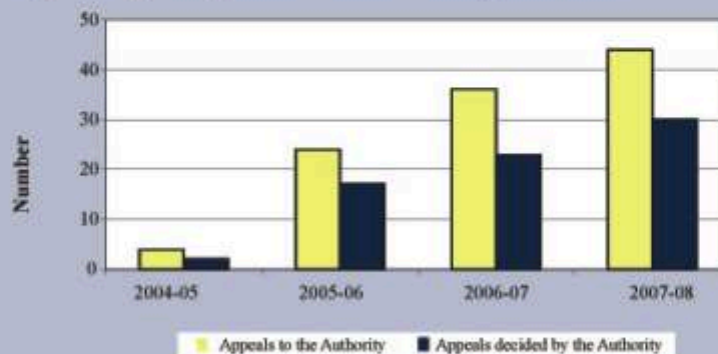
**Fig 3.16: Sector-wise Complaints Recieved**



**Fig 3.17: Complaint Status and Relief Provided to Consumers**

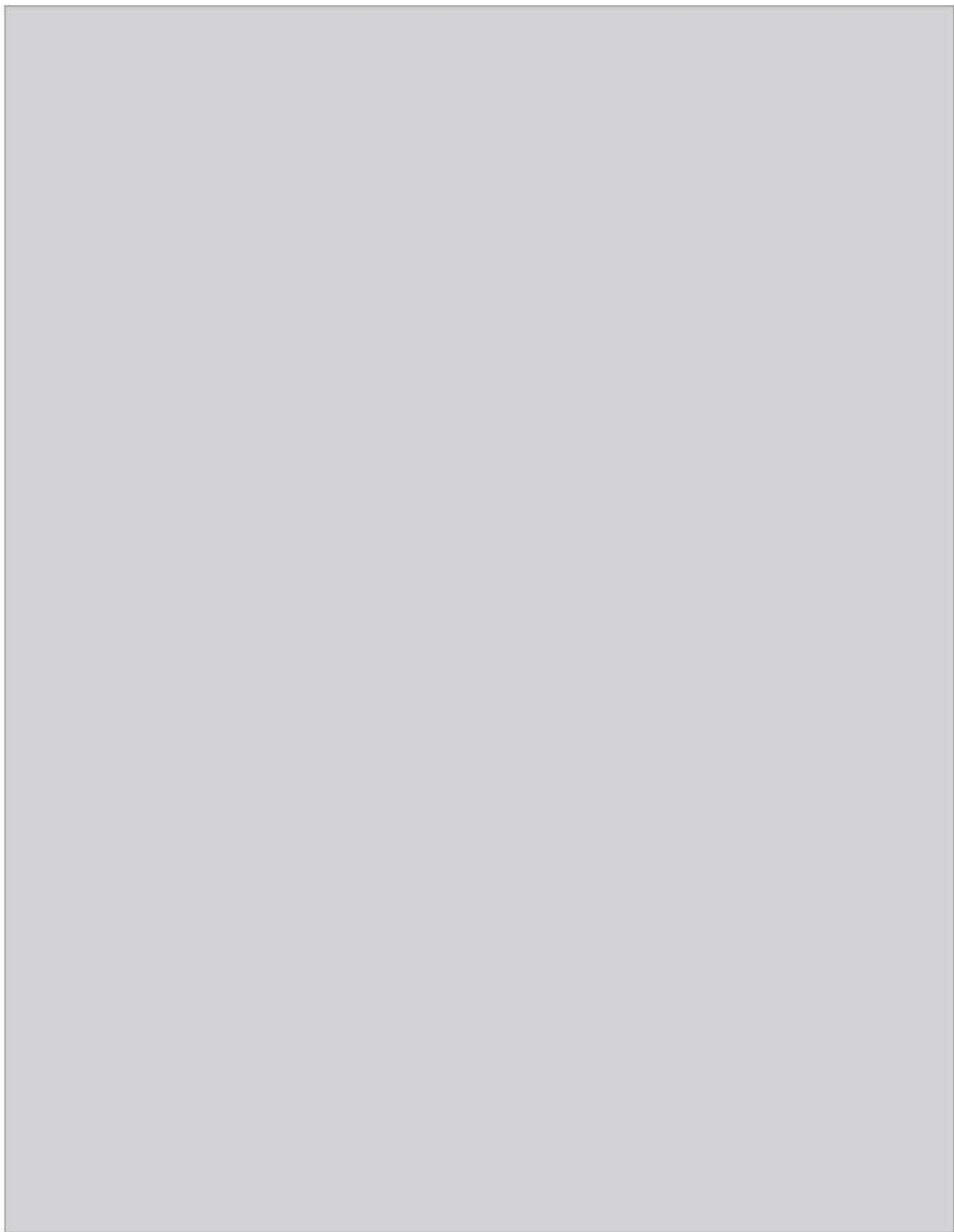


**Fig 3.18: Appeals against the Decision of Designated Officer**





Process





## 4. PROCESS

### 4.1 The Authority's Regulatory Decision Making Process

The regulatory framework is quasi-judicial 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 case of 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 licensees 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 regulated activities. The Authority is also vested under the law with the appellate power against the decisions of its delegates and power to review its own decisions.

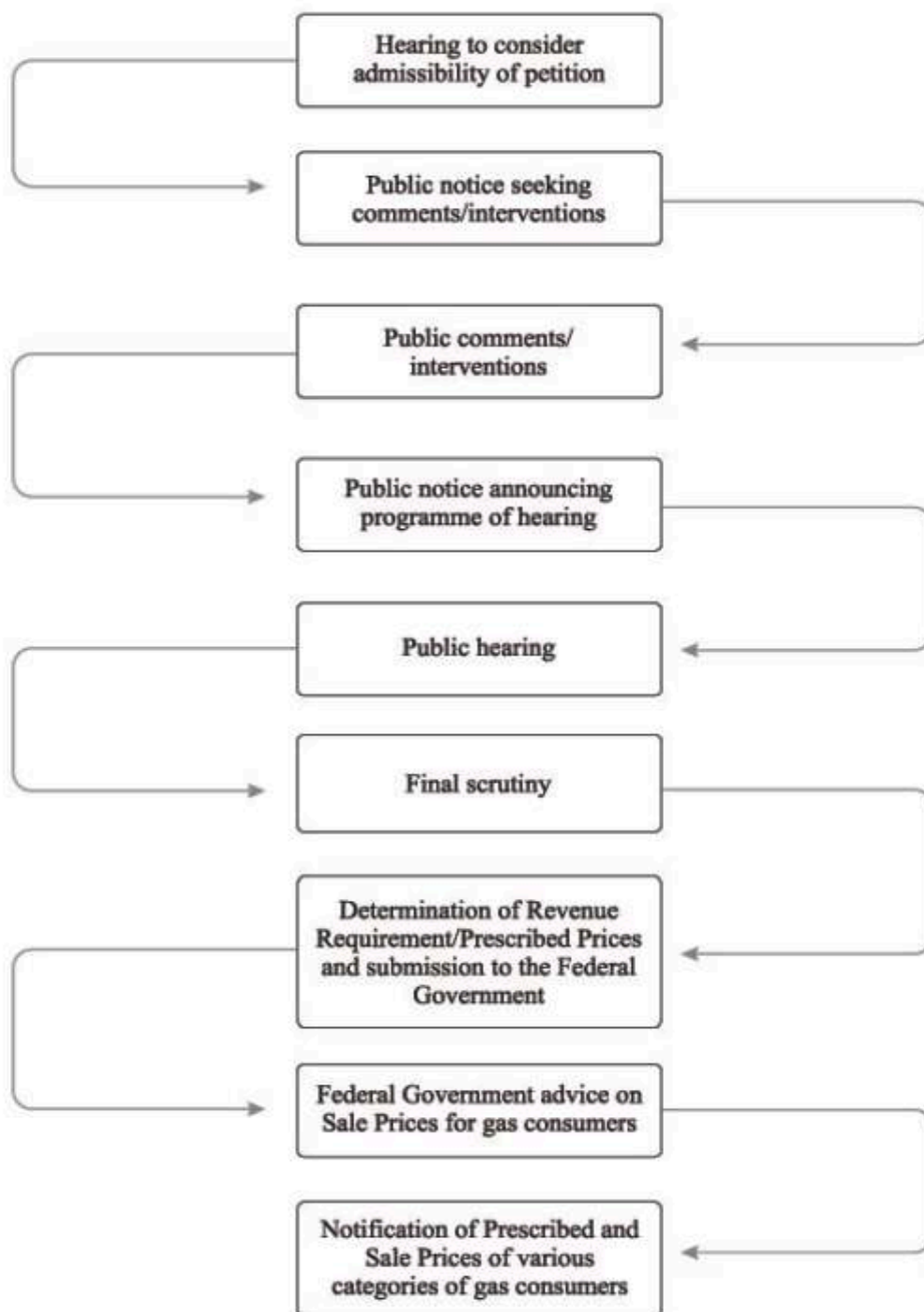


*Authority in a Public Hearing*

All petitions are examined in 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 put across its point of view on the cost and quality of service provided by the utility companies. This enables the Authority to have the benefit of a wider range of information and all shades of opinion, which it evaluates before reaching a decision. To give a bird's eye view of the process, Fig 4.1 shows the steps involved in determination of revenue requirement of a gas company from receipt of petition to notification of prescribed and sale prices.



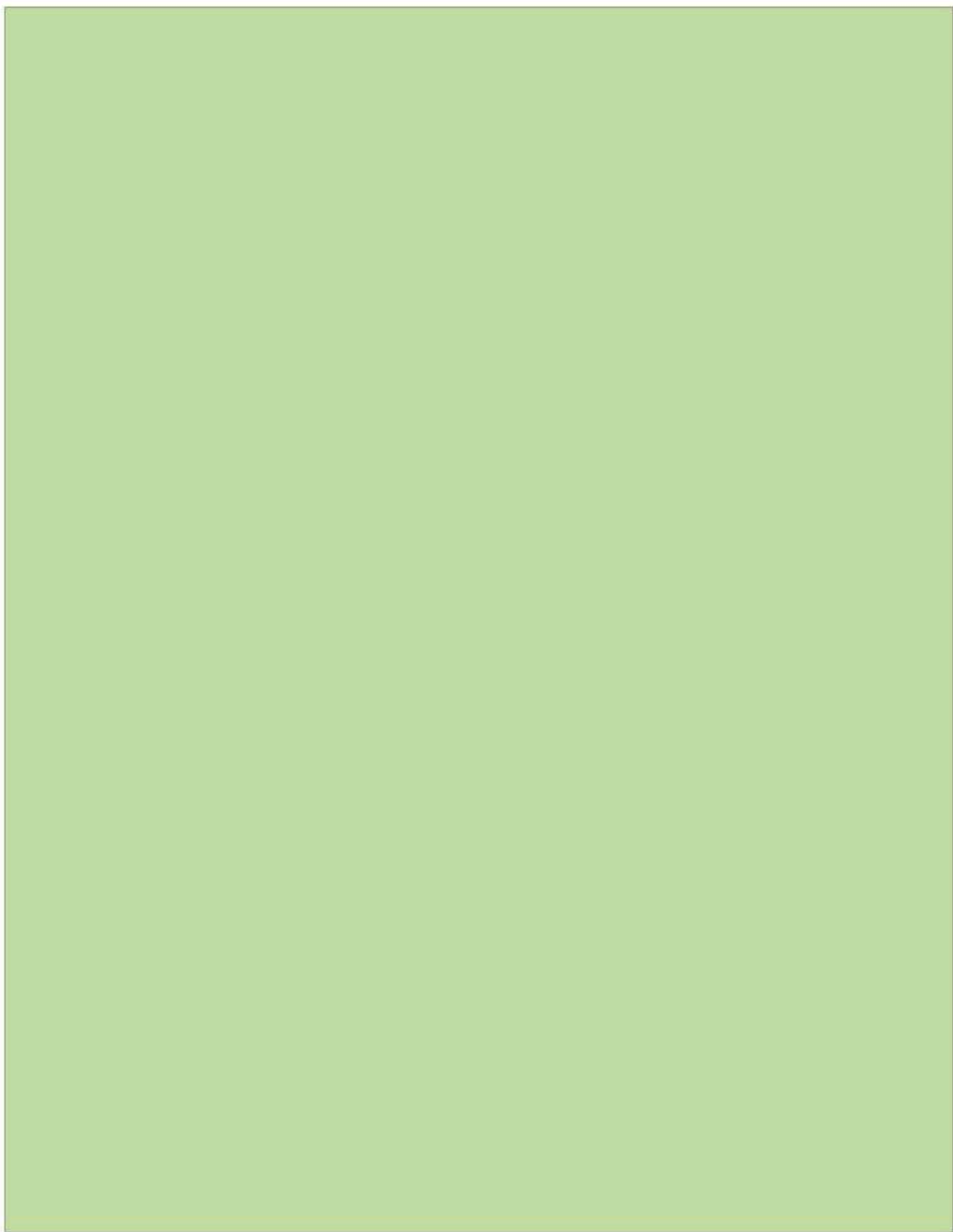
**Fig 4.1: The Process of Determination of Revenue Requirement, Notification of Consumer Gas Prices**





Performance





## 5. PERFORMANCE FY 2007 - 08

### 5.1 Development of Rules & Regulations

Sections 41 and 42 of the OGRA Ordinance require the Authority to formulate rules and regulations. 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. Rules and Regulations are fundamental legal instruments for carrying out the Authority's functions as provided in the Ordinance.

