



Sui Northern Gas Pipelines Limited

sng

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49th Annual General Meeting of Shareholders

Editorial Board

Patron-in-Chief

M. Arif Hameed

Chief Co-ordinator

Rehan Nawaz

E Team

Media Affairs Department

The 49th Annual General Meeting (AGM) of Sui Northern Gas Pipelines Limited was held on March 20, 2013 at Pearl Continental Hotel (The Mall) Lahore. Mian Misbah-ur-Rehman-Chairman SNGPL chaired the meeting. Mr. Mohammad Arif Hameed-Managing Director, Mr. Nessar Ahmed-Director, Qazi Mohammad Saleem Siddiqui-Director, Mr. Ahmad Aqeel-Director, Mrs. Uzma Adil Khan-Chief Financial Officer and Ms. Wajiha Anwar-Company Secretary were present at the meeting with the Senior Management of the Company.

The Company's Annual Accounts for the year ended June 30, 2012 were placed before the shareholders. As per declaration, the Company earned gross profit of Rs. 7,230 million, whereas the net Profit after tax was Rs. 3,044 million. The shareholders of the Company approved cash dividend at 25% alongwith 10% bonus shares and the Annual Accounts of the Company for FY 2011-12. During the year ended June 30, 2012, sales revenue of the Company was Rs. 216,652 million as compared to Rs. 187,838 million in FY 2010-11. The cost of gas sales were Rs. 209,423 million as compared to Rs.184,237 million in FY 2010-11. The Company has contributed an amount of Rs. 38,391 million to the National Exchequer in the form of taxes and duties. During the year under report 412 new towns, villages, District Head Quarters (DHQs) & Tehsil Head Quarters (THQs) were connected with the existing system of the Company. A total of 2494 towns, villages, DHQs now exist on the Company's network, which are being facilitated with natural gas facility at their doorstep.

The shareholders also approved the appointment of M/s A.F. Ferguson & Co. Chartered Accountants, as statutory Auditor of the Company for the Financial Year 2012-13. The shareholders raised certain questions, which were responded by the Management satisfactorily. At the end of the meeting, refreshments were served amongst the respected shareholders.

Corporate Affairs Dept. (HO)



Dear Readers,

Earth Day is a Global day, celebrated on April 22, on which events are held worldwide to demonstrate support for environmental protection. This year's theme is "The Face of Climate Change", chosen to highlight the "mounting impact" of global warming on people worldwide. Earth Day 2013 was celebrated at SNGPL as well. Media Affairs Department ran a campaign of small acts on this day to mark its share like turning off the lights when not in use, turning off the monitor when not to be used for 20 minutes, using recycleable bags when going for grocery, refilling the cartridges instead on installing new ones and eating less meat. We request our readers as well to make these small deeds, a part of our daily life to support the concept of Earth day.



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BIOMETRIC SYSTEMS / CLOCK IN CLOCK OUT

Biometrics is concerned with identifying a person based on his / her physiological or behavioral characteristics. Biometrics is a security measure that scans essential user information like fingerprints to authenticate authorized users. For especially sensitive information, some companies use biometric security measures instead of traditional passwords or pin numbers. Although both methods of security are common, biometric security measures have several advantages over traditional password security.

What are biometric systems used for?

Reliable user authentication is essential. The consequences of insecure authentication in a banking or corporate environment can be catastrophic, with loss of confidential information, money and compromised data integrity. Many applications in everyday life also require user authentication, including physical access control to offices or buildings, e-commerce, healthcare, immigration and border control, etc.

How does it work?

It is flexible and can be used for:-

1. Time attendance and access control of employees, using both standard means of identification (contactless card, passwords and PIN codes) and biometric ones (fingerprints).
2. Creation and management of access schedules and rules regulating employee access to restricted areas and checkpoints.
3. Employee time analysis and reports generated based on verified clock in and clock out events.
4. Automation of time-keeping routines and management of absences.

Why are biometrics secure?

- Unique: The various biometrics systems have been developed around unique characteristics of individuals. The probability of 2 people sharing the same biometric data is virtually null.
- Cannot be shared: Because a biometric property is an intrinsic property of an individual, it is extremely difficult to duplicate or share (you cannot give a copy of your face or your hand to someone).
- Cannot be copied: Biometric characteristics are nearly impossible to forge or spoof, especially with new technologies ensuring that the biometric being identified is from a live person.
- Cannot be lost: A biometric property of an individual can only be lost in case of serious accident.

Advantages of the Biometric System

1. Unique Biological Features – Biometric authentication measures a biological feature of a person like fingerprint, iris, etc. Hence it is a very effective security system and cannot be easily disguised.
2. Time Saving – Unlike other identification procedures, biometric is easily accessible and time saving. Within a couple of seconds, a person's biometrics is either identified or rejected. As every office follows time management, time saving systems like biometrics have become beneficial for the office revenue.
3. Reduce Fraud – As biometrics cannot be shared, you cannot find anything like more than one person using the same password. This reduces fraud and provides complete security.
4. Accountability - A biometric log in or entry indirectly connects the individual as responsible to any event. If there is a security breach, then the security system will provide the accurate record of who is accountable for the issue. This provides complete and true accountability and cannot be forged by others.

How to use this system which is being installed at Head Office?

It is essential to have the RFID card, to pass through the Biometric system to enter in office building.

It is pertinent to observe the following procedure:-

- Scan/swipe your card on the card reader/scanner of the biometric system.
- Let the barrier of the biometric system open.
- Then pass through the barrier.

The next following employee should apply the same procedure and should not attempt to pass through the open barrier.

Saman Altaf

Coordinator Officer LS (H0)



Steering Committee Meeting on Allocation of Gas to FFM Consortium Directly from Sources

A meeting of the Steering Committee with Four Fertilizer Manufacturers (FFM) Consortium was held at Head Office SNGPL on February 21, 2013 under the chairmanship of worthy Managing Director.

The meeting was a sequel in connection with implementation of decision of EEC of the cabinet regarding allocation of 202 MMCFD gas directly from sources to the members of FFM Consortium viz. Engro Fertilizer, Pak-Arab Fertilizer, DH Fertilizer, and Agri-Tech Fertilizer, and its transportation through SNGPL network in

accordance with OGRA's Third Party Access (TPA) Rules 2012. Deliberations were carried out to address the issues related to capacity availability, system augmentation and legal matters.

The allocated gas, as communicated by the Director General (Gas) vide letter No. NG (I)-7(158)/12-F dated 1st January 2013, is tabulated below:

FIELDS	ALLOCATED VOLUME (MMCFD)
Kunnar Pasaki Deep - (KPD) Additional	130
Mari Field (Additional)	22
Bahu (New Find)	15
Reti Maru (New Find)	10
Makori East (TAL Block) (New Find)	25
TOTAL	202

The allocated volume to each Fertilizer plant is as follow:

FERTILIZER PLANTS	ALLOCATED VOLUME (MMCFD)
ENGRO	79
PAKARAB	58
DAWOOD HERCULES	40
AGRITECH	25

Zeeshan Qadar-Exec. Engineer, Transmission (H0)



Interactions



**M.D. SNGPL,
Mr. M. Arif Hameed briefs
Ex. Minister of Water &
Power, Mr. Ahmed Mukhtar
on Energy issues/crisis.**

**Mr. M. Arif Habib-Director
SNGPL, visits
Mr. Arif Hameed MD
SNGPL at Head Office.**



**MD SSGC
Mr. Zohair Siddiqui with
MD SNGPL-Mr. M. Arif
Hameed, during a
discussion at SNGPL,
Head office.**

102nd Women's Day



Founding father of Pakistan, Quaid-e-Azam Muhammad Ali Jinnah in his speech at Islamia College for Women, on March 25, 1940 said, "I have always maintained that no nation can ever be worthy of its existence that cannot take its women along with the men. No struggle can ever succeed without women participating side by side with men. There are two powers in the world; one is the sword and the other is the pen. There is a great competition and rivalry between the two. There is a third power stronger than both, that of the women."

In today's world we can understand the vision of Quaid-e-Azam and realise that gender equality implies a society in which women and men enjoy the same opportunities, outcomes, rights and obligations in all spheres of life. Equality between men and women exists when both sexes are able to share equally in the distribution of power and influence; have equal opportunities for financial independence through work or through setting up businesses; enjoy equal access to education and opportunity to develop personal ambitions. A critical aspect of promoting gender equality is the empowerment of woman, with a focus on identifying and redressing power imbalances and giving women more autonomy to manage their own lives. Women empowerment is a vital to sustainable development and the realization of human rights to all.

