

**Chapter-5**  
**Supply of Natural Gas**

## Chapter 5 Supply of Natural Gas

### 5.1 Gas allocation/ utilization policy

Considering the demand, availability and imputed economic value of NG in various sectors, Gas Linkage Committee (GLC) allocated (till 2005) NG (APM Gas) from nominated blocks of NOCs to various consumers. Allocations were made based on the requests received from prospective consumers and the recommendations of concerned Ministries, depending on the availability of NG in the concerned region. In view of the importance of fertilizer and power sectors in the national economy, preference in allocations was given to these two sectors. As there was no further APM gas available for allocation to new consumers, GLC was wound up in November 2005.

Thereafter, GoI constituted (2007) an Empowered Group of Ministers (EGoM) to decide issues pertaining to commercial utilization of gas produced under NELP. Meanwhile, GoI allowed (2010) NOCs to sell NG from new fields in their nominated blocks at approved non-APM rate. Accordingly, MoPNG formulated (October 2010) a policy on pricing and commercial utilisation of non-APM gas produced by NOCs which maintained sector wise priority<sup>74</sup>.

As far as allocation of NG from NELP fields was concerned, EGoM had decided following principles:

- i) As a matter of general policy, NG produced/imported should be stripped off its higher fractions<sup>75</sup>, subject to availability, to ensure maximum value addition before supply to consumers.
- ii) Sale of NG by NELP contractors would be based on the following guidelines:
  - a) Contractors would sell NG from NELP in accordance with the marketing priorities determined by GoI and the sale would be on the basis of the formula determining the price as approved by GoI.
  - b) Consumers belonging to any of the priority sectors should be in a position to actually consume gas as and when it becomes available. So the marketing priority did not entail any 'reservation' of gas. It implies

<sup>74</sup> Order of priority :- Gas based fertilizer units, LPG plants, Power plants supplying power to grid, CGD for domestic and transport, steel, refineries & petrochemicals for feedstock, CGD for industrial and commercial customers, any other customer for captive & merchant power, feedstock or fuel purpose

<sup>75</sup> Methane (C1) is the predominant component in Natural Gas. Extraction of other components with higher carbon content viz Ethane (C2), Propane (C3), Butane (C4) etc for being used in production of other products such as polymers, LPG etc is known as stripping of higher fractions.

that in case consumers in a particular sector, which is higher in priority, were not in a position to take gas when it became available, it would go to the sector which was next in order of priority.

- c) In case of default by a consumer under a particular priority sector and in the event of alternative consumers not being available in the same sector, the gas would be offered by the contractor to other consumers in the next order of priority.
- d) The priority for supply of gas from a particular source would be applicable only amongst those customers who are connected to existing pipeline network connected to the source. So, if there was a marginal or small field that was not connected to a trunk pipelines or grid network, the contractor would be allowed to sell to consumers who were connected or could be connected to the field in a relatively short period (of say three to six months).

EGoM then decided to allot NG in the following order of priority:

- Existing gas-based urea plants
- Existing gas-based LPG plants
- Existing grid-connected and gas-based power plants
- CGD network for domestic and transport sectors

A decision was also taken to supply NG to steel, petrochemicals and refineries for feedstock purposes, CGD networks for industrial and commercial customers, other gas based fertilizer plants and to captive power plants.

The sector wise priority for allocation of indigenous gas was formulated to serve the larger public interest. Details of sector wise allocations made so far are given in Annexure 16. It could be seen that the allocation of domestic NG was to the tune of 236.79 mmscmd which was far in excess of available domestic production of 95.00 mmscmd.

## 5.2

### **Role of GAIL (India) Limited in supply of NG at regulated price**

GAIL was incorporated in August 1984 as a Central Public Sector Undertaking under MoPNG. GAIL plays a key role as a NG market developer in India and holds around 60 *per cent* share in India's gas market. Major supplies of NG include fuel to power plants, feedstock for gas-based fertilizer plants, LPG extraction *etc.*

GAIL as a GoI nominee holds the right to procure and sell gas from existing fields of ONGC, OIL, Tapti, Panna-Mukta and Ravva. NG from existing fields of nominated blocks of ONGC and OIL is supplied at the price fixed by GoI and as per allocations whereas NG from pre-NELP/NELP fields is sold at the price as per respective Production Sharing Contracts.

GAIL also maintains a gas pool account on behalf of GoI to take care of gain or loss from supply of APM/non-APM gas to consumers of APM/non-APM gas. Therefore, GAIL is required to exercise prudent control over the gas supply transactions to ensure that supply of NG is in line with the gas allocation policy and takes care of financial interests of GoI.