#### Rules/Regulations under Process

The Authority has worked on the following rules and regulations during current financial year.

- Gas Theft Rules
- Technical standards for oil refineries, oil pipelines, oil storage/terminals, retail outlets, oil road transportation
- Technical and Performance Standards relating to LPG
- The Pakistan Oil (Refining, Blending, Transportation, Storage and Marketing) Rules
- Fines and Recovery Rules
- Producer's Price Determination Rules

### 5.2 Natural Gas Sector

#### 5.2.1 Gas Sector Outlook

In the current global scenario, energy is the most important issue for any country of the world since it plays a major role in its economic growth. With the grace of Allah Almighty, Pakistan is blessed with reasonable natural gas resources.

Natural Gas contributes approximately 50% of the total energy mix of our country and plays a major role in driving the country's economy. The total gas production in Pakistan, including all sources, is approximately 3.7 Bcft/day with approximately 33 Tcft reserves intact. The gas volume produced is consumed mainly in domestic, commercial, power generation, general industry, cement and fertilizer sectors.

With the passage of time, the supply/demand gap is widening, due to which the Government of Pakistan is seriously working to augment supply through not only attracting more investment in exploration but also import of gas through interstate pipelines and also in the form of LNG.

Pakistan has a well developed and integrated infrastructure of transportation, distribution and utilization of natural gas. Presently two major gas transmission and distribution companies are operating in Pakistan, namely SNGPL & SSGCL. Both are public sector companies. SNGPL operates in the provinces of Punjab, NWFP, Federal Capital territory and Azad Jammu and Kashmir. SSGCL operates in the provinces of Sindh and Balochistan. The total transmission system of SNGPL is 6,533 Km and that of SSGCL is 3,290 Km. The distribution network for the two is 59,951 and 31,930 Km respectively. Total



number of consumers of SNGPL and SSGCL are approx. 3.2 and 2.0 million respectively.

In addition to the above, seven independent operators are also engaged in transmission and sales of natural gas from various gas fields to power generation, chemical and fertilizer companies etc. These operators include Mari Gas Company Ltd, Pakistan Petroleum Ltd., Oil and Gas Development Company Ltd, Engro Chemicals Pakistan Ltd., Fauji Fertilizer Company Ltd., Central Power Generation Company Ltd. and Fatima Fertilizer Company Ltd. These independent operators contribute to approximately 20% of the total natural gas sale in the country.

### **5.2.2 Gas Sector Regulation**

OGRA regulates the midstream and downstream segments of the natural gas sector in Pakistan. The law obligates the gas companies to acquire licences of natural gas for construction of pipelines/ storages, transmission, distribution and sales. The licences contain the parameters and conditions in respect of the regulated activities- the regulatory regime.

The core objectives of OGRA with reference to midstream and downstream Natural Gas sectors are to:

- Regulate tariffs by determining a reasonable return to the licensees.
- Grant licences for regulated activities.
- Determine as well as notify well-head gas prices.
- Determine revenue requirements of the gas companies.
- Endeavor promotion of efficient practices and competition.
- Resolve disputes between licensees and consumers.
- Prescribe and enforce performance, service, technical and safety standards.
- Ensure provision of open access, common carrier, common operators in the public interest.

### **5.2.3 Licences**

OGRA has so far issued fourteen licences for transmission, distribution and sale of natural gas and Natural Gas Storage Facility.

During FY 2007-08, OGRA has issued licences for transmission of natural gas and Gas Storage Facility as described below:-

#### **5.2.3.1 Licence to Star Power Generation Limited for Transmission of Natural Gas**

The Authority received petition of Star Power Generation Ltd. (SPGL) for grant of licence for construction and operation of 16 Km, 12" dia pipeline alongwith ancillary/connected facilities for the purpose of transmission of 44 MMCFD low BTU natural gas from Mari Gas Field to SPGL's power plant at Daharki, Sindh.

After due process including press notice inviting objections, OGRA granted the requested licence effective from January 01, 2008 for a period of 27 years or till the expiry of the Gas Sale Agreement



between SPGL and Mari Gas Company Limited, whichever comes first.

#### **5.2.3.2 Licence to SNGPL for Gas Storage Facility**

SNGPL filed a petition for grant of project licence to undertake the regulated activities of construction and operation of natural gas storage facility at Lilla Town, District Jhelum, Punjab for supply of natural gas to the consumers in Lilla Town.

The Authority, after due process including press notice inviting objections, granted the requested licence for a period of 30 years, effective from 26<sup>th</sup> November, 2005.

#### **5.2.4 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, 2002.



*SSGCL management team at an OGRA hearing, Karachi*

The cost of gas which constitutes bulk of the RR of the gas utilities is determined in accordance with the parameters contained in the Gas Pricing Agreements between the GoP 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 eleven petitions of SSGCL and SNGPL during the financial year 2007-08.

#### **SSGCL**

- FRR for FY 2006-07
- Motion for Review of FRR for FY 2006-07
- Second motion for review of DFRR FY 2006-07
- Motion for Review of ERR for FY 2007-08
- Interim Order of ERR for FY 2007-08
- Review of ERR for FY 2007-08
- ERR for FY 2008-09

#### **SNGPL**

- FRR for FY 2006-07
- Interim Order of ERR for FY 2007-08
- Review of ERR for FY 2007-08
- ERR for FY 2008-09

The process of determination of revenue requirements is transparent and ensures effective participation of consumers and general public.

OGRA while fully conscious of its duty to balance the divergent interests of the stakeholders, attaches primary importance to protecting consumers' interest who, by and large are voiceless, remaining however, within the Government's policy framework and providing incentives to entities to perform optimally.

#### **5.2.4.1 Sui Southern Gas Company Ltd**

##### **5.2.4.1.1 Final Revenue Requirement for FY 2006-07**

The Authority determined FRR for FY 2006-07 at Rs.72,606 million vide its Order dated September 14, 2007, as summarized in **Table 5.1**.



**Table 5.1: OGRA Determination of SSGCL FRR for FY 2006-07***(Rs. in Million)*

PARTICULARS	FRR 2005-06	FRR 2006-07	% Change
Sales Volume (BBTU)	338,126	335,363	(0.8)
Cost of Gas	59,647	63,237	6
Transmission & Distribution Cost and Others	4,545	4,613	1
UFG Disallowance	(478)	(1,154)	341
Depreciation	2,139	2,186	2
Return on Net Operating Assets	3,168	3,723	18
<b>Total Revenue Requirement</b>	<b>69,021</b>	<b>72,606</b>	<b>5</b>
<b>Total Revenue Available</b>	<b>68,317</b>	<b>75,418</b>	<b>10</b>
<b>Surplus/(Shortage)</b>	<b>704</b>	<b>2,812</b>	<b>299</b>
<b>Average Prescribed Price (Rs./ MMBTU)</b>	<b>190.66</b>	<b>199.89</b>	<b>5</b>

**5.2.4.1.2 Motion for Review of FRR for FY 2006-07**

The Authority had determined the Final Revenue Requirement of SSGCL for FY 2006-07 at Rs. 72,606 million. SSGCL, being aggrieved of certain disallowances made by the Authority submitted a motion for review, seeking a further increase in revenue requirement of Rs. 285 million. The Authority, after due examination, allowed an additional amount of Rs. 176 million on provisional basis, through its Order dated November 19, 2007, consequential impact of which to be made in FRR for FY 2007-08.

**5.2.4.1.3 Second Motion for Review of DFRR for FY 2006-07**

The company, again aggrieved by the Authority's decision dated November 19, 2007, submitted the review motion dated December 17, 2007 under Section 13 of the Ordinance, seeking a further increase in revenue requirement of Rs. 1,383 million. The Authority maintained its earlier decision as SSGCL failed to submit concrete justification in support of its claims.

**5.2.4.1.4 Motion for Review of ERR for FY 2007-08**

The Authority had determined the Estimated Revenue Requirement of SSGCL for FY 2007-08 at Rs. 91,017 million. SSGCL, being aggrieved of certain disallowances made by the Authority submitted a motion for review, seeking an addition to revenue requirement of Rs. 1,822 million. The Authority, after due examination, tentatively accepted expenses in respect of LNG project, ISGSL and bill collection charges amounting to Rs. 292 million, but decided to adjust shortfall at the time of FRR FY 2007-08, duly reflecting the Federal Government's advice, through its Order dated September 06, 2007.

**5.2.4.1.5 Interim Order of ERR for FY 2007-08**

The Authority determined the Estimated Revenue Requirement of SSGCL for FY 2007-08 at Rs. 92,733 million under its Interim Order dated November 20, 2007, taking into the account the recent hike in international oil prices as well as Rs. 292 million allowed per its Order on motion for review dated September 06, 2007 (Table 5.2).



**Table: 5.2 OGRA Determination of SSGCL RERR for FY 2007-08**
*(Rs. in Million)*

PARTICULARS	FRR 2006 -07	RERR 2007 -08	% Change
Sales Volume (BBTU)	335,363	401,754	20
Cost of Gas	63,237	79,419	26
Transmission & Distribution Cost and Others	4,613	5,731	24
UFG Disallowance	(1,154)	(306)	(73)
Depreciation	2,186	2,701	24
Return on Net Operating Assets	3,723	5,188	39
<b>Total Revenue Requirement</b>	<b>72,606</b>	<b>92,733</b>	<b>28</b>
<b>Total Revenue Available</b>	<b>75,418</b>	<b>90,268</b>	<b>20</b>
<b>Surplus/(Shortage)</b>	<b>2,812</b>	<b>(2,465)</b>	<b>(188)</b>
<b>Average Prescribed Price (Rs./ MMBTU)</b>	<b>199.89</b>	<b>218.22</b>	<b>9</b>

#### 5.2.4.1.6 Review of Estimated Revenue Requirement for FY 2007-08

The Authority, after holding public hearing and duly taking into account view point of all the interveners, confirmed its Interim Order, determining its revenue requirement at Rs.92,733 million, through its Order dated January 03, 2008.


*SSGCL presenting its petition for determination of ERR for FY 2008-09 at Karachi*

#### 5.2.4.1.7 Estimated Revenue Requirement of SSGCL for FY 2008-09

The Authority determined ERR for FY 2008-09 at Rs.114,768 million. **Table 5.3** summarizes OGRA's determination (of May 20, 2008).

**Table: 5.3 OGRA Determination of SSGCL ERR for FY 2008-09***(Rs. in Million)*

PARTICULARS	RERR 2007-08	ERR 2008-09	% Change
Sales Volume (BBTU)	401,754	383,833	(4)
Cost of Gas	79,419	102,808	29
Transmission & Distribution Cost and Others	5,731	4,875	(15)
UFG Disallowance	(306)	(1,585)	418
Depreciation	2,701	2,770	3
Additional Revenue Requirement for Air-mix LPG Project	-	24	100
Return on Net Operating Assets	5,188	5,876	13
<b>Total Revenue Requirement</b>	<b>92,733</b>	<b>114,768</b>	<b>24</b>
<b>Total Revenue Available</b>	<b>90,268</b>	<b>92,134</b>	<b>2</b>
<b>Surplus/(Shortage)</b>	<b>(2,465)</b>	<b>(22,634)</b>	<b>818</b>
<b>Average Prescribed Price (Rs./MMBTU)</b>	<b>218.22</b>	<b>279.98</b>	<b>28</b>

**5.2.4.2 Sui Northern Gas Pipelines Ltd****5.2.4.2.1 Final Revenue Requirement for FY 2006-07**

The Authority determined FRR for FY 2006-07 at Rs.114,920 million through its order dated September 7, 2007, as summarized in Table 5.4.

**Table 5.4: OGRA Determination of SNGPL FRR for FY 2006-07***(Rs. in Million)*

PARTICULARS	FRR 2005-06	FRR 2006-07	% Change
Sales Volume (BBTU)	539,099	541,569	0.5
Cost of Gas	92,009	99,166	8
Transmission & Distribution Cost and Others	6,950	7,801	12
UFG Disallowance plus Adjustment of FY 2004-05	(700)	(2,086)	198
Depreciation	3,760	4,010	7
Return on Net Operating Assets	5,746	6,029	5
<b>Total Revenue Requirement</b>	<b>107,765</b>	<b>114,920</b>	<b>7</b>
<b>Total Return Available</b>	<b>108,940</b>	<b>114,674</b>	<b>5</b>
<b>Surplus/(Shortage)</b>	<b>1,175</b>	<b>(247)</b>	<b>(121)</b>
<b>Average Prescribed Price (Rs./ MMBTU)</b>	<b>196.35</b>	<b>207.87</b>	<b>6</b>

**5.2.4.2.2 Interim Order of ERR for FY 2007-08**

The Authority determined the Estimated Revenue Requirement of SNGPL for FY 2007-08 at Rs.128,503 million taking into the account the recent hike in international oil prices as given in Table 5.5.