The traditional role of women had been, as an obedient daughter, a loving caring sister and a loyal wife. However education has given women enlightenment and vision, which made them realize their importance. In the present era now women can be seen in almost every sphere of practical fields besides men. They like men, tremendously play important roles in the development of the world, in different capacities and spheres.

Year after year, March 8 unwaveringly marks International Women's Day, which is commemorated globally for more than a hundred years now. And while the original focus of the celebration was a movement towards gender equality and women's suffrage, it has since evolved to become more than that. It has become a day to celebrate women –

their achievements and successes – as well as bring awareness to the progressions they've managed to accomplish thus far.

Sui Northern Gas Pipelines Limited is playing a significant role in promoting and strengthening women role in the development of a corporate culture based on equal opportunities for both genders. The Company is providing exorbitant opportunities, on par with men, to the new qualified talented females to join their different departments. In cognizance of contributions of working women, 8th March, the International Women's Day was celebrated with great enthusiasm and spirit. Almost all the female employees gathered with Mrs. Uzma Adil Khan, SGM and Ms. Wajiha Anwer, Company Secretary and greeted each other. They shared their experiences and views of being a women and how they feel working in a leading organization.

Saman Altaf

Coordinator Officer LS (H0)



Gas Theft Raid at Sami Town, Jahangirabad 5 Marla Scheme, Multan

On 20th February 2013, on information a gas theft raid was conducted at Sami Town, Mouza Jahangirabad, By Pass road, Multan. The said colony is developed privately by Mr. Mehr Muhammad Iqbal S/O Manzoor Hussain and gas network was laid in the colony illegally. On further investigation, it was found that 1 ¾" Ø P.E pipe was laid in the colony at the depth of 18" only and quality of work was substandard. According to the neighbors P.E pipe was laid about two months ago. The laid pipe was connected with our supply mains of 2" Ø MS pipe.

Laid network was disconnected immediately and the entire pipe was uplifted and handed over to the police.

Application for registration of case against the colony owner is submitted in the police station Seetal Mari.

M. Jamil Akhtar
Sr. Associate Engineer (D) Multan

Life imprisonment for Gas theft

A raid was conducted by Dy. Chief Engineer (Operation) Islamabad on 23rd September, 2011 wherein Bashir Masih resident of Islamabad was caught red handed, illegally supplying gas to more than 290 houses of Katchi Abadi in Sector 7/4, Islamabad through pilferage of gas from our system. Bashir Masih was recovering Rs. 700 from each house to which gas was being supplied. SNGPL has calculated total volume loss 2000 HM3 on account of gas theft amounting to Rs. 1.20 million.

Finally Anti Terrorist Court, Islamabad has sentenced Bashir Masih to Life Imprisonment with fine of Rs. 1 million on gas theft. His applications for bail were also rejected.

If you find someone around you indulging in gas theft, please contact nearest SNGPL office or dial 1199 for action against culprits. Your identity will be kept strictly confidential.

Beware
Gas theft is a crime

SNGPL and Ufone enters into Cellular Services Contract

SNGPL entered into cellular service contract with M/s Ufone for a period of 01 year (from 01.01.2013 to 31.12.2013) on the first week of January, 2013. Mr. Raza Ijaz Akram, Senior General Manager, Corporate Services, Ufone, and Mr. Rehan Nawaz, General Manager, Logistic Support, SNGPL signed the contract on behalf of Ufone and SNGPL, respectively. Mr. Muhammad Ali Rana, CAO, SNGPL, Mr. Javed Hussain, CAO SNGPL, Mr. Sajid Ali Hameed, Admin Officer SNGPL, Mr. Aamir Aleem Rana, GM Corporate Services Ufone, Mr. Vally Muhammad, Regional Manager Ufone, Mr. Khurram Jawad, Relationship Manager Ufone and Mr. Salman Wassay Chief Commercial Officer, Ufone were also present at the ceremony.



ACHIEVEMENTS



Syed Moazzam Ali Hamdani (Executive Engineer HSE) has recently completed "Professional Diploma in Project Management" and stood 2nd in his batch comprising 35 participants conducted by Pakistan Institute of Management (PIM), Ministry of Industries and Production, Government of Pakistan.

Pakistan Institute of Management (PIM) is the pioneer of executive development in Pakistan and specializes in the training and development of managers from business and industry. Its primary mission is to serve the growing and complex needs of organizational managers through training, consultancy and research.

Project Management is the application of appropriate management strategies in order to effectively coordinate the realization of complex and dynamic projects.

This Diploma would prepare participant for the preparation of International Certification "Project Management Professional (PMP)" examination conducted by Project Management Institute (PMI), USA.



Mr. Aqeel Ahmed, Supervisor Accounts, at Head Office, passed the final Examination of "ACMA", form "Institute of Cost and Management Accountant of Pakistan". He is also an Associate member of Pakistan Institute of Public Finance Accountants (PIPFA). We congratulate him on his success and wish him luck for a bright future.

AUGMENTATION PLAN OF LAHORE CITY

In order to alleviate rising problem of low pressure in Lahore City at fag end especially in Cantt and DHA areas which became pronounced with the advent of winter each year, an augmentation plan was prepared and finally evaluated through simulation study of Lahore distribution network on TG Net software. The plan was basically aimed at improving the off take pressures at Mahfooz Pura, Kasur and Lahore city by bifurcating the gas flows from existing SMS-II and new SMS-III and operating the 24" / 16" dia supply main downstream of SMS-III up to Mahfooz Pura at a high pressure. The augmentation plan finally evolved after simulation study was briefed to Managing Director who accorded approval to go ahead with the proposed plan.

Salient features of the plan are as follow:

1- Construction of new SMS-III of capacity 190 MMCFD within the premises of existing SMS-II. After this modification volume of 60 MMCFD from SMS-II shall pass through 24" / 18" dia supply mains running along defence road at 116 PSIG.

2- Shifting of 24" dia supply main downstream of SMS-II to downstream of new SMS-III which runs along the Hadiara drain and is connected to 24" dia supply main near Kahna Kacha Railway Station shall be operated at a pressure of 250 PSIG with an overall flow of 190 MMCFD. This 24" dia supply main which subsequently converts to 16" dia near Ferozpur road up to Mahfooz Pura would act as a Trunk Line out of which Lahore and Kasur would be fed after passing through Hudiara Drain regulation station near Ferozpur road. From the existing 100 MMCFD regulating station Hudiara Drain, 40 MMCFD gas would go towards Bhatta Chowk, Kalma Chowk and Ferozpur road adjoining areas while the remaining 60MMCFD gas would be fed back into the 18" dia pipeline originating from the downstream of SMS-II to supply gas to Kotlakhpat Industrial estate, Valencia Town and Tech Society, while Cantt and Defence areas shall be fed from Barki Road regulation station.

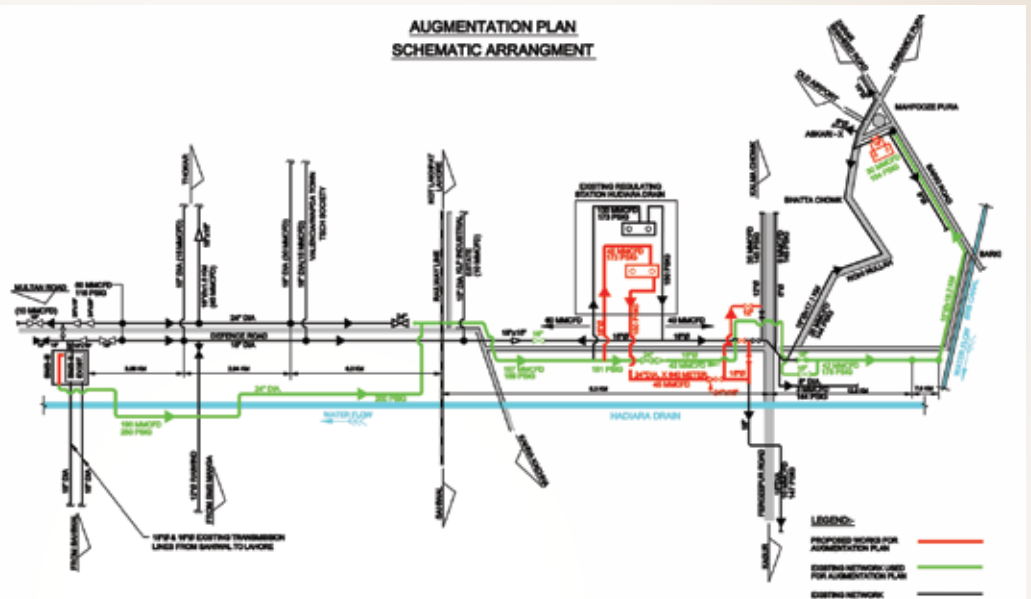
3- Construction of new regulating station of capacity 50 MMCFD in the premises of existing regulation station at Hudiara Drain, Ferozpur Road from where gas at a pressure of 150 PSIG is to be off loaded towards Lahore and Kasur by laying 24" dia x 640 meter pipeline downstream of newly proposed regulation station mentioned above.