### 5.3 **Absence of mechanism for monitoring end use of NG**

Power and fertilizer sectors being critical to economic development of the country, receive about 69 *per cent* of domestic gas at APM price through allocation. GoI decided (June 2005) to supply all available APM gas to power and fertilizer sector consumers against their existing allocation along with other specific end users committed under Court orders/small scale consumers having allocation up to 0.05 mmscmd at the revised price of ₹ 3200/mscm<sup>76</sup>. It was also stipulated that consumers other than those specified in the order and getting existing gas supplies through network of GAIL, would be supplied NG at market related price.

Audit noticed instances where available APM gas was not utilised for the specified purpose mentioned in the GoI order. In fertilizer sector this results in loss of production of urea with resultant avoidable extra burden on subsidy/under realisation in Gas Pool account. In other sectors, non-recovery of market rate results in under realisation in the Gas Pool account. These issues are discussed in paragraphs 5.3.1 to 5.3.3.

#### 5.3.1 **Fertilizer sector**

There are 30 urea units in the country (as on October 2014). Out of these, 27 units use NG (either domestic/R-LNG or both) as feedstock and fuel and remaining three urea units<sup>77</sup> use naphtha as feedstock and fuel. Regarding utilization of NG from domestic source in fertilizer sector, MoPNG directed (July 2006) that products other than fertilizers were not covered under supply of APM and the quantity of APM gas utilized for manufacturing products other than fertilizers should be charged at market

<sup>76</sup> Metric Standard Cubic Meter

<sup>77</sup> Mangalore Chemicals and Fertilizers Limited (MCFL), Madras Fertilizers Limited (MFL) and Southern Petrochemicals Industries Limited (SPIC)

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price. Market price was defined as price depending on the producer price being paid to joint venture and private operators at land fall point subject to a ceiling of ex-Dahej R-LNG price.

MoPNG directed (October 2009) GAIL to charge market rate for the APM gas utilized by fertilizer units for manufacturing products other than fertilizers from 1 January 2009. As regards period before 1 January 2009, it was directed that GAIL should examine financial implication of charging APM rates for chemicals, both on Gas Pool account/GAIL in terms of revenue forgone as well as on GoI subsidy and losses to the concerned companies *etc.*

GAIL, repeatedly requested Fertilizer Industry Coordination Committee<sup>78</sup> (FICC) and DoF to provide details regarding usage of NG for fertilizer and non-fertilizer purpose for which they did not receive reply till July 2014.

Audit noticed instances of use of APM gas for other than specified purpose by three fertilizer units<sup>79</sup>. Non- implementation of GoI directives for billing of gas utilised in production of products other than fertilizer at market rate and extra burden on subsidy were commented upon in the Reports of the Comptroller and Auditor General of India, Union Government (Commercial)<sup>80</sup>. It was also pointed out in the Reports that there was lack of effective coordination between MoPNG and DoF in resolving the issue. For the period beginning January 2009, the chances of sub-optimal recovery in Gas Pool account and excess payment of subsidy on fertilizer production in the absence of mechanism to verify usage of NG in GAIL were also reported.

Audit subsequently noticed (2013) that four fertilizer units (CFCL I and II, KSFL, IGFL and TCL) had not utilised entire quantity of APM gas received by them during 2010-11 and 2011-12 for specified purpose. GAIL, however, was yet to recover non APM price amounting to ₹ 5.34 crore<sup>81</sup> (Annexure- 17 a) for the quantity of APM gas not utilised for production of urea. This shows that a mechanism for ascertaining utilisation of NG supplied at regulated price was still not effective in MoPNG/GAIL and DoF.

Regarding utilization of NG supplied at APM rate, DoF stated (February 2012) that quantity of NG used by units for any other purpose apart from production of urea would be ascertained and differential price from either imported ammonia or any other benchmark would be recovered from the units. EGoM directed (February 2012) DoF

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<sup>78</sup> FICC, an attached office under DoF, is responsible to evolve and review periodically, the group concession rates including freight rates for units manufacturing nitrogenous fertilizers, maintain accounts, make payments to and to recover amount from fertilizer companies, undertake costing and other technical functions and collect and analyse production data, costs and other information. FICC computes concession rate for urea (as per the norm fixed by the GoI) based on which quantum of subsidy for urea is decided.

<sup>79</sup> Deepak Fertilizers and Petrochemicals Corporation Limited, Rashtriya Chemicals & Fertilizers Limited and Gujarat Narmada Valley Fertilizers & Chemicals Limited.

<sup>80</sup> Para No. 13.2.1 of Audit Report no. 9 of 2009-10 & Para no. 11.6 of Audit Report no. 8 of 2012-13.