**Table 5.5: OGRA Determination of SNGPL RERR for FY 2007-08**
*(Rs. in Million)*

PARTICULARS	FRR 2006-07	RERR 2007-08	% Change
Sales Volume (BBTU)	541,569	568,680	5
Cost of Gas	99,166	109,095	10
Transmission & Distribution Cost and Others	7,801	8,116	4
UFG Disallowance	(2,086)	(119)	(94)
Depreciation	4,010	4,948	23
Return on Net Operating Assets	6,029	6,463	7
<b>Total Revenue Requirement</b>	<b>114,920</b>	<b>128,503</b>	<b>12</b>
<b>Total Return Available</b>	<b>114,674</b>	<b>124,630</b>	<b>9</b>
<b>Surplus/(Shortage)</b>	<b>(247)</b>	<b>(3,872)</b>	<b>1,468</b>
<b>Average Prescribed Price (Rs./ MMBTU)</b>	<b>207.87</b>	<b>221.84</b>	<b>7</b>

#### 5.2.4.2.3 Review of ERR for FY 2007-08

The Authority, after holding public hearing and duly taking into account view point of all the interveners, confirmed its Interim Order, determining its revenue requirement at Rs. 128,503 million through its Order dated January 03, 2008.



*Managing Director, SNGPL, Mr. A. Rashid Lone with his team, in the hearing of SNGPL's petition for determination of ERR for FY 2008-09 at Lahore*



#### 5.2.4.2.4 Estimated Revenue Requirement for FY 2008-09

The Authority determined ERR for FY 2008-09 at Rs. 176,306 million. Table 5.6 shows summarized OGRA determination (of May 20, 2008) of estimated revenue requirement of SNGPL for FY 2008-09.

Table 5.6: OGRA Determination of SNGPL ERR for FY 2008-09

(Rs. in Million)

PARTICULARS	RERR 2007-08	ERR 2008-09	% Change
Sales Volume (BBTU)	568,680	597,306	5
Cost of Gas	109,095	153,404	41
Transmission & Distribution Cost and Others	8,116	9,078	12
UFG Disallowance plus Adjustment of FY 2004-05	(119)	-	-
Depreciation	4,948	6,301	27
Return on Net Operating Assets	6,463	7,524	16
<b>Total Revenue Requirement</b>	<b>128,503</b>	<b>176,306</b>	<b>37</b>
<b>Total Return Available</b>	<b>124,630</b>	<b>137,387</b>	<b>10</b>
<b>Surplus/(Shortage)</b>	<b>(3,872)</b>	<b>(38,920)</b>	<b>905</b>
<b>Average Prescribed Price (Rs./ MMBTU)</b>	<b>221.84</b>	<b>289.96</b>	<b>31</b>

#### 5.2.5. Efficiency Benchmark

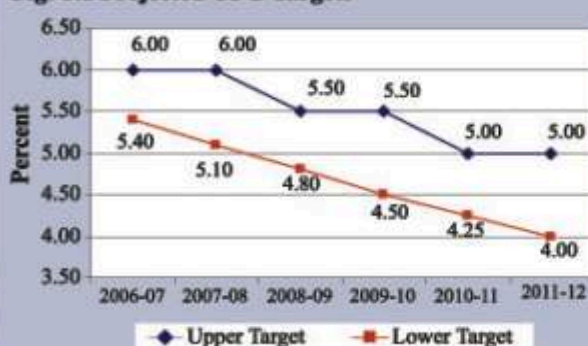
##### 5.2.5.1 Unaccounted For Gas (UFG)/ Benchmark

UFG means the difference between the total volume of gas purchased by a licensee during a financial year and volume of metered gas supplied to its consumers excluding metered gas used for licensee's self consumption.

High UFG levels of both the gas utility companies have been a major area of concern for the simple reason that this is waste of gas, which is avoidable to a great extent. It is pertinent to mention that one percent UFG of two gas utilities at average price of gas in 2007-08 translated to revenue loss of one billion rupees per year. This loss reflects gas companies' performance and adds to the cost of gas for the consumers.

Ever since its inception OGRA has taken effective measures to bring down the high UFG levels of the two gas utilities, most important being the enforcement of a UFG benchmark. In the light of the research covering prevalent international standards/ practices and also the ground realities and operational constraints in the country and in consultation with both the utilities OGRA started setting benchmarks from FY 2003-04. Later, the utilities have been given targets to reduce UFG levels to 4 % by the FY 2011-12 as shown in Fig 5.1. This measure incentivizes the companies to work for reducing gas losses through efficient

Fig: 5.1 Projected UFG Targets





operations.

Details of actual performance and disallowances on account of UFG by both the gas utilities is given below:

PARTICULARS	2006-07	2007-08
SSGCL Benchmark (%)	5.40-6.00	5.10-6.00
Actual (%)	7.53	6.63
Disallowances (Rs. in Million)	1,158	762
SNGPL Benchmark (%)	5.40-6.00	5.10-6.00
Actual (%)	7.77	8.04
Disallowances (Rs. in Million)	2,053	2,711
Total Disallowances (Rs. in Million)	3,211	3,473

In order to ascertain authenticity of UFG levels reported by the licensees, Authority got UFG Audit conducted by independent auditors.

#### 5.2.5.2 Human Resource Cost Benchmark

The Authority had developed a HR benchmark on experimental basis for a period of three years i.e. 2005-06 to 2007-08, set by indexing the base year (FY 2004-05).

Savings or excess in HR cost will be shared equally between the companies and consumers. During the last two years, the performance of both the companies remained pretty close to the benchmark, as shown in Table 5.7.

**Table 5.7: HR Cost**

(Rs. in Million)

Description	SNGPL			SSGCL		
	2005-06	2006-07	2007-08	2005-06	2006-07	2007-08
Actual Cost	3,563	3,892	4,070	2,945	2,992	3,480
Benchmark Cost	3,553	3,919	4,078	3,096	3,238	3,621
Excess/(Saving) over Benchmark	10	(27)	(8)	(151)	(246)	(141)

The benchmark, apparently, has achieved its purpose of motivating the utilities to contain their HR expenses. A comprehensive review exercise is in progress with a view to fine tune the benchmark. The existing benchmark will be reviewed by the Authority after the actual results for FY 2007-08 are made available.



### 5.2.6 Determination and Notification of Well-head Gas Prices

Section 6(2) (w) of OGRA Ordinance, 2002 empowers the Authority to determine the well-head gas prices to be charged by the producers of natural gas in accordance with their respective contracts with GoP, and notify the same in the official gazette. The Authority accordingly issued 87 well-head gas price notifications during FY 2007-08 in respect of 46 gas fields. (Appendix-I).

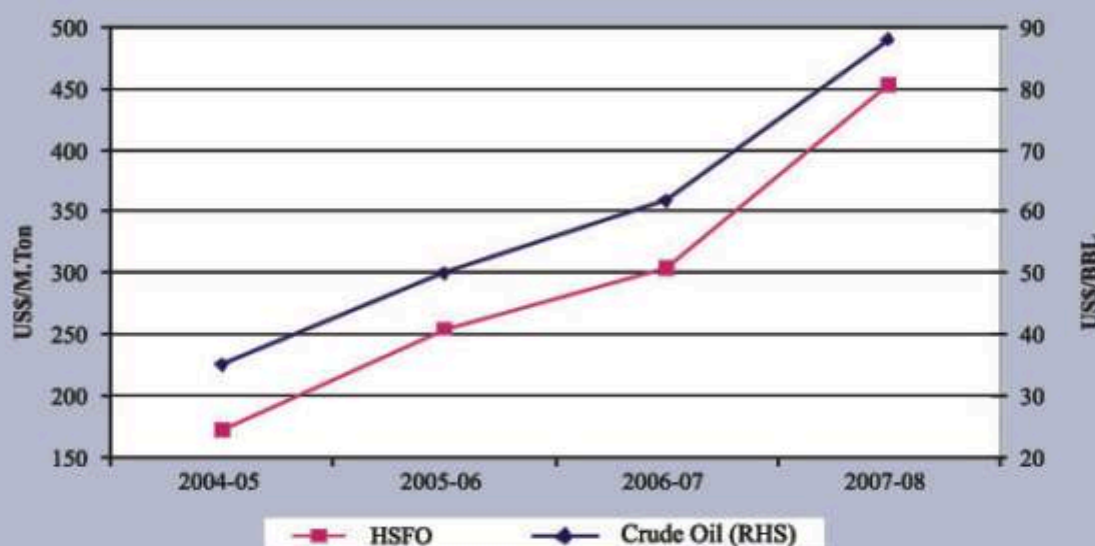
### 5.2.7 Weighted Average Cost of Gas (WACOG)

The cost of gas is a major part of the prescribed price of gas, retainable by the two gas utilities. Under the existing pricing agreements, the cost of gas (well-head price) of producers is indexed to the international price of crude oil/fuel oil, which has been rising rather steeply over the past few years as shown in Table 5.8 and Fig 5.2. Consequentially, prescribed prices of the utilities have also been going up sharply.

**Table 5.8: Average C&F Price of Basket of Imported Crude & Furnace Oil**

Well-head Gas Price Effective Period	2004-05	2005-06	2006-07	2007-08
Average Crude Oil Price (\$/BBL)	35.19	50.08	61.72	87.93
Increase (\$/BBL) year to year	-	14.89	11.64	26.21
Cumulative increase %	-	42	75	150
Average HSFO Price (\$/M. TON)	172.57	254.99	304.13	453.41
Increase (\$/M. TON) year to year	-	82.42	49.14	149.28
Cumulative increase %	-	48	76	163

**Fig 5.2: Increase in Prices of Crude Oil & HSFO**







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 variation in the prescribed prices. The Federal Government, however, as a policy, has always maintained uniform consumer prices of gas all over the country and resultantly, it issued a policy guideline under Section 21 of OGRA Ordinance 2002 on June 18, 2003 that the cost of gas of SSGCL and SNGPL should be worked out on an overall weighted 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 FY 2007-08, OGRA estimated the WACOG at the beginning of the year at Rs. 176.02 per MMBTU, and determined the same as part of the Estimated Revenue Requirement of both the companies. Later on, in review petitions WACOG was increased to Rs. 181.04 per MMBTU in view of increasing oil prices in the international market.

It is important to mention that in view of further increase in cost of gas, the WACOG for FY 2008-09 has been determined at Rs. 243.75 per MMBTU, owing to unprecedented hike in prices of crude oil and HSFO in the international market.

#### **5.2.8 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 three notifications of Prescribed Prices in respect of FY 2006-07 and FY 2007-08, on the basis of estimated Revenue Requirements of SNGPL and SSGCL.

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 August 23, 2007 which remained effective from July 01, 2007 till December 31, 2007. The sale prices were then revised effective from January 01, 2008 to June 30, 2008. The category-wise break up is given in **Table 5.9**.

Table 5.9: Gas Consumer Prices

(Rs. /MMBTU)

<b>CATEGORY</b>	<b>w.e.f 01.02.07</b>	<b>w.e.f 01.01.2008</b>
<b>(A) DOMESTIC</b>		
1 <sup>st</sup> slab (upto 50 cubic meters/month)	78.38	78.38
2 <sup>nd</sup> slab (over 50 upto 100 cubic meters/month)	82.07	82.07
3 <sup>rd</sup> slab (over 100 upto 200 cubic meters/month)	149.40	149.40
4 <sup>th</sup> slab (over 200 upto 300 cubic meters/month)	239.01	239.01
5 <sup>th</sup> slab (300 cubic meters/month)	310.92	310.92
Min. Charges/month	105.72	105.72
<b>(B) COMMERCIAL</b>	268.23	283.05
<b>(C) INDUSTRIAL</b>		
(i) General	238.38	251.55
(ii) Cement	305.15	335.67
<b>(D) CNG STATION</b>	264.87	291.36
<b>(E) FERTILIZER</b>		
<b>(ON SNGPL &amp; SSGCL'S SYSTEM)</b>		
<b>(i) FOR FEED STOCK</b>		
(a) Pak American Fertilizer Ltd.(PAFL)	36.77	36.77
(b) F.F.C. Bin Qasim Ltd.	36.77	36.77
(c) Dawood (DHCL) / Pak Arab	91.52	91.52
(d) Pak China / Hazara	97.11	97.11
<b>(ii) FOR FUEL</b>	238.38	251.55
<b>(ON MARI'S SYSTEM)</b>		
<b>(i) For Feed Stock</b>		
(a) FFC Rahim Yar Khan/Engro Chemical (New)	90.22	90.22
(Old)	90.22	90.22
(b) FFC Mirpur Mathelo	90.22	90.22
<b>(ii) For Fuel</b>	238.38	251.55
<b>(F) POWER</b>		
(On SNGPL and SSGCL'S System)	238.38	251.55
Liberty Power	467.52	443.06
<b>(G) RAW GAS SOLD TO WAPDA'S</b>		
Guddu Power Station		
(i) Sui Field (917 BTU)		
(ii) Kandhkot (866 BTU)	230.28	243.00
(iii) Mari (754)	223.96	236.34
(iv) Sara / Suri	-	-





## 5.2.9 Approval of Agreements

In pursuance of NGRA (Licensing) Rules, 2002, the following agreements of two gas utilities were processed and approved by the Authority, some of them subject to certain conditions:-

### 5.2.9.1 Gas Sale Agreements (GSAs) Between Producers and Licensees

- a) Gas Sale/Purchase Agreement for Salsabil field between Dewan Petroleum (Pvt.) Ltd. and SNGPL.
- b) Pipeline Contribution Agreement for Zarghun South field between Mari Gas Company Ltd. and SSGCL.
- c) Changes/Amendments in Zarghun South Gas Sales Agreement between Mari Gas Company Ltd. and SSGCL.
- d) Agreement for sale of off-specification Zamzama gas under Phase-II Gas Sales Agreement dated 22-11-2005 between BHP and SSGCL.