4- Construction of new regulation station at Barki Road of capacity 50 MMCFD. Volume of gas from this station shall be injected into 16" dia existing distribution network near Askari-X.

The execution of the proposed augmentation plan was requiring a lot of material whose procurement might delay the execution of project,

however keeping in view the strategic nature of job all the material was arranged in-house which led to the completion of project in a minimum possible time. It was also due to all our efforts of projects department which made it possible to complete the job within stipulated time. This project was completed and commissioned in December 2012. We are now expecting resolution of low pressure complaints experienced by the consumers of DHA & Cantt to a large extent.

The projected pressures (based on TG Net study) on various nodes / offtakes have been mentioned on the schematics of the augmentation plan given below:



Imran Yousaf Khan
Chief Eng. (CP & D) - HO

OMV & SNGPL Sign Agreement to Work together on the **Project of Latif Development Works**

OMV (Pakistan) Exploration GmbH, Oil & Gas Exploration & Production Austrian Company has recently awarded SNGPL with job of construction of 16" dia x 23 km pipeline from Sawan Gas Central Processing Plant to mid valve assembly located towards Latif Gas Field along with laying of Fiber Optic Cable (FOC) at a total cost of Rs. 312 million. OMV Pakistan has planned to process the raw gas at Sawan Central Processing Plant (CPP) coming from Latif gas field discovered in Latif petroleum concession area. The raw gas will be transported to Sawan CPP through NPS 16 carbon steel flow line from Latif well.

One major crossing of Nara Canal is also enroute which shall be executed through Horizontal Directional Drilling (HDD) technique. Pipeline route terrain is mostly sand dunes. The contract agreement of both parties has been signed on 28 January, 2013. Kick off meeting was held on January 31, 2013 on site which was attended by the projects and P&D engineering crew and now the execution of job is at hand. SNGPL shall complete this project by June 2013. It is pertinent to mention here that SNGPL is to comply strictly with OMV HSE standards and any deviation / non conformance could lead to termination of contract. Salient requirements are as follows:

- 1 Provision of one HSE person for each 50 employees and dedicated permit controller.
- 2 Third party certified crane operators, rigging supervisors and radiographers.
- 3 Full time doctor with specialized training for camp with a dispensary setup laying trained paramedic staff along with medicines and ambulances.
- 4 Health assessment and vaccination of all staff.
- 5 Vehicle emission and water quality testing.
- 6 Provision of standard quality fire extinguishers and first aid kits for camp, vehicles and cranes.
- 7 Standard quality (as defined by OMV) personal protective equipments for all employees.
- 8 Pit for the storage of black and gray water (septic tanks) and waste management at camps and site through a pre-qualified OMV recommended contractor.
- 9 HSE Induction training for all employees and driver's training through OMV recommended institute.
- 10 All the construction equipment to be employed at site would be first inspected by 3rd party assessor followed by OMV inspection team before mobilization to site.
- 11 All the construction crew down to the level of supervisor would be interviewed by OMV before mobilization to site.

This project is to be completed on fast track basis and after completion of this project additional 100 MMCFD gas shall be injected in the national grid. It is pertinent to mention here that prior to award of this contract, OMV pre-qualified SNGPL after scrutiny of its qualifications and technical credentials in the field of pipeline construction.

Map given below depicts the proposed pipeline route terrain.

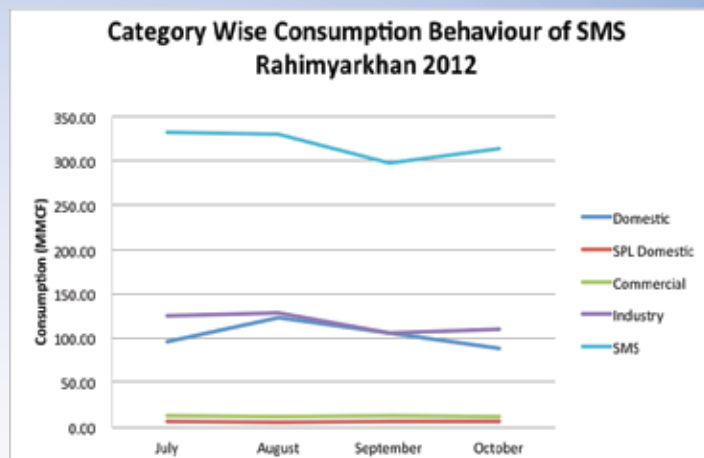
Imran Yousaf Khan
Chief Eng. (CP & D) - (HO)



Ears & Eyes of the Company

It is a natural trend that with the influx of Winter Season consumption of natural gas enhances at domestic level. Use of gas heaters and geysers are the chief causes for increase in natural gas utilization in winters. Unexpectedly the consumption of natural gas swiftly plunged in Rahim Yar Khan Region for the month of October 2012 and it started the drastic slump in the sale of natural gas of 21 MMCF that costs more than 2 million rupees. It was certainly an alarming situation for the company to face such a major downfall in a month in just one region. Concerned higher management took the notice of such a rupture in company's profile and asked for an immediate investigation of the case. To carry out the comprehensive analysis of the above cited situation the job was assigned to the Distribution Department at H.O and asked to submit the detailed diagnostic report on urgent basis. Scrutiny was started on the basis of Bill Register and HHU data of the concerned region acquired from the principal authentic source the IT Department at H.O. Data was manipulated and studied profoundly. Exhaustive assessment was conducted between the HHU data and the Bill Register data attained from the IT department. Book wise study of bill register data was carried out and sorted carefully in order to highlight the prime shortfall areas in the city. For this purpose the Bill register data of the city (Rahim Yar Khan) was manipulated and key factors were identified and filtered. After the data from books was categorized according to the proportion of the flaws, consumer wise analysis of each book was performed with the help of HHU data and its comparison with the bill register data was done. Numerous analytical reports and graphs were made for the breakdown. Graphs were made by using testimonial data received from IT Department for Rahim Yar Khan. Book wise and consumer wise study of domestic consumption revealed several flaws regarding meter readings and volume booking. There were 109 books in which Rahim Yar Khan city was divided and among those 109 books, 68 books were showing decreasing trend in the domestic gas consumption. Our study is on the base of books which showed downward consumption trend in the month of October-2012.

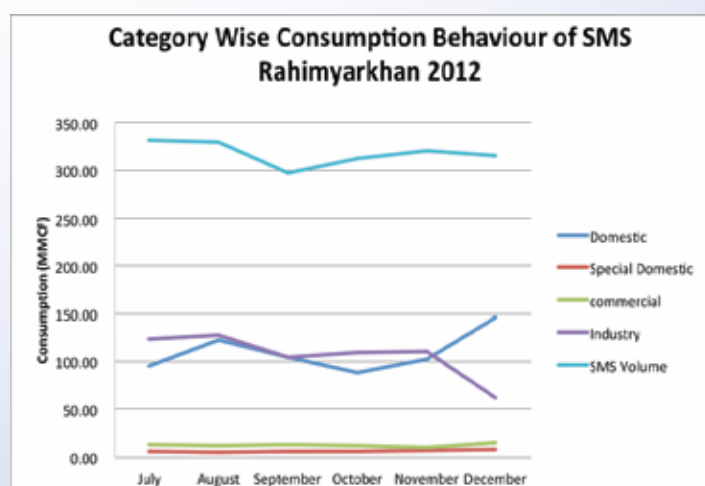
Category	July	August	September	October
Domestic	95.29	122.55	104.90	87.93
SPL Domestic	5.71	5.16	5.92	6.10
Commercial	12.83	12.26	12.60	11.83
Industry	124.59	128.15	104.76	110.05
Total	238.43	268.12	228.18	215.91
SMS Volume	332	330	297	313
Difference	93.57	61.88	68.82	97.09



Implications of the Comprehensive Case Study:

As a result of our inclusive case study of the suspected region Rahim Yar Khan constructive results have been observed in the later months of year 2012. Distribution Department at H.O was assigned the responsibility to carry out the complete analysis of the above cited situation so that company's loss can be reduced and UFG or gas pilferage can be controlled. Its consequences can be noticed in the following graph which shows the increase in domestic consumption after the efforts done by the departmental team.