<sup>81</sup> Amount recoverable has been estimated as the difference between APM price charged to respective units and non-APM price approved by GoI along the HVJ pipeline as per the methodology adopted by GAIL.

to frame specific guidelines by May 2012 to exercise control over usage of APM gas. DoF, subsequently referred (September 2014) the issue of framing guidelines for effecting the undue gains by Phosphatic and Potassic Fertilizer units to the Inter-Ministerial Committee<sup>82</sup>.

MoPNG stated (January 2014) that despite follow up with DoF to furnish quarterly utilisation certificates for APM gas, the requisite details had not been furnished by DoF. As GAIL did not have a mechanism to evolve a system on its own to ascertain the quantity of NG utilised by fertilizer units for manufacturing non fertilizer products and for its billing at market rate, MoPNG suggested following modalities (July 2014) to GAIL for necessary action:

- For all future gas supplies to fertilizer units, GAIL would insist on quarterly returns certified by FICC, failing which GAIL would charge non APM rates for entire gas.
- For past period, GAIL would issue notice to all fertilizer units to submit utilisation certificates indicating usage of supplied gas within a period of three months from 29 November 2013 duly certified by FICC, failing which GAIL would raise invoices for differential amount between non APM and APM gas price for the entire period and quantities of past supplies.

GAIL accordingly informed (August 2014) fertilizer units to furnish the required certificate to which compliance by fertilizer units is awaited. DoF, however, stated (October 2014) that there is a practical difficulty in giving certificate of NG usage by FICC in respect of urea units. FICC relied upon invoices raised by GAIL for quantity of NG supplies and as GAIL had its manpower deployed at supply points, GAIL should develop a system to check the usage of NG.

Regarding non recovery of market price from four fertilizer units (CFCL I and II, KSFL, IGFL and TCL) for the quantity of APM gas not utilised for production of urea, DoF stated (October 2014/January 2015) that, in the production process of urea, ammonia and carbon dioxide (CO<sub>2</sub>) are produced first and ammonia so produced is converted into urea with available CO<sub>2</sub>. However, it often happens that entire ammonia produced cannot be converted into urea due to reasons like interruptions in plant, limitation of quantity of available CO<sub>2</sub> in the NG *etc.* Further, due to limited storage facility and safety reasons, the surplus ammonia beyond safe level is sold off by units. The gain to the fertilizer unit by sale of this surplus ammonia is shared between GoI and the fertilizer unit and this revenue was more than market rate recoverable from the unit for NG not utilised for production of urea. Hence production of surplus ammonia by using APM gas was not to be viewed as diversion of APM gas.

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<sup>82</sup> Constituted under the Nutrient Based Subsidy Policy with representatives from MoPNG, DoF and Ministry of Law.

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In respect of four units mentioned above, amount recovered towards share of GoI in the gain on sale of surplus ammonia as intimated by DoF was ₹ 35.85 crore. This should be viewed against the following facts:

- In all these cases there was sufficient achievable capacity. Non production of urea, therefore, led to shortfall in meeting the demand which was met by means of import.
- Subsidy on imported urea was always higher than the subsidy on domestically produced urea.
- One of the reasons put forth by DoF for non conversion of excess ammonia to urea was non availability of sufficient CO<sub>2</sub> in the lean gas. This may be viewed against the fact that GAIL removes CO<sub>2</sub> from NG in HVJ pipeline as per production process of petrochemicals. Lean gas, which is stripped off higher fractions and CO<sub>2</sub>, is then sent back to HVJ pipeline for supply to other consumers. KSFL, CFCL, TCL and IGFL draw NG from this pipeline. Therefore, on the one hand, GAIL is removing CO<sub>2</sub> from NG and on the other hand, fertilizer units are facing shortage of CO<sub>2</sub>. DoF/MoPNG may examine possibilities of augmenting availability of CO<sub>2</sub> to fertilizer units on the basis of economic feasibility and viability as this would go towards reducing the burden of subsidy on GoI. In the case of only four units mentioned above, non conversion of excess ammonia led to production loss of urea to the extent of 147.79 TMT during the year 2010-11 and 2011-12. Average differential subsidy on urea produced by these units and urea imported was ₹ 8998 and ₹ 16199 per MT during 2010-11 and 2011-12 respectively. Therefore, estimated amount of subsidy that could have been saved by converting entire ammonia into urea would be ₹ 196 crore (Annexure 17 b), which is far more than ₹ 35.85 crore recovered by GoI towards share of gain on sale of surplus ammonia. Other reasons attributed by DoF are urea plant interruptions and lack of storage facility for ammonia which are required to be tackled separately at plant level.
- GAIL recovers non-APM rate for the quantity of APM gas used for other than specified purpose as per the existing orders. It was, however, noticed that after implementation of new gas price policy, price of APM gas and non-APM price have become equal with effect from 1 November 2014. In this scenario, rate at which recovery would be effected for quantity of NG diverted for other than specified purposes needs to be decided.