### 5.2.9.2 Gas Sale/Supply Agreements between Licensees & Retail Consumers

- a) Gas Supply Agreement between Mari Gas Company Ltd. and Foundation Power Company (Daharki) Limited.
- b) Gas Sale Agreement between Mari Gas Company Ltd. and Star Power Generation Limited.
- c) Amendment in Gas Supply Contract between SNGPL and Bestway Cement Limited, Chakwal.
- d) Amendment in Gas Supply Agreement between SSGCL and Fauji Fertilizer Bin Qasim Limited.
- e) Amendment in Gas Sale Agreement between SNGPL and Saif Power Limited.
- f) Gas Supply Agreement between SNGPL and Engro Energy (Pvt.) Ltd. for supply of 75 MMCFD Permeate Qadirpur gas.
- g) Amendment in Gas Supply Contract between SNGPL and Gharibwal Cement Limited.

## 5.2.10 Projects Approved

Both the gas utilities continued to expand/strengthen their transmission network in line with changes in sources of supply and gas demand. For this purpose, they sought approval of new projects, under Rule 20 (xviii) of Natural Gas Licensing Rules, 2002, and also of left over parts of some already approved projects.

OGRA carried out examination/evaluation of these projects' requests on the touchstone prudence of investment, viability and economic efficiency and accorded timely approvals, with modifications it considered necessary.



A summary of the infrastructure projects of SSGCL and SNGPL, approved during 2006-07 and 2007-08 is given below:

#### 5.2.10.1 SSGCL Transmission Projects

##### i) 20" diameter x 21 Km ACPL Phase-II Medium Pressure Pipeline

This pipeline was required on the SSGCL system for augmentation of ACPL Phase-II from SMS Surjani town to Hub Industrial Trading Estate (HITE). Its rationale was to redress the persistent low gas pressure problem in Hub area due to overloaded existing 12" diameter x 54 Km line from SMS Super Highway to Attock Cement pipeline and 20" diameter x 21 Km line from SMS Surjani to HITE, and to meet increasing gas demand of Attock Cement and domestic and industrial customers in Hub City, HITE, Gadani Ship breaking area and Vindar Industrial Estate. This pipeline project of 100 MMCFD capacity will increase gas availability in the area to 200 MMCFD.

OGRA's professionals carried out detailed evaluation of the project. The design parameters of the pipeline were cross-checked through hydraulic simulation by OGRA's engineers and were inferred to conform to the basic assumptions made in the design. The cost estimates were also cross-checked with the actual historical pattern, current prices of material etc. Once its prudence and viability was established, the Authority accorded approval to the project in January, 2008, at an estimated cost of Rs. 352 million, under Rule 20 (xviii) of Natural Gas Licensing Rules, 2002.

##### ii) 12" Dia x 64 Km Zarghun-Quetta Pipeline

In order to maintain adequate gas supply pressure in Balochistan throughout the year, and utilize precious gas reserves discovered at Zarghun gas field, the subject Zarghun-Quetta pipeline was envisaged by the Company at an estimated cost of Rs. 967 million, to be commissioned in FY 2007-08. Based on the conceptual design and simulation studies, the project's design capacity was to carry 20-25 MMCFD gas from Zarghun gas field to SSGCL's existing Quetta Pipeline distribution system. The project is a component of GIREP-II



*Transmission line being laid*

(Gas Infrastructure Rehabilitation and Expansion Project-II). During the scrutiny of the project, covering its feasibility, design, cost estimates and other details, it was revealed that US\$ 4.00 million (Rs. 244 million @ Rs. 61/\$) were to be borne by Bolan Joint Venture (BJV, the gas producer) for the entire life of the project as pipeline rental. Deducting this amount from the SSGCL's estimate of Rs. 967 million, the Authority, in its determination of Estimated Revenue Requirement for FY 2007-08, approved Rs. 673 million for this project. Now the pipeline is planned to be laid by June, 2009.



**iii) Construction of Submerged Crossings in Place of Existing Overhead Pipeline Crossings**

In view of the emerging terrorist threat, previously unforeseen, along SSGCL's pipeline network, SSGCL has planned to replace overhead crossings on canals and water channels with submerged pipeline crossings.

A phased programme was planned as under:

Financial Year	Number of Submerged Crossings to be Carried Out	Cost (Rs. in Million)
2004-05 & 2005-06	2 & 7 respectively	38
2006-07	7	70
2007-08	6	111
Total	22	219

The Authority, with a view to ensure un-interrupted, safe and reliable supplies to the consumers and to bring reduction in the rectification and restoration expenditures of the Company, allowed the plan in its determination of Estimated Revenue Requirement for FY 2007-08 at a cost of Rs. 111 million.

**iv) Construction of Metalled Road on Un-Approachable Right of Way (Row) on Transmission Pipeline Network**

Under the Licence Condition No. 32, SSGCL is required to enhance its access to its ROW and take steps as permissible under the relevant laws to remove any encroachments in order to deal with emergencies swiftly ensuring un-interrupted supplies to the consumers. For this purpose, SSGCL carried out a detailed survey of its ROW and prepared a "Five Years ROW Development Plan". According to the petition filed by the Company, out of the total 1,828 Km of ROW, approximately 576 Km ROW was neither patrolable by vehicular means nor on foot. In order to make it accessible by jeep, SSGCL has embarked upon ROW development plan as under:-

Financial Year	Cost (Rs. in Million)
2005-06	93
2006-07	137
2007-08	313

Work on remaining un-approachable ROW will be carried out in phases by FY 2009-10. The Authority approved Rs 313 million in its determination of Estimated Revenue Requirement for FY 2007-08.

**v) 24" diameter x 200 Km Loopline from Bhit / Bajara to Karachi Terminal**

The project is designed to absorb 240 MMCFD additional gas available from Zamzama gas field (150 MMCFD) and Bhit gas field (90 MMCFD) thereby strengthening IRBP System of the Company. After detailed evaluation, OGRA approved the project in December 2005 at an estimated cost of Rs. 4,724 million. A sum of Rs. 3,600 million was included in the determination of Estimated Revenue Requirement for FY 2006-07 and the remaining amount of Rs. 211 million in determination for FY 2007-08.



### 5.2.10.2 SNGPL Transmission Projects

#### a) Project IX

The objectives of the project are:

- i. Absorption of 354-444 MMCFD gas from different gas fields.
- ii. To enhance the line pressure beyond Multan.
- iii. Supply of gas to new power plants of WAPDA and Independent Power Producers (IPPs) downstream of Multan, in the industrial triangle of Faisalabad, Sahiwal and Lahore.
- iv. De-bottling of transmission system by reducing internal fuel consumption to help optimize the operation and maintenance cost.

The project is planned to be completed in two phases.

#### Phase I:

Phase-I comprises laying of 24" diameter x 140 Km Gurguri-Kohat-Nowshera pipeline at an estimated cost of Rs. 3,222 million. The project is designed to enable injection of 200-250 MMCFD of gas supplies into the transmission network. OGRA approved the project after due evaluation, and allowed Rs. 751 million as spill over cost in the ERR of FY 2007-08.

#### Phase II:

This phase of the project is designed to enhance system capacity of N-Leg (between Qadirpur Rawan and Lahore) from 300 to 650 MMCFD in order to meet gas requirement of six Independent Power Plants and additional load of general industries including Packages and Sunder Industrial Estate near Lahore.

On the basis of detailed deliberations on the subject, the Authority approved the proposed project plan at estimated cost of Rs. 8,681 million excluding the following two elements:-

- One 4700 Horsepower (hp) new Compressor unit at AC-6 Multan at an estimated cost of Rs. 406 million.
- Construction Equipments (50% of proposed Rs. 700 million i.e., Rs. 350 million)



*A view of Transmission line on Upstream of River Sutlej*

SNGPL sought review/reconsideration of disallowed components with additional information to justify the same.

After detailed deliberations, the Authority, in April 2008, accorded approval to these segments considering some changes in the conceptual design, reconfiguration of the compression data on the transmission spurs and the ground reality that the area of company's operation was spreading and construction equipment was engaged simultaneously on many sites in the wake of accelerated development work.





## 5.2.11 Promotion of LNG Projects

An important global issue of natural gas industry is that gas reserves are often located far from major consumption centers. Traditionally gas is transported through pipelines which are too expensive for providing gas to regions with low density of population. Liquefaction of natural gas and its distribution in liquid form to distant consumption centers is a viable alternative. Once the liquefied natural gas reaches the desired destination, it is re-gasified by a process called 'RLNG' (Re-gasification of Liquid Natural Gas) and injected into the local distribution network for supply to the end users.

Globally, LNG is gaining ground and its prospects in Pakistan are also promising. To sustain fast pace of development in the country, supply of gas has to meet the growing demand and GoP is determined to optimize the primary energy mix, based on economic and strategic considerations. Further, with the anticipated gap between the indigenous reserves of natural gas and increasing demand, LNG presents itself as a preferred short term alternative. In this background, GoP issued LNG Policy 2006 to promote investment in this sector. OGRA has been pursuing a proactive approach in framing and applying the LNG Rules for effective Regulation of the LNG sector.

Due to the incentives given by the GoP, formulation of regulatory framework in the form of LNG Rules by OGRA, there is growing investor interest in import of LNG as well as liquefaction of already available Natural Gas in the country for transporting through cryogenic bowsers to remote/far flung areas to meet their demand. OGRA already has a request for licence, which is under process.

## 5.2.12 Addition of Network/ Assets as Per Revenue Requirement

Every year the gas utility companies include a considerable amount in their revenue requirement petitions for expenditure on the addition to their fixed assets. OGRA allows only such capital investments which fully meet the criteria of efficiency, economy and prudence. On the basis of the expenditures allowed by the Authority, the licensees increase their transmission, distribution networks and thus provide gas to new towns and villages, thereby increasing their customer base.

A summary of additions to fixed assets for FY 2007-08 for both the companies are given below:

### 5.2.12.1 Sui Southern Gas Company Limited

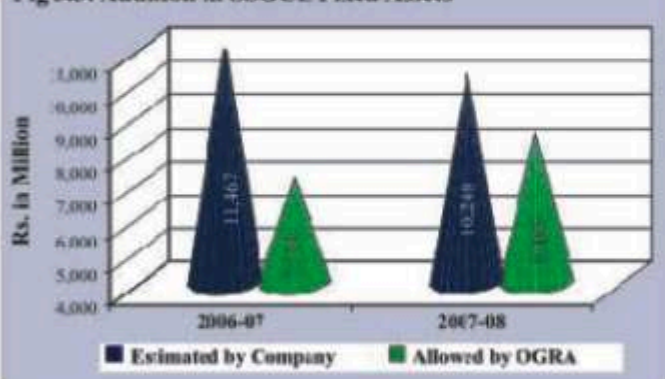
#### Increase in Assets

A graphical comparison regarding the increase in assets estimated by the company and finally allowed by OGRA on the basis of prudence in the years 2006-07 and 2007-08 as shown in Fig 5.3.