Category	Monthly Consumption in MMCF (2012)					
	July	Aug	Sep	Oct	Nov	Dec
Domestic	95.29	122.55	104.90	87.93	102.88	146.05
SPL Domestic	5.71	5.16	5.92	6.10	6.70	8.18
Commercial	12.83	12.26	12.60	11.83	10.41	15.08
Industry	124.59	128.15	104.76	110.05	110.45	61.54
Total	238.43	268.12	228.18	215.91	230.44	230.85
SMS Volume	332	330	297	313	320.40	316.00
Difference	93.57	61.88	68.82	97.09	89.96	85.15



Usama Tahir Engineer (D-South) - (HO)

Shale Gas

A few years ago, George Mitchell, an American citizen developed a technology to extract natural gas from shale, a sedimentary rock. This technology was called 'fracking'. Natural gas extracted from shale is called shale gas. Pakistan has numerous reserves of shale gas but has not started exploiting them.

Shale gas was known to geologists but had never been worth extracting. As recently as 2000, hardly any of it was coming out of the ground. Big oil and gas companies were interested in shale gas but could not make the breakthrough in hydraulic fracturing of shale rock. George Mitchell provided the solution by spending \$6 million over 10 years by developing the hydraulic fracturing technology. Now shale gas contributes a third of America's natural gas supplies. By 2035, the country's share of total supplies could be nearly half.

There are several objections to development of shale gas resources and most of those have to do with environmental impact of deep earth drilling. There are three main concerns: it could set off earthquakes, pollute water supplies or release methane into atmosphere which acts as a greenhouse gas.

If shale gas developments go full steam ahead, the IEA reckons that the share of gas in the global energy mix will rise from 21% today to 25% in 2035. That may not sound much of an increase, but over that period total global consumption will grow spectacularly. If the 'shale gas' blowing through America can be replicated worldwide, the huge surpluses it would bring, could hasten the advent of a global market. Just as the 20th century was the age of oil, the 21st century could prove to be the century of gas.

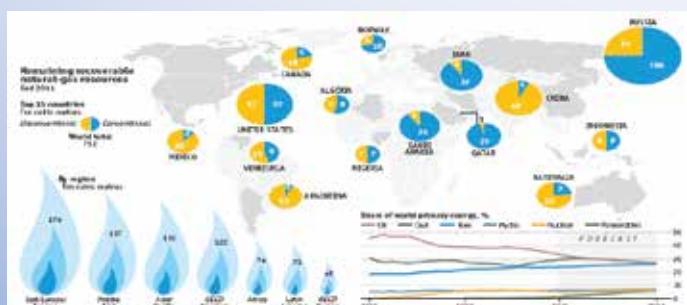
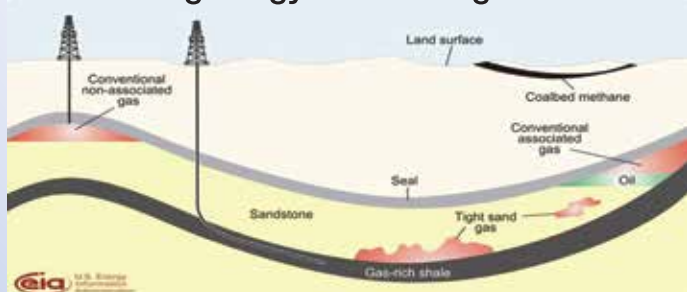
China is encouraging domestic producers to form partnerships with foreign oil and gas companies. B.P, Chevron and others are involved in joint exploration ventures with Chinese partners. India also hopes to map its shale resources and have exploration rules in place by December 2013. All in all, it is likely to be a decade or more before shale gas has much of an effect on global markets and pricing systems outside America.

As of 2009, Pakistan stands 17th in the world in terms of total technically recoverable shale gas resources. Pakistan has about 51 trillion cubic feet of shale gas reserves. Pakistan consumes all of the gas it produces, so shale gas may be an area of future growth in Pakistan.

Pakistan is heavily dependent on natural gas for its energy needs. Pakistan's conventional fields are on the decline. Pakistan has heavy dependence on natural gas for industries such as fertilizer, fiber and plastics. Demand for natural gas in Pakistan has increased by almost 10% annually from 2000-01 to 2007-08. Shale gas offers alternative source for energy starved Pakistan.

To encourage investment in developing domestic shale gas resources, Pakistan has approved a new exploration policy with improved incentives. Under the new policy, exploration companies will be offered 40-50% higher prices for the extracted gas compared with the regular price.

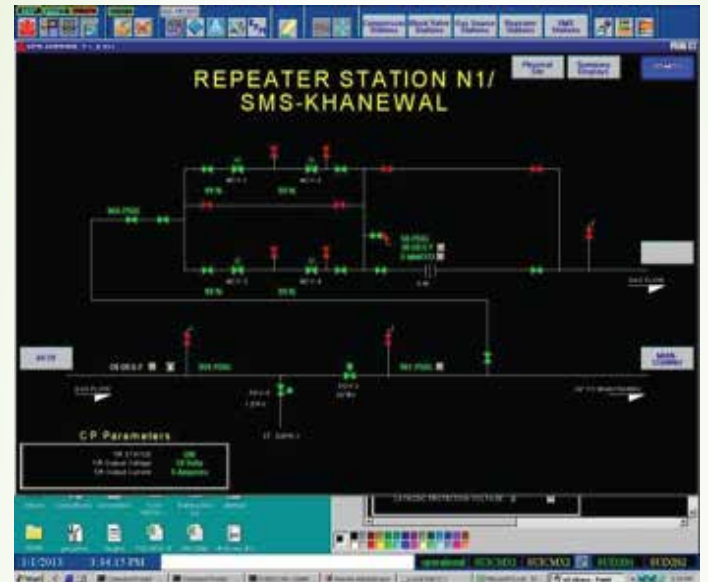
Schematic geology of natural gas resources



Furqan Basit (Engineer-D)

Real time monitoring of C.P. Parameters through SCADA

Corrosion of underground structure is a natural phenomenon. It is caused by electrochemical reaction due to presence of salts and moisture in the soil. As soon as a pipeline is laid in soil it faces threat of Corrosion. Coatings are applied on an underground pipeline as a first line of defence and supplemented by Cathodic Protection (C.P). The Corrosion is a permanent threat; therefore a C.P. system must operate round the clock. Our C.P. Stations on transmission network are located at remote locations and are visited once in a month. A plan was chalked with the coordination of Telecom department to remotely monitor the C.P. parameters through SCADA system. The system has successfully been installed and is working at 19 C.P. Stations on transmission network, i.e. AC-1, AC-2, A-3, A-4, AC-4, A-5, A-6, A-8, N-1, N-3, K-1, K-2, K-3, AC-7, B-1, C-2, C-4, CC-3, C-5.



Installation of Remote Monitoring Units (RMUs) are being planned at more locations in all transmission sections. Real time monitoring of following C.P. Parameters is being carried out through SCADA system.

- C.P. Station Status (On / Off)
- Output Current
- Output Voltage



The above parameters are visible on the window of respective location at gas control. The data can be monitored on real time and any discrepancy / fault is reported immediately to the concerned staff for rectification. The above arrangements have enabled us to operate the C.P. system with more efficiency and uptime.

Ahmed Jawad Khan

Dy. Chief Engineer (Corrosion) Multan

Human Resource Management Initiatives for Improved Performance and Motivation - a Brief Overview of Amendments in HR Manual

"The world hates change, yet it is the only thing that has brought progress" (Charles Kettering).