## 5.3.2

## Power sector

MoPNG directed (June 2006) that as far as power sector consumers were concerned, APM price would be applicable only for those quantities of gas which were used for generation of electricity for supply to the grid for distribution to consumers through public utilities/licensed distribution companies.

Instances of use of APM gas for other than specified purposes were commented in the Reports of Comptroller and Auditor General of India, Union Government (Commercial)<sup>83</sup>. It was pointed out that GAIL failed to comply with directions of MoPNG and extended undue benefit to seven private power producers<sup>84</sup> generating and supplying power to their end users at commercially agreed rate under wheeling arrangement. At the instance of Audit, GAIL started recovering market driven price for the gas consumed by these consumers from November 2011. These consumers, however, invoked arbitration clause against the action taken by GAIL for recovery of ₹ 246.16 crore for the period prior to November 2011. The matter is under various stages of arbitration and recovery is pending (October 2014).

Audit further noticed that GAIL failed to evolve an effective system to arrest such unauthorized use of APM gas despite deficiencies being pointed out. Two instances, where GAIL failed to detect unauthorized use of APM gas by consumers timely and to take action for recovery of market rate from them as noticed in Audit are discussed below:

- Andhra Pradesh Gas Power Corporation Limited (APGPCL) is a public limited company formed (October 1988) to set up a gas based power generating station in Andhra Pradesh (AP). The company was initially promoted by Andhra Pradesh State Electricity Board (APSEB) along with other Central and State PSUs and private sector entities. The Company was later transformed into Public Private Partnership (PPP) model with 26 per cent equity participation of APSEB. As per Memorandum of Understanding (MoU) entered into between shareholders (October 1988 and April 1997), the power generated is distributed among its shareholders (Annexure 18) on cost to cost basis.
- APGPCL was getting APM gas as per allocation and in accordance with the agreement between APSEB and GAIL (November 1990). The agreement was revised (January 1997) by increasing the quantity<sup>85</sup> and

<sup>83</sup> vide Para no. 12.2 of Audit Report No 3 of 2011-12 and para no. 11.5 of Audit Report No 8 of 2012-13

<sup>84</sup> Sai Regency Power Corporation Private Limited, Arkay Energy (Remeswaram) Limited, Coromandel Electricity Company Limited, OPG Energy Pvt. Limited, Saheli Exports Private Limited, Kaveri gas power Limited and MMS steel & Power Limited

<sup>85</sup> Quantity of gas to be supplied was increased from 0.4 to 0.5 mmscmd (0.4 on firm and 0.1 on fall back basis)



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extended from time to time. The present Gas Sales and Transmission Agreement (GSTA) is valid upto 31 December 2015 for supply of 1.22 mmcmd gas as per allocation at APM rate of US\$ 4.2/mmbtu<sup>86</sup>.

- GAIL entered into gas supply contract for supply of gas to Andhra Fuels Limited (AFL) in May 1996 which was extended from time to time. Present agreement was entered into (December 2010) for supply of 0.1 mmcmd gas on firm and/or fallback basis as per allocation at APM rate of US \$ 4.2 per mmbtu.

Both APGPCL and AFL were using APM gas for captive consumption since beginning. APGPCL was sharing power at the price fixed by a committee of Directors, among its shareholders under wheeling arrangement and AFL was reselling NG to another consumer. Utilisation of APM gas, therefore, was not in conformity with the MoPNG directives. It was mandatory for GAIL to charge market rate for the quantity of gas consumed in accordance with pricing order of June 2005.

Audit noticed that market rate was not charged till 2013 owing to deficiencies in the system of gas supply contract management as discussed below:

- Article 17 of GSTA stipulated that buyer shall neither sell gas to any other party nor use it for any other purpose other than those contemplated unless and otherwise approved by GoI and/or mutually agreed to in writing by the buyer and the seller. It may be noted that GAIL is acting as GoI nominee with the right to procure and sell APM Gas as per allocations. Therefore, incorporation of a clause in GSTA, permitting buyer to use the gas for purpose other than those contemplated therein with mutual agreement between buyer and seller, defeated the very principle behind allocation of a scarce natural resource.
- The agreement did not include a clause/article permitting GAIL to verify end use of NG and charge non-APM rate in case of misuse.
- Government of AP constituted an institutional arrangement viz. Andhra Pradesh Power Coordination Committee (APPCC) in June 2005 to co-ordinate the affairs of distribution licensee companies of AP. GAIL had an option to verify the credentials of APGPCL and AFL with APCC in 2005. However, GAIL obtained information from APPCC only in September 2012.