#### Addition in SSGCL Network

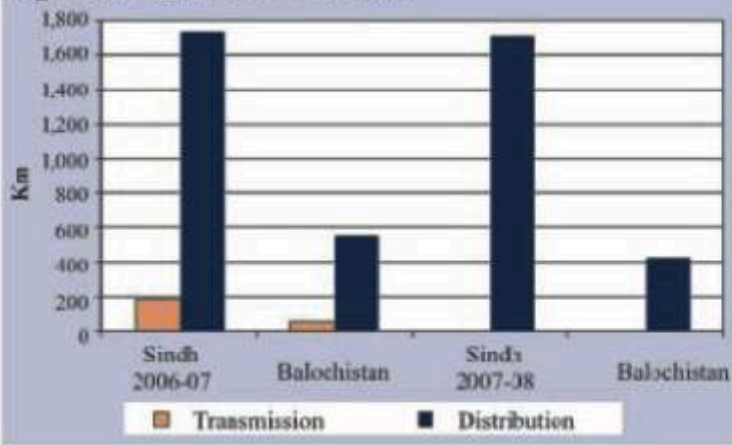
Fig 5.4 shows the increase in Transmission and Distribution networks of the company which has been allowed

Fig 5.3: Addition in SSGCL Fixed Assets



by OGRA after thorough evaluation of the company's petitions in recent years. SSGCL increased its distribution network by 2,139 Km during FY 2007-08. This increase in the fixed assets provided the Company further room to facilitate the existing and the prospective consumers either in terms of increase in the system capacity/ removal of bottlenecks or provision of new gas connections thus resulting in increase of their consumer base.

Fig 5.4: Addition in SSGCL Network



#### Addition in Number of Consumers

Table 5.10 shows the increase in the number of consumers in Sindh and Balochistan of various categories during FY 2006-07 and FY2007-08.

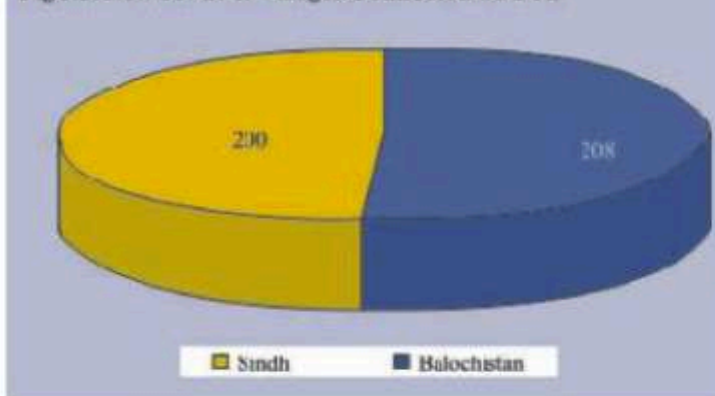
Table 5.10: Addition to SSGCL Consumer Base

Category	2006-07			2007-08		
	Sindh	Balochistan	Total	Sindh	Balochistan	Total
Domestic	72,652	9,951	82,603	82,436	11,336	93,772
Commercial	966	67	1,033	1,614	161	1,775
Industrial	201	5	206	398	4	402
<b>Total</b>	<b>73,819</b>	<b>10,023</b>	<b>83,842</b>	<b>84,448</b>	<b>11,501</b>	<b>95,949</b>

#### New Towns and Villages Connected

Fig 5.5 shows the total number of towns and villages connected to the network of the company in FY 2007-08. During the year under review additional 408 new towns and villages were linked to the company's distribution stream.

Fig 5.5: New Towns &amp; Villages Connected-SSGCL







### 5.2.12.2 Sui Northern Gas Pipelines Limited

#### Increase in Assets

A graphical comparison regarding the increase in assets estimated by the Company and finally allowed by OGRA in the years 2006-07 and 2007-08 is shown in Fig 5.6.

#### Addition in SNGPL Network

Fig 5.7 shows the increase in Transmission and Distribution networks of the Company during FY 2006-07 and FY 2007-08. An additional 391 Km of transmission and 8,085 Km of distribution were added during FY 2007-08 to SNGPL network.

#### Addition in Number of Consumers

Table 5.11 shows increase in number of consumers in company's area of operations province/territory-wise and category-wise during FY 2006-07 and FY 2007-08.

Fig 5.6: Addition in SNGPL Fixed Assets

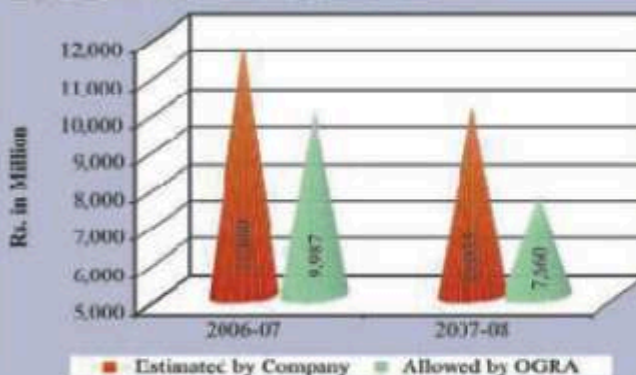


Fig 5.7: Addition in SNGPL Network

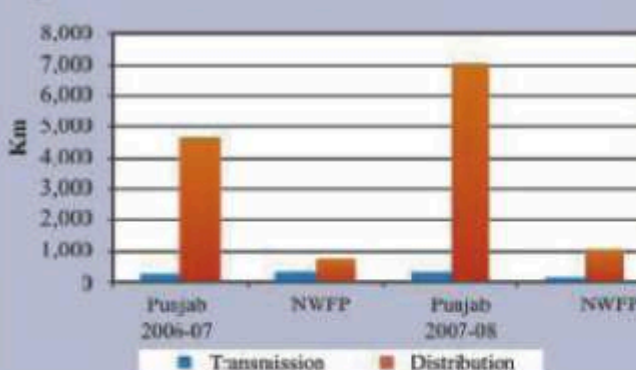


Table 5.11: Addition to SNGPL Consumer Base

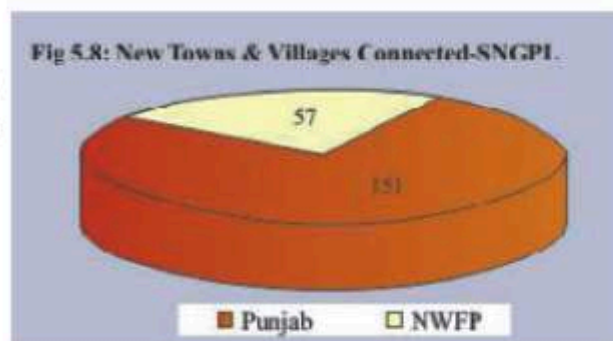
(Numbers)

Category	2006-07			2007-08		
	Punjab	NWFP	Total	Punjab	NWFP	Total
Domestic	194,982	31,157	226,139	202,790	29,305	232,095
Commercial	3,272	440	3,712	2,905	346	3,251
Industrial	668	74	742	830	187	1,017
Total	198,922	31,671	230,593	206,525	29,838	236,363



### New Towns and Villages Connected

During FY 2007-08, 208 new towns and villages were connected to SNGPL system as shown in Fig 5.8.



### 5.2.13 Enforcement of Regulatory Framework

OGRA is effectively enforcing the rules, regulations, standards, licence conditions, directions issued from time to time. In case of SSGCL and SNGPL, 30 out of 45 licence conditions pertain to safety, quality of service and consumer interests/rights. Additionally, OGRA has issued specific technical regulation and service standards.

OGRA is ensuring the use of best international practices through monthly, quarterly, biannual and annual reports on the regulated activities from the licensees, which are analyzed in depth and rectification of any discrepancies/gaps observed is ensured. The process of consumer complaint redressal is yet another regulatory enforcement mechanism, which OGRA uses effectively.

#### 5.2.13.1 Licence Conditions

OGRA in exercise of its powers conferred by the OGRA Ordinance 2002, granted licences to the gas transmission and distribution companies. Under the provision of these licences, the licensees are bound to undertake the regulated activities within certain defined parameters. Details are as follows:

#### 5.2.13.2 Gas Quality

The consumers of Natural Gas in the country are billed on energy units (MMBTU) and the regulator is obligated to ensure the quality of gas at the doorsteps of the consumers. OGRA has enforced the gas quality specifications by specifying mandatory limits of the components of gas and ensuring the same through regulatory mechanism. Gas quality comprises of several components namely, heat value, sulphur, hydrogen sulfide, carbon dioxide and water contents. Minimum average BTU, have been approved in conformity with best international industry practices as these components are directly related to pipeline and consumer safety. The Authority acquires periodic gas analysis at designated installations including 'mixing points' to ensure that the mixed or co-mingled gas conforms to the specifications as laid down by the Authority.

#### 5.2.13.3 Technical Standards

Under Licence Condition 17, the gas companies are under obligation to conform to the technical standards prescribed by the Authority from time to time, in accordance with the provisions of the Ordinance and Rules for the design, construction, operation and maintenance of its pipelines, equipments, materials and other accessories required for undertaking any of the regulated activities.

The standards and specifications for equipments and materials have also been developed and currently



the licensees are being consulted. These will be notified after the consultative process, and would further improve quality of equipment and materials procured and used in regulated activities. OGRA has notified technical standards relating to transmission and distribution of natural gas for the design, construction, operation and maintenance of its pipelines and is ensuring their compliance through technical audit currently under process, by an international firm in both the gas companies.

#### **5.2.13.4 Consumer Service Manual**

The licensees i.e., SSGCL and SNGPL have been directed to draft Consumer Service Manuals and submit the same for Authority's approval. The purpose of this initiative is to educate and facilitate the consumers regarding every aspect of their interaction with the licensees, from the time of application for new gas connection to its provision and then the services that the licensee shall provide to the consumers on an ongoing basis. The manual will also focus on creating greater consumer awareness about safe and efficient use of the gas appliances and energy conservation. In compliance, both the licensees had submitted the draft Consumer Service Manuals, which were reviewed and referred back with advice to include the following details:-

- a. Procedure of making application for new connections and their processing by the licensees.
- b. Billing procedures policies etc.
- c. Procedure of responding to complaints/ their redressal.
- d. Disconnection and Reconnection policies.
- e. Modifications and relocations of installations procedures.
- f. Additions /alterations in gas load procedure.
- g. Procedure for dealing with gas theft cases.
- h. Standard Industrial, Commercial and Domestic- Gas Sales Contracts.
- i. Performance and Service Standards.
- j. Safety and Energy conservation.

The licensees have since re-submitted the manuals, which are currently under review for approval.

#### **5.2.13.5 Performance and Service Standards**

Under the Licence Condition 24, licensees are obligated to maintain quality of gas, read meters timely and correctly and respond to consumer complaints efficiently. The Performance and Service Standards provide yardsticks to measure the licensees' efforts in the areas of safety, billing, providing new gas connections, complaints handling and other services.

Both the companies submit their annual reports on performance and service standards which are thoroughly examined by OGRA and corrective actions are taken as found necessary.

#### **5.2.13.6 Inspection**

Licence Condition 27 permits any person, duly authorized by the Authority, to carry out inspection of any aspect of operations of its licensees. In wake of reported incidents of blasts due to undetected leakage of gas, visits to various installations were arranged to check and verify whether the installations were safe, steps necessary to prevent such incidents were being taken e.g. whether the 'odorant oil' (basically a mixture of mercaptans i.e. organic compounds of sulfur bearing a typical unpleasant smell) was being added at Sales Metering Stations before injection of natural gas to Distribution Systems so as to enable



the consumers and public at large to detect leakage of gas. The inspections also covered the conditions of the following equipment:

1. Filtration equipment.
2. Control valves.
3. Flow meters.
4. Safety relief valves.
5. Calorific value meters (Gas Chromatographs, On-line Calorimeters).



*A view of Sales Meter Station*

#### **5.2.13.7 Technical Audit**

Under the Licence Condition 28, the utilities are under obligation to conduct technical audit of their operations for the first time within 3 years of issuance of the licence or within such period as may be approved by the Authority and subsequently, not later than every ten years of the first audit or such period which may be specified by the Authority. This condition has been embedded in the licences in order to assess the integrity of the utilities existing transmission and distribution infrastructure at regular intervals. The companies have already engaged the firms of international repute for the assignment. They have visited OGRA's office and have been provided with guidelines regarding the scope of work identifying areas which need closer attention. The audit in both the utilities is in progress. The reports will be submitted by the companies to OGRA for review and action/directions as may be found necessary.

#### **5.2.13.8 New Connections to the Distribution System and Minimum Service Obligations**

The Licence Condition concerning this aspect stipulates that the distribution companies are obligated to provide proposal letters/demand notes (i.e., sanction for gas connection) to the applicants whose premises are on existing gas line, within 90 days from the date of receipt of application. After payment of the demand note and deposit of security, new gas connections for domestic and commercial use are to be provided within 45 days and for industrial use within 90 days. In case of SSGCL this condition is being fully complied with whereas certain gaps have been identified in respect of SNGPL. Enquiries have revealed that compliance with the stipulated time frames per licence condition is delayed in case of SNGPL mainly because of massive ongoing gas network development work in new localities, towns and villages. OGRA has initiated a consultative process to reduce the waiting period and accelerate the clearance of back-log. It is likely to expedite service to the waiting prospective consumers as well as new applicants.

#### **5.2.13.9 Standard Contract Terms for Retail Consumers**

Under the Licence Condition 39, the companies are bound to develop comprehensive and equitable contracts for supplying natural gas to domestic, commercial and industrial consumers. The Authority, after a prolonged consultative process, approved and revised contract for supply of gas for domestic use, in August, 2005 making it more balanced and uniform. Similarly, the standard contracts with commercial and industrial consumers have also been revised and approved by the Authority in the current year.