Change is inevitable to make progress

and live with time. Everything in this universe is designed by The Almighty to change. One can observe changes taking place around him in people, habits, technology, laws, weather, even in constitutions for these to be the living documents catering needs of the time. Like wise, with research and experimentation, the Management practices are changing and new ideas for Human Resource Management are introduced in the market for improvement in performance and motivation of employees. Organizations ready to adopt these changes, surpass its competitors and benefit from enhanced productivity & loyalty of its employees which is the outcome of employee motivation and satisfaction.

The Management of our Company has always endeavoured to introduce new Human Resource practices in order to keep the employees motivated and provide fair opportunities to all of them for advancement in the career. Here is a brief of some of such policies recently introduced:

- Equalization of parking period of executives promoted from subordinate cadre vis a vis directly recruited executives.
- Introduction of 7% increment (one time only) for executives who improve their qualification, higher than that of existing qualification.
- Amendment in promotion criteria of executives to give reasonable weightage to newly introduced tool of "Potential Assessment".

Potential Assessment is a tool used to determine an employee's managerial skills and potential for current and future position. It also identifies training and development needs, possible directions in which an individual's career might go and the potential for promotion. Using this assessment, organizations have been able to identify future managers and help to train them for leadership roles. These assessments often made a part of succession planning and identifying future leadership needs. In SNGPL, Potential Assessment has been made mandatory for promotion of executives to Grades - IV, V, VI and VII. This exercise will be carried out by a third party (neutral assessors to eradicate chances of favouritism) using different assessment techniques; customized as per business requirements of SNGPL, including personality test, case studies, simulation exercises (role play) and group discussions. A group of executives of same grade will be given different tasks and the performance of each executive will be rated. Potential Assessment carries 25% weightage in the promotion criteria. With this policy, the executives having good potential and possessing adequate competencies will get fair opportunity of timely promotions. For others, there is time and opportunity available to improve their skills and job knowledge to compete for promotion. So, get ready for a more competitive and rewarding career with SNGPL.

"If there is no struggle, there is no progress" (Frederick Douglass)

Mr. Bilal Murtaza
(Executive Officer HR) - (HO)

10 Steps to Process Safety Excellence in Oil and Gas



Process Safety Management (PSM) is a key concern for companies operating in the oil and gas industry, with new strategies and ways of dealing with challenges.

Safety incidents pose and immediate human and environmental risk and can have wider repercussions relating to finance, brand reputation, regulations and the sector as a whole.

These are 10 steps companies can take to improve their safety management and minimize risk:

1. Always look forward

A common PSM approach is for companies to log the amount of time since their last incident. However, this may not be the most effective way of preventing an unwanted occurrence in future. According to the Energy Institute (EI), most well-run organizations can state how many accidents occurred over a certain period of time but the "real challenge" is to assess the likelihood of an incident happening tomorrow.

2. Manage data with care

Major companies operating in the oil and gas and petrochemicals sectors have large teams of staff interacting with one another and different organizations. This means substantial amounts of data, reams of documents and thousands of pieces of information must be managed carefully. An overlooked detail or undetected error could have serious ramifications

3. Remember two key questions

According to the EI, there are two key questions organizations must always consider when trying to improve PSM:

- How will we assure the integrity of the operation?
- How will we know we are doing it?

The institute warned that starting to answer these questions with the words 'I think' is a telltale sign of uncertainty. To help in this area, the EI offers two resources - a PSM framework covering good industry practice and a survey that allows companies to assess their safety arrangements and performance against the sector as a whole.

4. Consider the human factor

Companies can spend time, money and effort assessing the reliability of their technology and processes, but this could all be pointless if insufficient attention is paid to the people who keeps a company running.

People management is key, as human error becomes much more likely if staff is stressed, tired or given responsibilities that do not suit their skill set.

5. There is no such thing as a 'Small' event

While a relatively small incident may not result in any significant damage or loss for a company, but it can have much wider importance in terms of precaution.

Completing a detailed examination of what prompted the event and how it could have been prevented can help organizations to better understand cause-and-effect relationships and reduce the risk of major accidents in future.

6. Distinguish between occupational and process safety

In an article on the Digital Refining website, Graham Bennett, director of DNV Energy with special responsibility for global refining and petrochemicals activities, stressed the importance of distinguishing between process safety and occupational safety. He said PSM is much more difficult than managing occupational safety and therefore requires a holistic approach encompassing all areas of the business, from basic health, safety and environment to asset and supply chain management.

7. Support an integrated, industry-wide approach

Mr. Bennett's article on achieving excellence in PSM also underlined the need for the industry to adopt an integrated approach to the management of major hazards.

He said issues in this area "cannot be solved overnight" but can be addressed by a coherent, inclusive strategy that considers "not just the consequences of failure, but also the likelihood of failure, and the factors influencing event likelihood and development".

8. Don't think technology is infallible

In a world of ever-evolving technology and powerful computers, it is possible that safety managers could see a human error as the most likely source of an accident.

However, new technological innovations can often bring new challenges. Security holes or unreliable software can be just as big a safety risk as a stressed or overworked employee.

9. Ensure safety assessments are up to standard

The most refined and considered approaches to PSM could be rendered pointless if the most basic aspects of management, such as safety assessments, are not executed effectively.

Any flaws or blind spots in the process, however insignificant they may seem, could create a risk or begin a chain of events that could result in a serious incident.

10. Pursue regular education and training

Education and training programs can keep a company's workforce informed of its responsibilities and also ensure that workers feel happy and confident with what they are doing.

In his article on the Digital Refining website, Mr. Bennett revealed that DNV Energy recommended improvements to education and training after being retained by a major European company to improve its PSM. The firm's other proposed changes included a revised incident investigation process and the creation of an implementation plan for PSM.

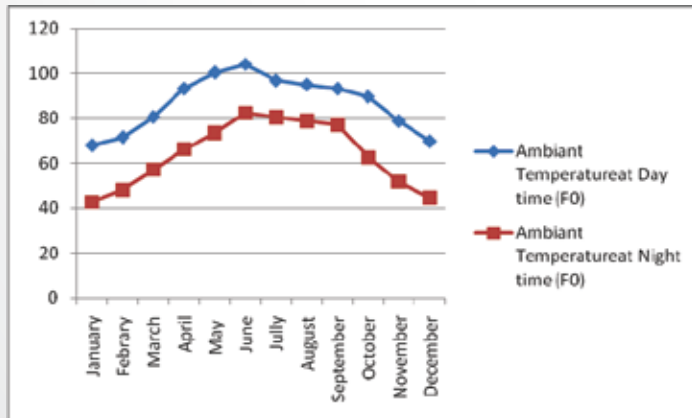
Courtesy: Oil & Gas IQ

One of many features Causing UFG

Consideration of Temperature & pressure compensation on domestic consumers in respect to ensure measurement accuracy absolutely focusing unaccounted for gas if parameters favors naturally. This study perhaps really strikes the engineering approach that how does state functions directly affect the dynamics of compressible fluids. For a while if we just keep away the international & national billing standers & follow the principles of optimization on the basis of engineering approach then a factual depiction will unwrap the gain or loss, if any in gas industry. To investigate this element, statistics of the testimonial data can put us on right direction to know, where we stand.

Sui northern gas pipe lines limited has franchise area covering about 12 main cities of Pakistan where every city has a diverse atmospheric temperature & sun shine hours in every month of the year. Lahore city is the capital of Punjab province, in January only 7 hours sun shines in a day, where as it is 10 hours in the month of May. Though average atmospheric temperature recorded in January at day time is different than recorded at night i.e. 68 Fo & 42 Fo respectively. Similarly through out the year atmospheric temperature at day time varies from 68 Fo to 104 Fo and at night it varies from 48 Fo to 83 Fo.