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<sup>86</sup> Million Metric British Thermal Unit

APPCC confirmed (September 2012) that APGPCL supplied 21 *per cent* (share of APSEB) of power generated by it to the grid for public purposes under Power Purchase Agreement (PPA) and AFL did not supply power to the grid (AP TRANSCO). Based on this information, GAIL raised (January 2013) debit note of ₹ 308.91 crore<sup>87</sup> on APGPCL towards difference of APM and non-APM price for the quantity of NG consumed to the extent of 79 *per cent* for the period July 2005 to December 2012. Similarly, debit note of ₹ 27.18 crore<sup>88</sup> towards difference of APM and non-APM price for the quantity of gas supplied to AFL for the period July 2005 to February 2013 was issued in February 2013.

In both cases GAIL supplied APM gas as per allocations and in terms of agreement with consumers. The agreement *inter alia* specified the applicable rate for gas as APM. The agreement was revised periodically with the same terms and conditions. Consumers in both the cases proceeded for legal remedy. As a decision in this regard was awaited, GAIL had not demanded (October 2014) market rate even for the subsequent period from both consumers.

GAIL stated (October 2013) that it delivered gas to consumers at delivery point where the quantity of gas supplied was measured by a single meter. Beyond delivery point, it was the customer who made arrangement to take the gas for usage at various locations. Since delivery of gas was completed as per contract at the delivery point, GAIL had no authority to ascertain the usage of power produced by the gas supplied to customers. GAIL further stated (August/December 2014) that specific clarification sought from MoPNG in 2006-07 regarding applicability of APM price to various groups of power customers was not received.

MoP stated (January 2015) that verification would be carried out if there was complaint or doubt about utilisation of gas, but that no such case had come to notice of the Ministry, so far, regarding gas supplied by GAIL.

The replies need to be viewed against the facts that:

(i) GAIL, being the GoI nominee for supply of NG, should have verified the utilization of gas supplied at APM rate by incorporating an enabling provision in the agreement to that effect. Moreover, as allocation of APM gas to the units in power sector was made on the recommendation of MoP, a proper mechanism to verify the end use of power produced by them should also have been in place in MoP.

(ii) Instances of utilisation of APM gas for other than specified purposes by seven power producers were reported in previous Audit Reports of CAG (para no. 12.2 of Audit Report no. 3 of 2011-12 and para no. 11.5 of Audit Report no. 8 of 2012-13). An amount of ₹ 246.16 crore was pending recovery by GAIL in these cases. Further,

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<sup>87</sup> ₹ 308.91 crore includes ₹ 39.12 crore towards VAT@ 14.5%

<sup>88</sup> ₹ 27.17 crore includes ₹. 3.44 crore towards VAT @ 14.5%

cases of two more power producers i.e. APGPCL and AFL have also been mentioned in this Report where power was being used for captive consumption instead of being supplied to the grid for distribution to consumers, which was not an authorised use of APM gas. Recovery of ₹ 308.91 crore and ₹ 27.18 crore was pending from APGPCL and AFL respectively, on this account.

### 5.3.3

#### Small scale consumers

GAIL was supplying APM gas to small scale consumers as per the allocations and in terms and conditions of GSTA. MoPNG *inter alia* stipulated (June 2005) that any supply beyond APM allocation would have to be made at non-APM/market related price. Audit noticed that though GSTA provided for recovery of price at any time in future as per directive, GAIL did not enforce the clause within the validity period of existing agreement with consumers in Vadodara region.

MoPNG issued a further directive (February 2010) clarifying that any supply beyond APM allocation would have to be made at non-APM rates in accordance with gas pricing order of June 2005. On the above direction, GAIL started recovering non-APM price prospectively i.e. with effect from April 2010 for supply made beyond allocation. However, GAIL did not initiate action for recovery of arrears for the past period i.e. 1 July 2005 to 31 March 2010 before expiry of existing agreement until May 2012. Raising a claim for past period after the expiry of existing agreement led the consumers to go for legal remedies. This resulted in non-recovery of ₹ 43.01 crore (Annexure 19).