#### **5.2.13.10 Installation Inside Premises**

Licence Condition requires the licensee to survey the premises of the retail consumers to ensure that natural gas is safely used, provide a design of the installation for supply of gas and provide specification of materials, fittings and appliances. The Licence Condition also obligates the licensees to ensure standards of good workmanship. The installation of house-lines and appliances by qualified, certified and accredited technicians will not only help in mitigating potential safety risks but would also ensure efficient use of gas. Both the licensees have reported that they are complying with this condition by engaging trained manpower.

#### **5.2.13.11 Disconnection and Reconnection Policies**

Under licence Condition 42, the Companies are required to submit to the Authority their detailed policy and procedure of disconnection and restoration of supply of natural gas to their gas customers. Both the Companies have submitted the same, which are currently under review.

### **5.3 Liquefied Petroleum Gas (LPG)**

#### **5.3.1 Regulation**

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



*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).
- Regular periodic inspection of LPG works and 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.
- Determination of reasonable prices and monitoring.
- Action against unauthorized activities like decanting, etc.

### 5.3.2 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. These licences are granted in two- stage for an overall period of 15 years. A provisional licence is granted for one year for construction of the LPG facilities. The licence for operation is granted after completion of works to the satisfaction of Authority.

### 5.3.3 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](http://www.ogra.org.pk)) along with other related documents, as required under the rules.

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



*LPG Extraction Plant (Night View)*

- 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 3<sup>rd</sup> party inspector, M/s. ENAR Petrotech Services (Pvt) Limited.
- Last three year's Audited Reports.
- Work Programme to be executed.

A licence is initially granted for a period of one year and after completion of works 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 a licence is granted on fast track once the requirements are met/complied. During FY 2007-08, 12 licences for marketing of LPG and 03 licences for construction of LPG Storage and Filling plants were issued. Investors are further provided comfort through one window facility where prompt guidance and information is provided to the applicants.



*LPG Extraction Plant*

### 5.3.4 Regulatory Enforcement

In order to ensure safe and cost effective supply to consumers, OGRA took following steps during FY 2007-08:

- All LPG marketing companies were directed to ensure that the distributors/dealers premises meet the requirements/guidelines of NFPA-58 Standard as given in the LPG (Production and Distribution) Rules, 2001. A list of minimum requirements to be met/complied with at the distributor's premises was also issued. In addition, Provincial Governments were also requested to ensure compliance of minimum requirements through respective DCO's and taking necessary action against the defaulters in their areas to ensure public safety.
- The authorized manufacturers of LPG storage tanks/bullets/bowzers/cylinders and cylinder valves have been pre-qualified by the Authority based on their experience/ expertise, capability, documentation and thorough inspections by an independent committee. All LPG licensees have been advised to get their equipment manufactured only from OGRA's authorized manufacturers.
- The layout plan(s) for LPG autogas stations in accordance with Regulatory Framework for use of LPG in automobiles, LPG (Production & Distribution) Rules, 2001 have been developed and placed at OGRA's website for guidance and convenience of potential investors. In addition, the layout plan(s) have also been distributed to all LPG marketing companies as well as to all Provincial Governments for information and necessary action.



*LPG Extraction Plant and Storage Facility*

- The first licence for construction of LPG Refueling Station has been issued after verification/ vetting of layout plan(s) by OGRA's 3<sup>rd</sup> party inspector, M/s. ENAR Petrotech and meeting other



requirements of Regulatory Framework of LPG (Production & Distribution) Rules, 2001.



- In order to stop/ minimize the illegal decanting of LPG, marketing companies have been advised to promote the usage of small sized LPG cylinders in their distribution network.
- Action against the illegal LPG decanting continued through the Provincial Governments and public awareness campaign launched in the print media to curb such malpractices. Seven (7) FIR's have been registered against the offenders found involved in the illegal decanting of LPG during the year.
- Enforcement of international technical/ safety standards.
- All LPG marketing companies were directed to ensure that all of their LPG cylinders fulfill the requirements of LPG standards (NFPA-58/DOT), as specified in LPG Rules, 2001. The companies were also advised to closely monitor the activities of their distributors' so as to ensure that their distributors only distribute company's branded cylinders.
- Thirty five (35) inspections of LPG marketing and production facilities were carried through 3<sup>rd</sup> party inspectors during FY 2007-08.
- LPG supplies were monitored to help uninterrupted supplies to consumers.
- 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 quantities of LPG supplied to these areas by LPG marketing companies were regularly forwarded to the concerned Provincial Governments in order to confirm the actual distribution of LPG quantities in the specified areas.
- LPG consumer prices of marketing companies were monitored in accordance with the provisions of LPG Production and Distribution Policy, 2006. In this regard, the Authority intervened in September 2007 & January 2008, to fix the reasonable consumer price.
- Penalties were imposed upon those companies which were found in violation of LPG Rules, 2001.
- Checklist of technical parameters for 3<sup>rd</sup> party inspection for LPG storage and filling plants is provided at the stage of issuance of licence so that the requisite facilities are completed in accordance with the applicable standards.

### 5.3.5 Investment in the LPG Sector

It is the policy of the Government to improve the availability of LPG and affordability of its price in the country to meet the domestic fuel requirements of the consumers especially in areas where natural gas is not available. To achieve the policy objective, OGRA has provided a level playing field for the investors to attract investment in the LPG sector. During the FY year 2007-08, an investment of Rs.0.75 billion has



been made in the LPG supply infrastructure whereas total investment in the sector till date, is estimated at about Rs. 12 billion.

### 5.3.6 Liquefied Petroleum Gas (LPG)'s Producer Pricing

The Cabinet, in its meeting held on December 06, 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:



*LPG Production Facility (Night View)*

- ❖ 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.
- ❖ OGRA will monitor / take measures to keep the profit margin of middlemen at reasonable level.

Prices announced by OGRA during FY 2007-08 are given in **Table 5.12**.

**Table 5.12: LPG Producer Price**

Price Effective	FOB Saudi ARAMCO Contract Price for Previous Month				
	Propane	Butane	Wt. Avg. Price US\$ / M.Ton	Exchange rate	Maximum price
	US\$	US\$	(40:60)	US\$ / PKR	Rs. / M.Ton
July 3, 2007	592	612	604	60.71	36,668
August 3, 2007	575	595	587	60.48	35,504
September 3, 2007	580	605	595	60.61	36,061
September 8, 2007	560	580	572	60.61	34,667
October 3, 2007	No change per advice of Federal Govt.				
November 3, 2007	730	755	745	60.78	45,279

*Note: LPG Maximum Base-Stock Prices are not issued after November 2007 as per the advice of the Federal Government*



The Federal Government (FG), in December 2007 however decided that LPG producers will be allowed to fix the prices at their own on monthly basis and OGRA will be responsible for monitoring the same in accordance with FG formula, with the objective that these remained at reasonable level. Accordingly, OGRA has been determining the reasonability level of LPG prices on monthly basis. OGRA intervened and undertook effective measures to successfully control the rising LPG prices during winter 2007-08 when the demand rises and the prices tend to go up.

## 5.4 Compressed Natural Gas (CNG)

### 5.4.1 Regulation

Government of Pakistan in 1992 took a policy decision to introduce CNG in Pakistan. In order to promote CNG as alternate/cheaper auto fuel, the Government offered certain policy incentives *inter-alia* including guaranteed price differential between motor gasoline & CNG, duty free import of CNG kits cylinders, market competition through deregulated pricing mechanism, establishment of an independent regulator (OGRA) etc. 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 the CNG facilities.
- Grant of licence for operation after certification of conformity of the CNG works to the laid down technical standards by the 3<sup>rd</sup> party inspector appointed by OGRA.
- Regular periodic 3<sup>rd</sup> party 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.
- Certification of CNG equipment after confirmation 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.





## 5.4.2 Licensing Procedure

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

### 5.4.2.1 Licence for Establishment/Construction of CNG Station

OGRA has simplified the procedure for obtaining the licence for establishment/construction of CNG station. The procedure requires complete application which is available free of cost from OGRA's office as well as from website ([www.ogra.org.pk](http://www.ogra.org.pk)) along with list of requisite documents. The applicants are also briefed and guided on the application procedure at the one window facility available in OGRA office.

OGRA grants a provisional licence for construction of CNG station for a period of two years under rule-6 of CNG Rules 1992, during which the licensee after acquisition of requisite NOCs from the concerned Federal/Provincial/Local authorities including a licence from Chief Inspector of Explosives under Rule 18 of CNG Rules 1992, completes construction of the CNG station.

The licence is normally granted within fortnight if all the legal formalities are fulfilled. Investors are further assisted by a one window facility where prompt guidance and information is provided to the applicants. Almost 6,000 visitors, during the year 2007-08, were entertained and provided with CNG related information at the one window facility.



*CNG Compressor*

### 5.4.2.2 Licence for Operation/Marketing of CNG Station

The licensee, after acquisition of requisite NOCs from the concerned Federal/Provincial/Local authorities, including licence from Chief Inspector of Explosives, and construction of CNG Station and installation of approved CNG equipment then requests the Authority for appointment of third party inspector for verification of the conformity of its CNG works to Standard Code of Practice of CNG safety Rules, 1992. The Authority appoints third party inspector for carrying out inspection of CNG Works/ Installations/ Stations under rule-10 of CNG Rules 1992. The licence for operation/marketing is issued for a period of 15 years after satisfactory report of the third party inspector. In order to bring quality and competition in the 3<sup>rd</sup> party inspections, the Authority has appointed internationally recognized inspectors to inspect the CNG facilities.

To ensure safe, reliable and cost effective services to the consumers, OGRA has given focused attention on conducting effective third party inspections, standardization of CNG equipment to help investors to adhere to the requirements of Safety Code of Practice and effectively regulating the sector in the light of the latest technological developments.



### 5.4.3 Regulatory Enforcement

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 following regulatory activities have been taken in 2007-08:-

- a) Annual safety audit / inspection on regular basis through the designated third party inspectors
- b) Surprise inspections to check measurement accuracy and safety violations on specific complaints under the Complaint Resolution Procedure Regulations, 2003.
- c) Regulatory monitoring of conformance of standards for new brands of CNG cylinders and conversion kits as per applicable rules.
- d) Fines/penalties imposed under the CNG Rules 1992, on the licensees involved in repeated safety violations, leading to disconnection of gas supplies.
- e) Public awareness campaign launched through print media to create public awareness on safety issues including the use of approved brands of CNG conversion kits and cylinders in the vehicles to ensure public safety.

### 5.4.4 Investment in the CNG Sector

Owing to increasing liquid fuel prices, enhanced trend to go for CNG as fuel, has attracted the attention of potential investors. CNG sector has shown tremendous growth in FY 2007-08. The investor friendly policies of the Government and level playing field provided by the Regulator through effective and efficient regulations has made Pakistan as one of the largest CNG user in the world with 2,214 operational CNG stations and more than 1.6 million CNG vehicles. During the year 2007-08, 764 new CNG stations have commenced operation showing growth rate of 53%. An investment of about Rs. 12 billion has been made in the CNG sector during 2007-08 whereas total investment in the sector stood at about Rs. 66 billion. The activity in the CNG sector during FY 2007-08 has generated more than 20,000 direct/ indirect jobs while the total direct/indirect employment opportunities in the CNG sector, till date, stands at more than 100,000.

### 5.4.5 Local Manufacturing of CNG Equipments

OGRA, in order to enhance national self reliance and save foreign exchange, has always encouraged local investment in manufacturing and assembling of CNG equipments. 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. During the current financial year M/s Comcept (PVT) Ltd has been granted approval of local manufacturing/assembling of CNG dispensers.



CNG Storage Bank



*Night View of a Refinery*

## **5.5 Midstream and Downstream Oil Sector**

### **5.5.1 Regulation**

The Federal Government enforced the provisions of sub-section (3) of Section 23; and (a) and (b) of sub-section (3) of section 44 of OGRA Ordinance 2002 with effect from 15<sup>th</sup> 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.

### **5.5.2 Powers and Functions**

In view of the above mentioned notification, the powers and functions transferred under the OGRA Ordinance and Pakistan Petroleum (Refining, Blending and Marketing) Rules 1971 mainly pertain to the following areas:-

#### **a) Grant of Licences to:**

- 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.



*Oil Pipeline*



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

### 5.5.3 OGRA's Activities in the Oil Sector

The details of the activities carried out by the Authority to regulate the mid and down stream oil sectors are as under:-

#### 5.5.3.1 Formulation of New Draft Rules

The new draft Rules namely Pakistan Oil (Refining, Blending, Transportation, Storage and Marketing) Rules 2006, developed by the Authority for regulating the oil sector, have been sent to Federal Government after incorporating the comments and feedback from oil industry and Ministry of Petroleum and Natural Resources (MP&NR), for approval and notification.