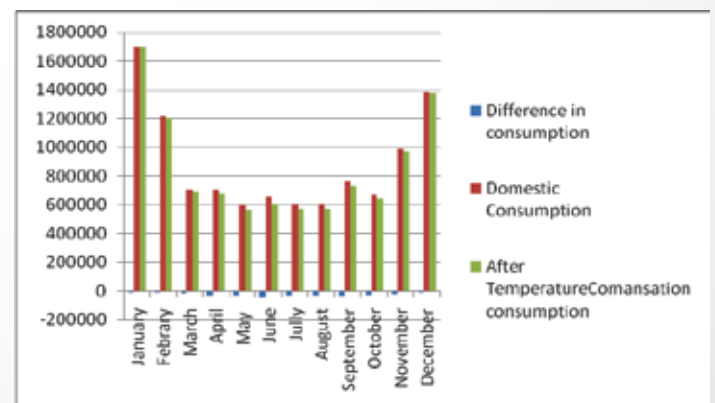
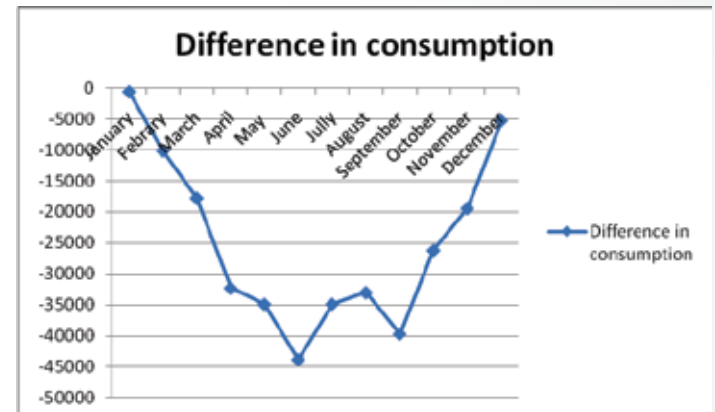
For the Year 2009



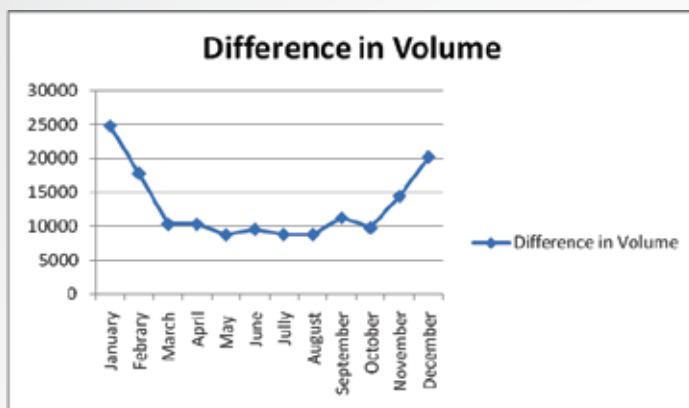
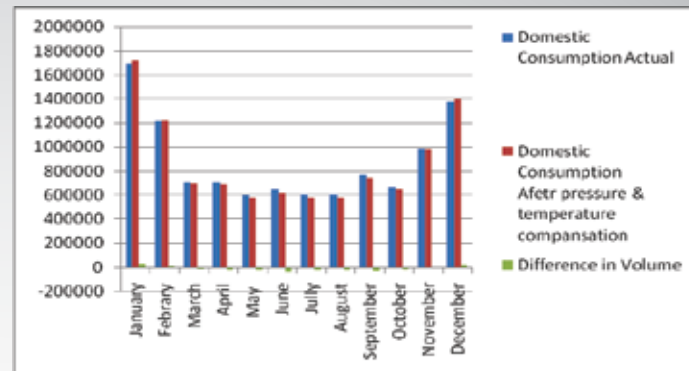
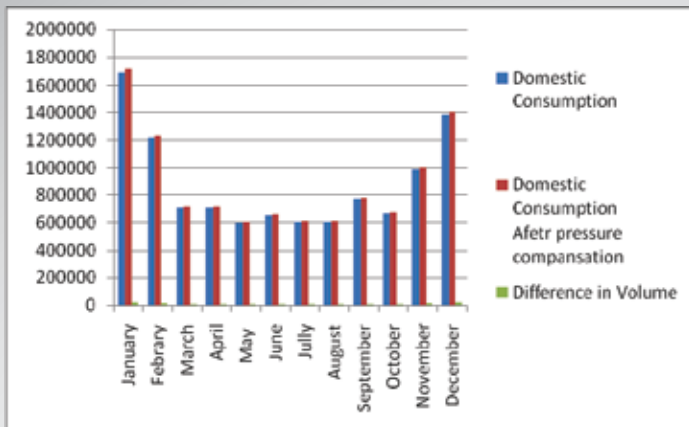
Currently the company's standard 60 Fo is being considered the gas convivial temperature while calculating the gas volume, with calm at what temperature the gas is being sold? Naturally the ambient temperature affects the gas temperature. The amount of the effect can be determined with the move that, the tendency & gradient are the deriving forces enabling the gas present in the service line riser to be closer to the atmospheric temperature and there is no change in enthalpy before & after regulator. Nevertheless fugacity factor reflection does matter & 30% of the domestic gas volume is being consumed at night with 70% in day time.

For a while if we apply only temperature compensation to all the domestic consumer of Lahore city on the available data based on monthly consumption for the whole year 2009 along with the change in atmospheric temperature. In this case we are going to have loss of about 0.46% gas volume (297620 Hm³) at the end of the year in contrast with the present calculation methodology. Its graphical presentation illustrates that we do not expand volume in every month of the year but decrease. If we calculate the reduction in temperature at single domestic CMS due to throttling (joule-Thomson effect) from 15 psig to 6" w.c at a consumption of 60 CFT/day & compensate this temperature factor to all the domestic consumption, even than it never reimburse the above said lost volume of gas due to negligible outcome.

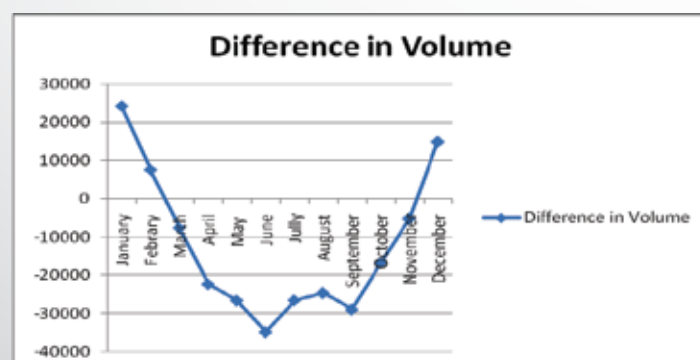
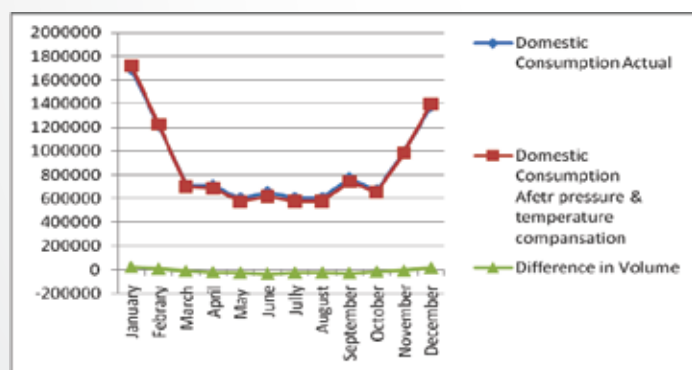
For the Year 2009



Now we see how pressures affect unaccounted for gas, since we buy natural gas at standard pressure not less than 14.65 psia & it compel us to be corrected while calculating the domestic gas volume as we are selling at 0.21 psig (6" w.c) i.e. 14.86 psia. Now if we apply pressure factor through out the year to the domestic consumers in Lahore city than we can add gas volume almost 0.24% (154998 Hm³) at the end of the year.



For an instance if we apply both pressure & temperature factors through the year in lahore city then we have loss of gas volume about 0.23% (146975 Hm3) at the end of the year.



Consequently, only pressure alteration to the domestic consumers can eliminate the chapter of the unaccounted for gas owing this feature. Nevertheless, its further impact in the light of logical approach is more damaging instead of engineering approach. This phenomenon can also help us to look in to the winter vs summer UFG. As the UFG in Lahore region always remained high in winter than in summer, it means we require looking into measurement errors caused by Pressure instead of temperature. For an instance only 1 psig rise in domestic pressure at constant temperature of 60 F0 can result almost 1% UFG & similarly 2 & 3 psig rise can result 2% & 3% UFG.