GAIL stated (November 2013) that MoPNG had addressed the issue of utilization of gas from small/isolated fields through revised guidelines (July/August 2013). The guidelines stipulated that if the average drawal quantity in last six months of a customer drawing gas from small/isolated fields had been more than its allocation (APM and/or non-APM allocation taken together), such excess quantity over and above its allocation should be allocated on 'fall back' basis. This additional fall back allocation was to be at non-APM price as notified by GoI from time to time.

GAIL further stated (August/December 2014) that pricing order dated 20 June 2005 had no provision for charging non-APM price for quantities supplied beyond allocation. The reply needs to be viewed against the fact that point no. (iv) of the said pricing order *inter alia* stipulated that "Consumers other than fertilizer, power and specific end users committed under Court Orders/Small Scale Consumers having allocations up to 0.05 mmcmd and getting existing gas supplies through GAIL network, would be supplied natural gas at market related price". Moreover, MoPNG

order dated 9 February 2010 was only an order reiterating the terms of order dated 20 June 2005.

The fact, therefore, remains that GAIL did not recover market rate from 18 small scale consumers in Vadodara region who were using NG in excess of allocation and by not enforcing the pricing order of June 2005 timely led to non-recovery of ₹ 43.01 crore.

#### 5.4

#### Low off-take of allocated quantity by fertilizer units

As per computation of Fertilizer Association of India (FAI) in June 2011, by using one mmcmd KG D6 Gas (based on energy content of 8200 KCL/SCM which makes approximately 1400 MT urea) instead of other alternative feedstock, the saving in production cost of urea would be ₹ 556 crore per annum. Therefore, it was essential to utilize available NG at APM rate to the maximum extent possible for production of urea. Underutilization of available NG not only results in loss of production but also leads to import of more urea. This leads to payment of extra subsidy as the subsidy paid on imports is more than the subsidy paid on domestic production.

Test check revealed instances where certain units did not fully utilize NG supplied to them at APM rate to optimum level, causing loss of production. All these units had further achievable production capacity. During the same period, none of the gas based fertilizer units received NG in excess of quantity allocated which indicated that the quantity underutilized by the units were not used in any other fertilizer units. Certain units utilised costlier NG instead of using available APM gas which increased the cost of production of urea.

Loss of production/increase in cost of production of urea deprived the opportunity for GoI to reduce subsidy burden by ₹ 637.07 crore (Annexure 20) as detailed below:

- I. GoI allocated 1.72 mmcmd APM gas to Brahmaputra Valley Fertilizer Corporation Limited (BVFCL), a GoI undertaking situated at Namrup in Assam. BVFCL underutilized 0.30 mmcmd in 2008-09 and 0.27 mmcmd in 2011-12 out of the NG available to it during the period. The resultant surplus NG was not used elsewhere to compensate the loss of production of urea, as there was no pipeline infrastructure to transmit the same.

DoF replied (January 2014) that BVFCL plants at Namrup-II and III were 35 and 26 years old respectively and built on technology considered outdated. Considering the actual status of plants FICC had also relaxed norms of operation for these units. DoF also stated (January 2015) that there were many technical reasons viz. frequent equipment breakdowns,

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restriction of gas supply, strikes, blockades etc for low on streams days leading to loss of production of urea.

Constraints of the plant as stated by DoF were considered and subsidy burden of ₹ 55.72 crore (Annexure 21) was estimated on the production loss based on the quantity of APM gas not utilized as accepted by BVFCL.

- II. Actual consumption of NG by Nagarjuna Fertilizers and Chemicals Limited, (NFCL) Kakinada (AP), was less than the actual supply available during 2011-12 and 2012-13. Underutilization of one mmscmd NG results in loss of production of 1.3399<sup>89</sup> TMT. Production loss on account of underutilization was 0.51 LMT. Resultant extra expenditure on subsidy works out to ₹ 98.04 crore (Annexure 22).

DoF stated that (January 2014) actual production during the period was in excess of reassessed capacity of the unit. Production beyond the reassessed capacity was under incentivized production which the company might or might not produce. DoF further stated (January 2015) that NFCL receives its NG requirement from ONGC, CAIRN and RIL. There was not much disparity between the landed cost of NG from these sources. Similarly as explained by NFCL, when there was occasional excess NG availability some margin was kept by it while nominating NG from different sources.

Reply needs to be viewed against the fact that the production loss was estimated based on the data on consumption of NG made available by FICC in respect of the unit which indicated that there was under utilisation of NG at APM rate. Moreover, GoI had incentivized urea units to produce more than their assessed capacity to ensure that the available cheaper gas was utilized to the maximum possible extent for production of urea and this would have saved additional outgo of subsidy.