#### 5.5.3.2 Enforcement of Technical Standards (Storages)

In order to ensure that the new Oil Marketing Companies construct their oil terminals/storages in accordance with the latest 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:-

- 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)



### 5.5.3.3 Preparation of New Technical Standards

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

### 5.5.3.4 Quality Assurance

In order to ensure the supply of quality products, the Authority, under section 6(2)(x) of the OGRA Ordinance, has initiated the quality testing of petroleum products through Hydrocarbon Development Institute of Pakistan, which submits the quality testing reports to OGRA on regular basis.



*Oil Storage Tanks*

The testing is carried out on bi-annual/quarterly basis at the following:-

- OMCs' Depots/Terminals
- Blending/Reclamation Plants

Similarly, under advice of the Authority, the OMCs carry out product testing inspections at their respective retail outlets on regular basis and submit quarterly report to OGRA.

In the same way, the Authority has enforced through HDIP the monitoring and quality testing of the imported petroleum products on vessels (before unloading) in light of the GoP policy guidelines.

### 5.5.3.5 New Licences for Oil Refineries

M/s Bosicor Oil Pakistan Limited (BOPL) intends to set up a refinery with a capacity of 115,000 barrels/day (extendable up to 180,000 barrels/day) at Hub, Balochistan, for which the company has applied to OGRA for licence. This project would bring about an investment of US\$ 337 million. In addition, M/s. Trans Asia Refinery Limited (TARL) has already been provided regulatory guidelines by the Authority to set up a refinery in Karachi with a capacity of 100,000 barrels per day. While the case for issuance of regulatory guidelines to M/s. Indus Refinery Ltd. (IRL) is also in process, which intends to set up a refinery at Port Qasim with the capacity of 100,000 barrels per day. These three projects (i.e. BOPL, TARL and IRL) would bring investment of US\$ 1.54 billion after completion which is expected in the next two years. The Authority is currently issuing regulatory guidelines, pending issuance of formal licence under the new Oil Rules which are yet to be notified by the Federal Government. The guidelines are issued for construction of the refinery after examining the proposal in light of the Ordinance, policy guidelines given in Import Policy Order 2007 and obtaining MP&NR's observation from policy perspective inter-alia covering the following main areas:-

- i) Follow GoP policy on relocation of complete 2<sup>nd</sup> hand refinery as provided in the import policy order.



- ii) Clearance from the concerned Environmental Protection Agency and other federal or provincial agencies as per 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 on conformity of Technical/Safety Standard upon completion of the project.



*Plant Unit of a Refinery*

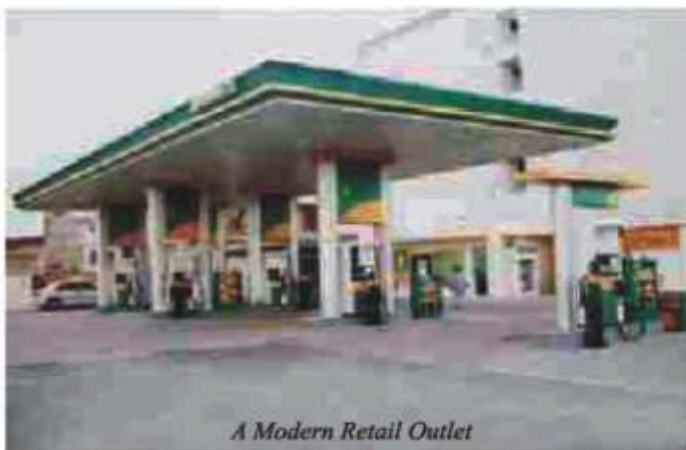
#### **5.5.3.6 Licence for Offshore Loading/Unloading Facility**

M/s. Bosicor Pakistan Limited (BPL) in collaboration with M/s. Coastal Refinery Limited (CRL) intends to install a Single Buoy Mooring System (SBM) for loading/unloading of crude oil and furnace oil near Khalifa Point at Hub Balochistan. A pipeline of 20 Km (12.7 Km off shore and 7 Km on shore) will be laid down, connecting with SBM, located near Khalifa Point west of Karachi coast, the storage tanks of M/s. BPL. The company, in this regard has applied for grant of licence under section 23 (3) (a) of OGRA Ordinance. The Authority is in consultation with the Federal Government to seek policy guidelines, so that the company is allowed to proceed in the matter in accordance with the regulatory framework to be laid down by OGRA.

#### **5.5.3.7 Renewal/Extension of Licences for Oil Marketing Companies**

The Authority renewed marketing licence of Admore Gas Pvt. Ltd. after it successfully met all the requisite investment and infrastructure related conditions for getting a renewal.

The provisional licences of M/s Hascombe Storage Pvt. Ltd. and M/s Overseas Oil Trading Company Ltd. were extended for one year so that they can complete their committed work plan.



*A Modern Retail Outlet*





#### 5.5.3.8 New Licences for Lube Oil Blending/Reclamation Plants

Seven applicants requested for registration of their Lube Oil Blending/Reclamation plants in accordance with rule 16 & 17 of the Pakistan Petroleum (Refining, Blending and Marketing) Rules 1971. The Authority, registered five plants after certifying through HDIP, the conformity of the plants with the mandatory technical requirements given in the aforementioned Rules. Rest of the applications are under process.



*Base Oil Storage Tanks*

#### 5.5.4 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.

The Federal Government has also issued policy guidelines to the Authority in respect of parameters 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 1<sup>st</sup> and 16<sup>th</sup> 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.
- ❖ 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 2007-08 is at **Appendix-II**.

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 trend of ex-depot sale prices of petroleum products notified by OGRA during the 2007-08 is shown in **Fig 5.9**



It is worth-mentioning that the Federal Government is providing huge subsidy in respect of petroleum products. A comparison of international prices and local ex-depot prices during the period of FY 2007-08 is given in **Tables 5.13 & 5.14** respectively.

**Table 5.13: International Prices**

Products	Unit	1-Jul-07	22-Jun-08	Increase	
				Amount	%age
Naphtha	S/M. Ton	641.55	1041.89	400.34	62.40
HSFO	S/M. Ton	349.40	595.34	245.94	70.39
KERO	S/BBL	82.26	158.71	76.45	92.94
HSD	S/BBL	79.86	158.85	78.99	98.91
Aviation Light	S/BBL	67.13	127.05	59.92	89.25
Exchange Rate	R./\$	60.59	67.38	6.79	11.21





Table 5.14/ Local Ex-Depot Prices

Products	Unit	1-Jul-07	22-Jan-08	Increase	
				Amount	%age
MS	Rs /Ltr	53.70	68.81	15.11	28.14
HOBC	Rs /Ltr	64.88	80.77	15.89	24.49
SRO	Rs /Ltr	35.23	41.44	6.21	17.63
LDO	Rs /Ltr	32.57	44.59	12.02	36.91

The above tables clearly shows that the international prices kept increasing, rather sharply but local prices were kept frozen. Through the recent increases, the FG has passed only partial impact of increase in international oil prices to the consumers.

## 5.6 Complaints Resolution

### 5.6.1 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) as amended from time to time, framed under the OGRA Ordinance, 2002. A dedicated Complaints Redressal Department is resolving public complaints and redressing their grievances against gas utility companies, LPG companies and CNG stations expeditiously in the shortest possible time. OGRA values the complainants and takes into account their very useful feedback. OGRA's public grievances redressal mechanism encompasses core values of good governance like transparency, responsiveness, efficiency and rule of law.

OGRA is protecting the consumers (weakest stakeholders) from unfair treatment and exploitation by the licensees. OGRA also provides a service to them by ensuring public safety, reliability and quality. Utilities are being persuaded through various means to improve their operational efficiency, provide gas connections in stipulated time frame, improve bill collection, and avoid inaccurate meter reading, late delivery of bills and load-shedding.

The complaints being received relate to:

- Delay in provision of gas connection/Refund of urgent fee for gas connection.
- Excessive/Estimated billing.
- Low pressure of gas.
- Unjustified removal of gas meter/delay in restoration of gas supply.
- Supplementing billing for alleged tampering/theft.
- Late delivery and non-provision of gas bills/unjust levy of Late Payment Surcharge.
- Supplementing billing for alleged enhancement in delivery pressure.
- Demand of additional security.
- Gas leakage.
- 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 any Licensee or its agents, etc. etc.

In conformity with CRPR the Authority has designated specific officers for handling complaints with specific jurisdictions. The complaint is first referred to the relevant agency for its comments within the stipulated timeframe. The comments of the agency are provided to the complainant for counter-comments. The Designated Officer decides the case taking into account view point of both the parties and providing an opportunity of personal hearing/meeting to both the parties if needed. Any party, 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.

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

- OGRA follows an "OPEN DOOR" Policy for complainants. Visitors can see the concerned officers without prior appointment. Further, they do not have to wait for more than 15 minutes to see the officers.
- The affected parties are invited to defend the case at least once.
- A focal person has been appointed to facilitate the public.
- OGRA publicizes the Complaint Resolution Procedure through the newspapers and also disseminates through its website.
- The complainant is allowed to file application on a plain paper without paying any fee.
- The complainant is kept informed of the progress.
- The complainants are guided how to fill and file the Application form.
- Ensures the following facilities for the visiting public:-
  - Reception
  - Seating arrangement
  - Safe drinking water
  - Toilet
- Treat every one with the same respect and dignity, irrespective of socio-economic status, or background.
- No act of discretion.
- Grievances redress procedure, in detailed form, is available.

### 5.6.2 Complaints and Appeals

During 2007-08 OGRA received 1,594 complaints from all over the country and resolved 1,154 of them. About 92% of the complaints were related to natural gas as it is the most widely used fuel. 44 Appeals against the decisions of the Designated Officers were received by Authority. The Authority has already decided 30 of them. The status of complaints and appeals is given in **Table 5.15**.

**Table 5.15: Status of Complaints and Appeals***(Numbers)*

Category	Natural Gas	LPG	CNG	OIL	Total
Complaints received	*1,470	64	44	16	1,594
Complaints resolved/disposed	1,036	64	41	13	1,154
Complaints under process	434	0	03	03	440
Appeals to the Authority against decisions of the Designated Officers	44	-	-	-	44
Appeals decided by the Authority	30	-	-	-	30
Appeals to the High Court against the decisions of the Authority	02	-	-	-	02

*\*includes 293 complaints carried forward*

On OGRA's intervention, gas utilities provided 409 gas connections and relief of Rs.26.77 million to consumers during FY 2007-08. On receipt of complaints from the residents of a number of localities/areas inhabited by weaker sections of the society, OGRA issued necessary directions to SNGPL and gas has been/is being provided to 10 localities/areas by SNGPL. Commitment has been made by SNGPL to supply gas to 08 other localities/areas in near future.

OGRA's intervention on consumer complaints resulted in direct benefit/relief to 510 complainants mostly the domestic consumers during FY 2007-08. However, more important is the positive effect that it is having on companies' overall performance. They are continuously upgrading their own complaint resolution processes to prevent consumers from approaching OGRA.

Anticipated  
Developments  
Next Year







## 6. Anticipated Developments Next Year

### 6.1 Regulatory Framework

The Authority has already 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 per requirement. Following specific progress is scheduled during FY 2008-09:

#### 6.1.1 Rules

- ❖ Notification of the Pakistan Oil (Refining, Blending, Transportation, Storage and Marketing) Rules, by the Federal Government.
- ❖ Submission of Fines and Recovery Rules to the Federal Government for approval/notification.
- ❖ Submission of Producers Price Rules to the Federal Government for approval/notification.
- ❖ Submission of Amendments to Liquefied Petroleum Gas Rules, 2001 to the Federal Government for approval/notification.
- ❖ Submission of Amendments to Compressed Natural Gas Rules, 1992 to the Federal Government for approval/notification.

#### 6.1.2 Regulations

- (i) Formulation and notification of Oil Technical Standards for oil storage/terminals, retail outlets, oil road transportation and oil pipelines.

### 6.2 Determination of Revenue Requirement

Determination of the revenue requirement of natural gas utilities is one of the most important functions of the Authority. The Authority has recently completed the estimated revenue requirement of SSGCL and SNGPL for FY 2008-09. The Authority shall make the following determinations of both the gas utilities during the next financial year:

- i) Final revenue requirement for FY 2007-08 based on the actual audited results.
- ii) Review of estimated revenue requirement for FY 2008-09 after incorporating the actual changes in well-head prices of natural gas and other relevant factors.
- iii) Estimated revenue requirement for FY 2009-10.

### 6.3 Price Notifications

- i) 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.



- ii) The process of notification of oil prices on fortnightly basis will also continue.

## **6.4 Implementation of Uniform System of Accounts**

Both the gas utility companies have started generating prescribed reports from the system; however, there are certain anomalies, yet to be resolved. It is anticipated that Uniform System of Accounts (USOA), will be fully implemented during FY 2008-09.

## **6.5 Implementation of New Tariff Regime**

OGRA has developed a new tariff regime for regulated natural gas sector of Pakistan, which is in the process of legally mandatory consultation with the Federal Government, and is expected to be finalized during next year.