Rise In Pressure (psig)	% age UFG
1	1.12
2	2.2375
3	3.356
4	4.33
5	5.415
6	6.71246

Recently Transmission department checked about 8013 Nos. domestic CMSs in Lahore region and found that 2238 Nos (28%) were enjoying gas at almost 1 psig and their consumption was between 3-15 HM3. No doubt meter reversal & meter tempering are the cancer causes but pressure compensation meters at least for every commercial & 28% domestic consumers can help us to cater 4-5 % UFG.

Shahid Shoukat
Exec. Engineer-D (D-South) - (HO)

EDUCATION vs De-EDUCATION

“Missionary Zeal” they use to call. It is an extreme enthusiasm to gain knowledge with passion, honesty and spirit of inquiry and then transferring the same in the pupils and followers with a mission to develop them. This entire process demands commitment from both teacher and the taught without compromising the integrity to learn. It is a self discipline directed to inculcate knowledge for human personality development. Continuous learning means exploring new vistas of knowledge through knowledge creation and then reflecting them in one’s own personality. Learning is an attitude and not an aptitude with a scriptural foundation focused on “Truth seeking”. When we say that we know the truth, it does not mean to have information about some event and then describing its reality, instead, it means a continuous pursuit of finding universal laws of nature which can be harnessed for our personality development.

Education in its process has two overlapping dimensions. First is in the realms of moral development where virtuous principles (honesty, hard work, social well being, care for others etc) must be learned. These laws of social sciences once learned are applied in the second phase for the conquest of the nature (knowledge of Mathematics, Physics and Chemistry etc.) to enable a person, a group and a nation to achieve distinction in terms of socio economic development through wealth creation and social integration. Knowledge is neither worldly nor non-worldly, neither eastern nor western, it is an indivisible act with a Universal character. Whenever an optimum combination of spiritual development along with material progress through scientific thought is achieved, it is called “Divine Illumination”. This is the very concept of EDUCATION which Greeks used to call “VERITAS” means TRUTH and is also the Motto of Harvard University.

De-education is a process of teaching, training and learning, especially in schools or colleges, to prevent students from achieving their full potential, through the use of misleading information and bias analysis.

Or in simplified terms:

The act or process where students achieve the same grades as previous generations even though their knowledge is less than previous generations." (<http://www.de-education.com/>) It has become a cliché in

Pakistan that EDUCATION is key to our National Development. In past 30 years thousands of public and private educational institutions have opened, rather some private institutions branched around the globe to have achieved the distinction of entry into Guinness book of world record. The commitment of parents in education can be gauged from the fact that bulk of parents household income is spent on educating their progeny which reflects the realization of our society at large that education is key to our success. In terms of economic activity education has become a thriving business with more return on investment than even any food business in our Agrarian economy. The media campaign by GEO TV emphasizing education as an exclusive reason behind creation of Pakistan is being critically appreciated, debated and accepted.

There is no second opinion in any person’s mind that education is necessary for life. Despite the fact that many of our educational institutions have emulated and imparted education through the latest academic modules from the developed nations of the West, but they have failed to deliver to the satisfaction of our students, teachers, parents and the nation at large. Have we become a victim of “De-Education”?

De-education starts when the objective of education is not properly defined in national context. Anything without an objective is like a ship in the hands of sea pirates which is efficient in its execution but NOT effective as it has no direction towards the shore. The institutions of every nation derive their aims from the vision of the Government which in turn drive its vision from its ideology.

Ancient Greeks in alliance with Romans opened schools in the form of Lyceums in order to create a breed which can give them dominance over the world resources through military conquests. England opened missionary schools to become colonial power and then replicated the same missionary zeal through their public schools in their colonies in Asia, Africa and America to serve their commercial interests and establish their strong kingdom. The USA educational system is a blend of Roman and British vision to serve its national interest of establishing and sustaining itself as a Global Super Power.

India's education system is directed to become a Regional power in South East Asia. China's education system is based on National objective of replacing USA as the new Super power. One should not enter into discussion to find the merits and demerits of these nations self-serving interests, but to identify some kind of objective as a nation to exist and then formulate the related educational goals.

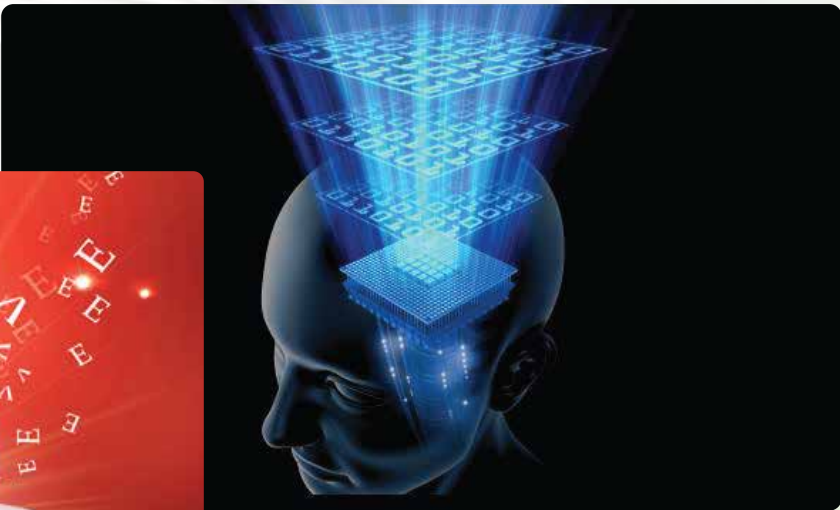
The National objectives once identified must be translated into mega public projects specifically. USA's objective to be the leading Nation in the world called for excellence in Science and Technology. This was translated into public-private projects as Dam Construction, Ship Building, Aviation, Automobile, Computer Industry and Space programs etc. The requirements of these programs called for development of educational system as desired to complete these projects. The schools and universities so opened carried the subjects in their curriculum supplemented by resources committed which prepared their nation from grass root level to achieve dominance in science and technology. As a part of national policy , the developed nations earn from Applied sciences and then invest in Basic sciences. This Investment in basic sciences is actually an investment by the government in educational sector.

Our academic modules with latest borrowed western educational material and resources cannot equip us to

address the indigenous challenges. That is why when the student graduates from our institutions, he finds the relevance to his work only in the west which causes the brain drain.

This process of de-education can only be addressed if education is stressed as a basic right backed up by a strong Federal commitment. This will create a sense of belonging among the people for our country. The intellectual frontiers of any progressive state are always guided by its educational priorities. Our Islamic democratic state must consider education as a universal instrument for national development. It demands education to be taught in context of science and technology inter alia with other spiritual aspects . The Renaissance in the West from 15th century onwards was very much inspired by Muslim education in Spain which found its expression in the establishment of their universities today. The educational excellence of Muslims in the past was shaped by the idea to be the leader of the world community. Later this trend was imbibed by Britain, USA and now China. In order to reverse the process from de-education to education we must end our negligence towards our national ideology and endeavor to create knowledge workers who can contribute towards the development of society at large.

Mohammad Asim
Dy. Chief SNGTI (HO)



strategy improvement
competence practice system
success
KNOWLEDGE

2nd Fire & Safety Award

Fire and Safety Convention

was organized by the Fire Protection Association of Pakistan and National Forum Environment and Health. Discussions were carried out regarding the Fire Safety Systems in Pakistan and to increase the Fire Safety Protection in Businesses by filling the gaps.

The convention was followed by an award distribution ceremony. Based on the criteria set by the Fire Protection Association of Pakistan, SNGPL received the 2nd Fire and Safety Award.



Miss Asma Maqbool
Engr, Gr-III HSE (HO)

Dedicated to all the Women of Sui Northern

A Woman can deal with stress
and carry heavy burdens

She smiles when she feels like crying

And she sings when she feels like crying

She cries when she is happy
and laugh when she is afraid

Her love is unconditional

There is only one thing wrong with her

She forgets what she is worth

Monica, LS - (HO)

Air/Vehicular Emission and Noise Level Testing

Excessive Vehicular / Welding Plant / Generator Emission are the major cause of air pollution. These Vehicular emissions comprises of important gases like NO_x, SO_x, CO and HC. All these gases affect the human health in different ways e.g they cause disease of Chest, Lungs and Throat. Prevention from these diseases is quite possible, if vehicles tuned up in time on regular basis and abide by the regulations pertaining to environmental protection. In view of the above Air / Vehicular Emission / Noise Level Testing of Welding Plants / Generators / Compressors under the domain of Islamabad / Rawalpindi Region were carried out Emission / Noise level of 22 Equipments (**Welding Plants, Compressors and Generators**) were tested by HSE Engineers Team. Two types of gadgets were used for testing:

- Exhaust Gas Analyzer for Petrol, CNG and Diesel Equipments
- Noise Meter

Umair Ashraf
Engr. HSE. ISD-D

Pictures of the Event



Smoke Emission and Noise Level Test at Regional Office Islamabad 26-12-2012



HSE - Only at work?