- III. A. GoI allocated 2.24 mmscmd APM gas to NFL, a GoI undertaking, situated at Vijaipur (MP) during 2012-13. Actual availability, however, was ranging between 1.39 mmscmd to 2.08 mmscmd during the year, against which, actual consumption was less in all the months during the period and costlier gas<sup>90</sup> was consumed fully, against the supply. Underutilization of one mmscmd per day results in loss of production of 1.3215<sup>91</sup> TMT. During nine months from April 2012 to December 2012, NFL

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<sup>89</sup> Production target 15.65 LMTPA /(required NG 3.2 mmscmd X No. of days in a year 365 days) ie 0.013399 LMTPA ie 1.3399 TMT

<sup>90</sup> PMT, RIL, Non-APM and Spot-RLNG

<sup>91</sup> Annual production target 20.5 LMTPA /(required gas 4.25 mmscmd X No. of days in a year 365 days) i.e. 0.013215 LMTPA i.e. 1.3215 TMT

underutilized APM gas from 0.01 mmscmd to 0.61 mmscmd from NG available to it. This resulted in loss of production of 0.65 LMT urea and consequent extra burden of subsidy amounting to ₹ 139.63 crore (Annexure 23) on GoI.

III. B. Actual supply of APM gas to KRIBHCO, a co-operative society at Hazira, Gujarat was ranging between 1.62 mmscmd and 2.31 mmscmd during 2011-12 and 2012-13 which was less than the required quantity (3.0 mmscmd). However, during the period July 2011 to October 2012, short consumption of APM gas (0.01 mmscmd to 1.16 mmscmd) was noticed. One of the reasons for underutilization of gas was shut down of ammonia stream. Audit, however, noticed that during the period other costlier gas<sup>92</sup> was consumed instead of available cheaper gas. As underutilization of one mmscmd per day resulted in loss of production of 1.2254<sup>93</sup> TMT, this meant loss of production of 1.66 LMT with consequent extra burden on GoI of ₹ 340.45 crore towards subsidy (Annexure 24).

III. C. Gujarat State Fertilizer Corporation (GSFC) consumed NG from costlier source instead of using the cheaper gas available during six months in 2011-12 and five months in 2012-13. Resultantly, cost of production increased by ₹ 3.23 crore which was extra subsidy burden on exchequer (Annexure 25 a & b).

DOF replied (October 2014) that:

- (a) Units sometimes had to take costlier gases to avoid penalties due to 'take or pay' clause;
- (b) APM gas was underutilized due to shutdown/revamping of plants *etc.*;
- (c) Priority of usage of gas was drawn on day to day basis and calculating usage of APM and non-APM gas on monthly basis would give misleading conclusions *i.e.* long term data would show that a unit has used costlier gas inspite of possible availability of cheaper gas whereas in reality on day to day basis the units exhausted the usage of cheaper fuel before going to procurement of costlier gas.

DoF further stated (January 2015) that actual production was above the reassessed capacity (of NFL); hence there was no loss of production due to low off-take. Data available with audit, however, revealed that plants can operate even above the reassessed capacity as per the demand. Therefore, DoF should ensure that units make full utilisation of NG supplied at APM price so that subsidy burden of GoI is kept at minimum.

<sup>92</sup> RIL, Non-APM and Spot-RLNG

<sup>93</sup> Annual production target 22.14 LMTPA /(required gas 4.95 mmscmd X No. of days in a year 365 days) *i.e.* 0.01225405 LMTPA ie 1.2254 TMT

Above reply of DoF needs to be viewed against the following facts:

- (a) APM gas should have been used fully to keep the cost of production of urea low, as cost of production has direct impact on the subsidy being paid by GoI.
- (b) Audit noticed instances that during the period where DoF had given shutdown/revamping as reasons for low off-take of APM gas, respective units utilized other costlier gases fully.
- (c) No documentary evidence was furnished by DoF in support of their argument that calculation on the basis of monthly data would give misleading conclusions. It may also be noted that FICC had expressed their inability to certify usage of NG even on quarterly basis which shows that a mechanism to ensure the utilization of APM gas is yet to be derived.

## 5.5

### Marketing margin on supply of NG

Fertilizer sector receives about 23 *per cent* of domestic gas at APM price as per the priority set by GoI which includes about 15 mmscmd from KG D6 field operated by the contractor<sup>94</sup>. GAIL, being the GoI nominee, supplies NG produced by NOCs.

Both GAIL and the contractor levy marketing margin on the NG supplied over and above APM price. Marketing Margin so levied is included in the delivered price of NG which forms a part of the normative cost of production of urea.