## **6.6 Licensing**

### **6.6.1 Natural Gas**

OGRA will continue to process applications for licences under NGRA (Licensing) Rules, 2002 during FY 2008-09.

Approval of Gas Sales Agreements between Producers and Licensees and Gas Supply Contract between Licensees and the Consumers shall also be processed promptly.

### **6.6.2 LNG**

OGRA will process applications for licence for LNG production, transportation and distribution under Liquefied Natural Gas (LNG) Rules, 2007 from prospective investors next year. Up till now one company has requested for issuance of licence for production, storage and sale of LNG. The process of issuance of licence is at an advanced stage. Few other companies have also shown interest in the LNG sector.

### **6.6.3 LPG**

It is anticipated that the LPG marketing companies and OMC's will apply for a number of LPG refueling stations in light of Regulatory Framework for use of LPG in automobiles. Further, 8-10 companies will be granted licences for marketing of LPG once satisfactory inspection of facilities is completed. In addition, manufactures of LPG equipment who have applied for pre-qualification will be pre-qualified as authorized manufactures after inspecting their facilities by an independent committee of OGRA.

### **6.6.4 CNG**

The Authority expects to grant about 400-500 marketing licences for commercial operation of CNG stations. It is also anticipated that the Authority will get applications for evaluation and approval of additional manufacturers of CNG equipments during FY 2008-09. Further, the Federal Government had decided to entrust OGRA to regulate CNG prices and the law is being amended for necessary empowerment.



### 6.6.5 Midstream and Downstream Oil Sector

Processing of following cases for licences is expected;

- i) Three refineries namely M/s Bosicor Oil Pakistan Limited, M/s Trans Asia Refinery Limited and Indus Refinery Limited.
- ii) M/s Fateh Petroleum Limited, M/s Anoud Group, M/s Masood Sons and M/s Indus Refinery Limited showed interest in establishment of an oil marketing company.
- (iii) Lube Oil Blending / Reclamation Plants

### 6.7 Redressal of Public Complaints

One of the fundamental responsibilities of a public utility regulator is provision of easy 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 have shown an increasing trend. OGRA is determined to continue to promptly process the complaints in accordance with OGRA's Complaint Resolution Procedure Regulations, 2003.

### 6.8 Capacity Building

OGRA has successfully put in place the regulatory framework and is now fully operative. The stage has reached when, substantive actions need to be taken to re-engineer the processes and achieve higher levels of effectiveness to meet the regulatory challenges.

The following strategy will continue to be followed in future to nurture the requisite expertise:

- Studies pertaining to key regulated activities will be undertaken as necessary for finding regulatory solutions tailored to Pakistan's specific economic conditions. These studies would help in ensuring efficient and effective economic and social regulation of the petroleum sector.
- Professionals will continue to be provided relevant specialized training in leading international and local institutions to continually upgrade their competencies and effectiveness.

A reliable and consistent database on energy sector, with particular focus on oil & gas sector will be established and maintained to have information available on various variables at the international, regional and national level and to improve credibility and usability of the periodical report on the State of Regulated industries.

### 6.9 OGRA Building Project

At present OGRA's offices are located in rented space in three buildings. This temporary arrangement is conducive neither to efficient, cost effective operation nor to cultivating a sense of belonging among the employees. For permanent housing of OGRA offices and to meet future needs, it is envisaged that a building will be constructed at two adjacent Plots, No. 37 & 39, Mauve Area, G-10/4, Islamabad, which have already been allotted to OGRA by CDA for this purpose with the approval of the Prime Minister of Pakistan.



Development Working Party (DWP) for OGRA has approved the Project. Design Consultant has been engaged and the design has actually been approved by CDA. The foundation stone is expected to be laid in the last quarter of 2008.

## Appendix-I

## Field-wise Well-head Gas Prices

Sr. No	Field Name	Units	Price Effective 01-07-07	Price Effective 01-01-08
1	Adhi	Rs.per MMBTU	89.24	91.15
2	Bhangali	Rs.per MMBTU	124.92	128.09
3	Bhit	\$ per MMBTU	3.4283	3.8334
4	Dakhani	Rs.per MMBTU	88.92	91.17
5	Daru	Rs.per MMBTU	78.18	80.16
6	Dhodak	Rs.per MMBTU	177.67	182.17
7	Dhurnal	Rs.per MMBTU	15.61	16.19
8	Hassan	\$ per MMBTU	2.3219	2.4252
9	Kadanwari	\$ per MMBTU	6.9692	9.4129
10	Kandkot	Rs. per MMBTU	93.91	107.47
11	Loti	Rs. per MMBTU	83.55	85.66
12	Meyal / Dhulian	Rs. per MMBTU	77.87	79.70
13	Miano	\$ per MMBTU	3.1919	3.5690
14	Nandpur Panjpir	Rs. per MMBTU	225.05	230.75
15	Pariwali	\$ per MMBTU	3.4283	3.8334
16	Pindori	\$ per MMBTU	3.4283	3.8334
17	Pirkoh	Rs. per MMBTU	83.55	85.66
18	Qadirpur	Rs. per MMBTU	161.02	
19	Sadkal	Rs. per MMBTU	262.89	366.78
20	Sara / Suri	Rs. per MCFT	87.80	89.93
21	Sari Hundi	Rs. per MMBTU	248.38	342.94
22	Sawan	\$ per MMBTU	3.1919	3.5690
23	Sui	Rs. per MMBTU	93.91	107.47
24	Turkwal	\$ per MMBTU	3.4283	3.8334
25	UCH	\$ per MMBTU	3.9223	3.9223
26	Zamzama SNGPL	\$ per MMBTU	3.1044	3.4815
27	Zamzama SSGCL	\$ per MMBTU	3.1019	3.4790
28	Zamzama Wapda/Guddu	\$ per MMBTU	3.1449	3.5220
29	Badin Compression	Rs. per MMBTU	127.83	
30	Badin Non-Golarchi Non-Associated	Rs. per MMBTU	248.34	344.07
31	Ratana	Rs. per MMBTU	234.16	239.44
32	Mari	Rs. per MMBTU	55.94	
33	Rehmat	\$ per MMBTU	2.5219	2.5297
34	Chanda	\$ per MMBTU	2.7087	2.7171
35	Niamat Basal-1 & Siraj South-1	\$ per MMBTU	2.5219	2.5297
36	Bilal North - 1 & Bilal - 1	\$ per MMBTU	2.2319	2.5297
37	Kauser Deep-1, Usman, Umar & Ali-1	\$ per MMBTU	2.5219	2.5297
38	Badin Deep fields	\$ per MMBTU	3.0967	3.4736
39	Badin-II, Badin-II Revised, Badin-III (Head of Agreement)	\$ per MMBTU	3.0967	3.4736
40	Badar	\$ per MMBTU	2.2319	2.3352
41	Mela	\$ per MMBTU	2.6387	2.6471
42	Chachar	\$ per MMBTU	2.4769	2.4897
43	Salsabil	\$ per MMBTU	2.5017	
44	Zamzama - Phase - II	\$ per MMBTU	3.0967	3.4736
45	Bhadra	\$ per MMBTU		3.8334
46	Makori	\$ per MMBTU	2.6587	2.6671





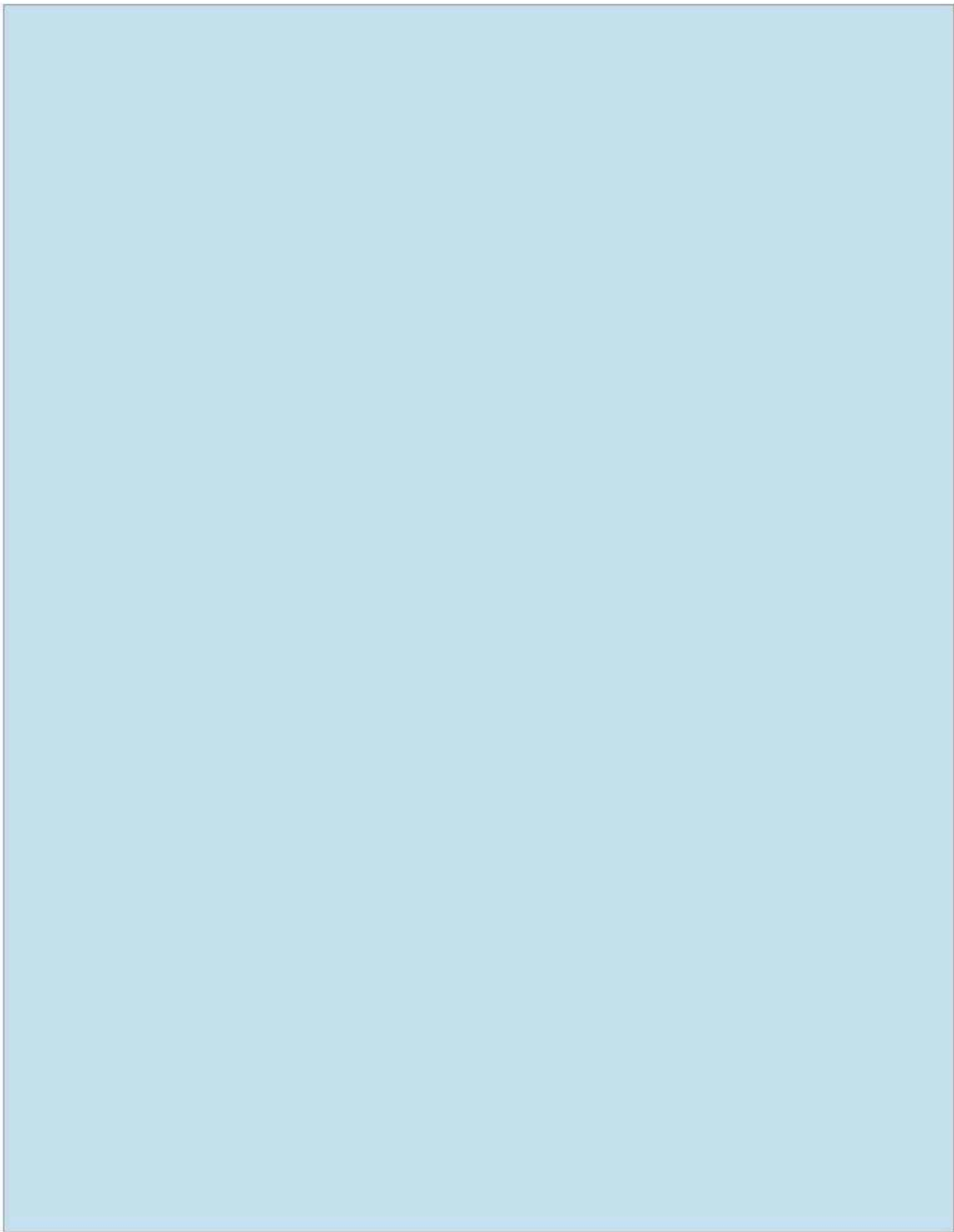
## Appendix-II

### Petroleum Development Levy (2007-08)

(Rs./ Liter)

Product	MS 87 RON	HOBC	KERO	LDO	JP-1	JP-4	JP-8
July 1, 2007	8.85	16.36	-	-	-	3	3
July 16, 2007	7.85	15.04	-	-	-	3	3
August 1, 2007	8.48	15.56	-	-	-	3	3
August 16, 2007	9.79	17.01	-	-	-	3	3
August 25, 2007	10.52	18.29	-	-	-	3	3
September 1, 2007	11.03	18.76	-	-	-	3	3
September 16, 2007	9.06	15.89	-	-	-	3	3
October 1, 2007	6.63	12.5	-	-	-	3	3
October 16, 2007	6.21	12.23	-	-	-	3	3
November 2, 2007	3.95	9.66	-	-	-	3	3
November 16, 2007	2.29	5.81	-	-	-	3	3
December 2, 2007	0.99	4.37	-	-	-	3	3
December 16, 2007	1.12	7.49	-	-	-	3	3
January 1, 2008	0.04	6.4	-	-	-	3	3
January 17, 2008	-	2.06	-	-	-	3	3
February 1, 2008	-	4.36	-	-	-	3	3
February 17, 2008	-	4.36	-	-	-	3	3
March 1, 2008	0.57	6.26	-	-	-	3	3
March 16, 2008	3.04	9.14	-	-	-	3	3
March 31, 2008	3.22	9.23	-	-	-	3	3
April 15, 2008	4.89	11.14	-	-	-	3	3
May 1, 2008	4.23	10.22	-	-	-	3	3
May 16, 2008	0.8	4.69	-	-	-	3	3
June 1, 2008	-	-	-	-	-	3	3
June 22, 2008	-	-	-	-	-	3	3
June 29, 2008	-	2.18	-	-	-	3	3







The logo of the Oil & Gas Regulatory Authority (OGRA) is a large, stylized 'O' composed of several concentric, wavy lines in shades of blue and green, creating a sense of motion and energy. The background of the entire page is a dark blue gradient with abstract, flowing shapes in lighter blue and green.

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