Who has to bear the consequences of an accident?

In conjunction with all accidents and personal injuries, the person who has been injured will always bear the heaviest burden. In addition, those closest to the person who has been injured, spouse/partner, children, parents, siblings, friends, colleagues, the local environment and employer will suffer to a greater or lesser degree. Consequences of personal injuries are largely independent of the place and time of the incident. If someone is so severely injured that they can't take care of themselves, they will need the same care whether the accident occurred at work or during free time. Their family loses part of their "freedom", their employer has to train a new person, and so on.

Let's look at an example. A 35 year-old, married with three children gets injured and is paralyzed from the neck down, no head injuries. What happens to their relationship to their spouse? What about feelings of guilt? What about following up the children's development? What about common experiences like vacations and travelling? What about the social life of the spouse who is not injured? The list of questions we can ask is almost endless. Does this list get shorter or longer if the accident happens at work or during free time? - NO.

Where do accidents happen?

Fewer people lose their lives at work, and many more die in traffic each year. Doesn't this clearly indicate that we have not managed to improve our consciousness of HSE when we look at the entire population from a 24 hour perspective? In conjunction with these facts, we also have to remember that most traffic accidents happen outside of work hours. The reasons for the large reduction in fatal accidents at work and in traffic are many, of course e.g. The number of hazardous jobs has been reduced, focus on HSE work in companies, safer cars, better and quicker help to/at accident sites, etc. The conclusion must be: if you want to be on the safe side – stay at work as long as possible.

What can be done to reduce personal injuries?

We have a more active private life, the consequences of personal injuries are the same whether an accident happens at work or during free time, the death rate percentage in relation to accidents has been pushed more and more away from job and traffic situations and over to leisure activities.

This is enough proof that we have to focus much more on personal responsibility and understanding consequences, also for situations that apply to our free time. In this context, we have to be realistic and admit that advertising a Distance Education course or some other form of free training just won't cut it. There have also been media campaigns without noticeable effect. We have to start at the workplace and from there, expand training to apply to free time as well, including the entire family.

Many will react negatively to this kind of approach, but that will depend on the way we engage them in awareness raising activities. One way can be employers arranging courses/training where employees can bring along their spouse/partner and adult children. Sessions can be run over 2-3 hours in the evening. During the session, we point to examples of potential consequences should a family member be seriously injured. Discussion between the participants must be emphasized. Here, it would be an advantage to have each family form a group and discuss the matter based on their situation. This kind of session could be the beginning of an awareness raising process.

Employers, if they really believe in HSE work, must look around as soon as possible and find out how they can contribute to reducing the number of injuries and ruined lives in the private sphere as well. It would be an infinitely good business investment. When it comes down to it, employers also suffer losses from accidents that injure an employee's family members if the employee needs to be at home to take care of an injured child or spouse, or if the employees are injured during their free time.

Good luck with your HSE Work - Don't forget your free time!

Sohail Shahzad
EE HSE FSD-T



A Trip to Rana Resort

On the sunny morning of 2nd March, 2013 the journey began for a recreational trip of HR Department to Rana Luxury Resort near Head Balloki. It took about 1 and 1/2 hour time to reach the site. We were warmly welcomed with the beats of drums. The grassy



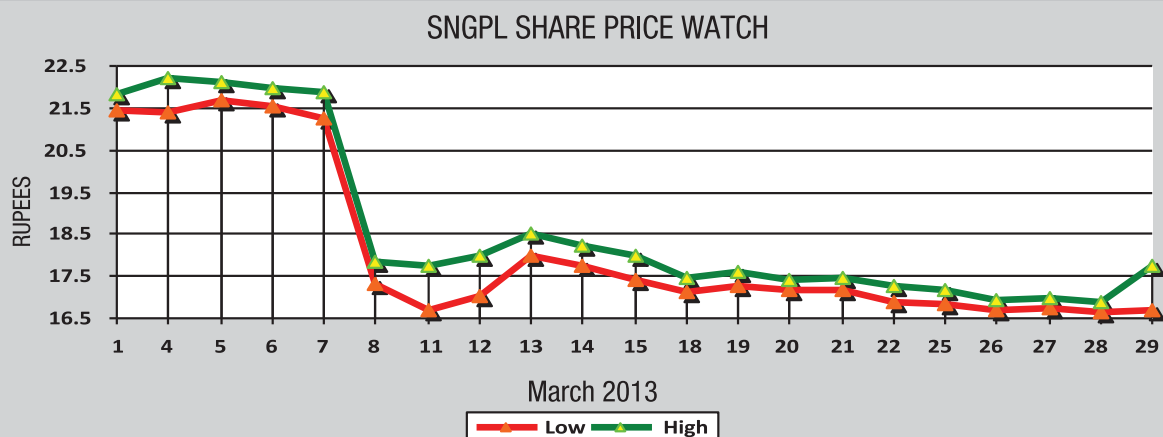
lawns all around the resort were worth seeing. The canopy of bamboo trees was quite mesmerizing. The deer, peacocks, swans, ducks and ostriches in the resort were depicting the real essence of wildlife. The horse & donkey cart rides were the major attractions at the resort. The mini train ride throughout the deep bamboo jungle was enjoyed by all of us. A friendly cricket match was also played between the executive & subordinate teams. Our

appetite was satisfied by the delightful lunch arranged at the safari hut. The design & decor of the hut was exquisite. We clicked away the alluring water flow at Head Balloki with our cameras. The trip was full of zeal and zest. Indeed, it was an effort not only to share joyous moments but also to grow as a team.

Rabia Iftikhar
Officer-HR - (HO)

SNGPL SHARE PRICE WATCH MARCH 2013

Rate / Rs				
Period	Opening	Closing	High	Low
1st & 2nd WEEK	21.68	17.37	22.22	17.31
3rd WEEK	17.37	17.52	18.54	16.70
4th WEEK	17.52	17.01	17.59	16.90
5th WEEK	17.01	17.46	17.77	16.65



Why Managing HSE is important in Industry?

*Safety Makes
Good Business
Sense*

Law requires an employer
to provide safe workplace
to all employees



*Piper Alpha-
Night of 1988*



- Chain Reaction of Gas Release, Fire & Explosion
- 165 Dead out of 226
- 3billion USD Damage
- Litigation
- Bad Reputation

*Mexico LPG Plant-
November of 1984*



- LPG Leak
- 900 Killed
- 1000 Injured
- Bad Reputation

**Mexico LPG Plant
After Explosion**



It may take One minute to write a Safety Rule

It may take one hour to hold a Safety Meeting

It may take one week to plan a Safety Program

It may take one month to put it in operation

It may take one year to win a Safety Award

It may take one lifetime to make a Safe Worker

BUT

It takes only ONE SECOND to destroy it all with

AN ACCIDENT

REAL CONCERN:

- Each day, an average of 5,000 people globally die as a result of work-related accidents or diseases
- Every year, workers suffer from 270 million occupational accidents and some 160 million non-fatal diseases
- Hazardous substances in industry kill about 438,000 workers annually

3 MAIN CAUSES OF ACCIDENTS:

Technical Equipment

- Possibly due to faulty design leading to a sequence of unexpected events which finally results in an accident

Working Conditions

- Possibly due to bad housekeeping, high noise, extreme temperatures, poor ventilation, poor lighting, or/and exposure to chemicals is hazardous to health

People

- Possibly new to a job or new to a procedure. The same applies to a person, when person changes a job

Can We Afford an Accident?

- No way
- Accidents are too costly for the Company, workers and their families
- Accidents can cause massive cost of damage to plant facilities, property and the environment
- Not to mention, production losses and bad reputation

**Health, Safety & Environment Department
Sui Northern Gas Pipelines Limited**