Production Sharing Contract for KG D6 block did not provide for marketing margin component. The contractor, however, has been charging marketing margin based on the energy equivalent of gas supplied i.e. 0.135 US\$/mmbtu. Ministry of Chemicals & Fertilizers (MoCF) brought (March 2009) this issue to the notice of MoPNG as the fertilizer companies were regularly representing for reimbursement of marketing margin charged by the contractor.

MoPNG stated (March 2009) that GoI had not fixed or approved the quantum of marketing margin till date for sale of NG by any contractor. Thereafter, MoPNG fixed (May 2010) marketing margin only for GAIL at ₹ 200/mscm.

Marketing margin for GAIL was fixed in Indian Rupee whereas contractor was charging this in terms of US dollar.

Audit observed that:

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<sup>94</sup> Reliance Industries Limited (90%) and NIKO (10%)

- i. Charging of marketing margin for KGD6 gas in US\$ instead of Indian Rupee for a commodity produced, marketed and consumed domestically is incongruous with Indian market. The amount charged towards this was equivalent<sup>95</sup> to ₹244.31/mscm in 2010-11 and it increased to ₹325.51/mscm in 2013-14 owing to US\$ exchange rate fluctuations<sup>96</sup> (Annexure 26).
- ii. Considering the fact that availability of NG is limited and its price is administered by GoI for fertilizer sector where GoI bears substantial financial burden as subsidy, leverage given to contractor to charge marketing margin needs justification. In this regard, MoCF estimated that charging of marketing margin of US\$ 0.135/mmbtu on KG D6 gas would lead to additional subsidy outgo of approximately ₹ 125 crore per annum.

DoF stated (January 2014) that in the absence of any policy of MoPNG in this regard, DoF/FICC has not considered marketing margin paid to the contractor (KG D6 basin) in the determination of cost of production and reimbursement to the urea units so far. Hence, subsidy claims on account of marketing margin on KG D6 gas was kept pending from 2009-10 i.e. since beginning of supplies by contractor.

Point being made by Audit, however, is that additional impact of charging of marketing margin by contractor as given above, on 15 mmscmd KG D6 gas (supplied to fertilizer units on an average) in excess of marketing margin allowed to GAIL, for the period from May 2009 to March 2014 works out to ₹ 201.40 crore. This additional burden would have to be borne by GoI, in case a decision is taken to reimburse the same (Annexure 26).

GoI entrusted (December 2011) PNGRB to determine quantum of marketing margin on the basis of actual marketing cost. PNGRB, however, was empowered to deal only with notified petroleum products and NG. As GoI has so far not notified NG for the purpose, PNGRB was not in a position to evolve any system and fix marketing margin. No decision, therefore, could be arrived at on charging of marketing margin of KG D6 gas (October 2014).

MoPNG stated (July 2014) that there was a need to regulate marketing margin for supply of domestic gas to urea and LPG producers, as the same had implication on the subsidy outgo. In all other cases, marketing margin should be decided by the buyer and seller mutually and any complaint about restrictive trade practices followed by any entity should be addressed by PNGRB and/or the Competition Commission of India. Accordingly, MoPNG requested (November 2013) PNGRB to determine marketing margin for supply of domestic gas for Urea and LPG producers.

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<sup>95</sup> Marketing margin per mmbtu = USD 0.135 X Exchange rate per USD X 1000 scm /25.2

<sup>96</sup> Exchange rate of USD for the year 2009-10 considered is ₹ 45 and it increased to ₹ 60.14 for the year 2013-14.



MoPNG informed (December 2014) that PNGRB has decided to engage a consultant to assist in the task and has sought time upto December 2014 keeping in view the fact that that process involves collection/analysis of data from various entities.

The fact remains that there was a need to regulate marketing margin especially for NG supplies to sectors where GoI has to bear subsidy burden.

**Recommendations:**

3. MoPNG may work out modalities by involving all the implementing agencies for implementing a control system/mechanism to detect and prevent deviation/mis-utilization of NG supplied at regulated price. The modalities so worked out may also include decision on rate at which recovery would be made for utilisation of such NG for other than specified purposes as there would be no difference between APM and non-APM price with effect from November 2014.
4. GAIL may critically review NG supply contract management system and put in place specific measures, such as incorporation of a clause in Gas Sales and Transmission Agreement enabling GAIL to verify end use of NG and reviewing Article 17 that permits buyer to use the NG for purposes other than those contemplated with mutual agreement between buyer and seller *etc.*, that would empower it adequately to track ultimate utilisation of NG supplied at regulated price and prevent its diversion towards unauthorised purposes.
5. MoPNG should ensure that same methodology, i.e. charging marketing margin in Indian Rupee, is adopted for supply of NG from domestic source for use in sectors where GoI bears subsidy burden.