Chapter III

Compliance Audit Observations

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Important audit findings that emerged from the test check of transactions of the Government of Gujarat Companies are included in this Chapter. It also includes audit findings in respect of test-check of transactions of Statutory Corporations of the Government of Gujarat.

Government Companies

Gujarat Agro Industries Corporation Limited

3.1 Non-fulfillment of objectives of promoting important activities in the agriculture sector by the Company

Introduction

3.1.1 Gujarat Agro Industries Corporation Limited (Company) was incorporated in 1969 with main objectives of enhancing productivity of crops, setting up of agriculture infrastructure projects to promote exports, ensure economical and timely supply of agricultural inputs, equipment and services and providing clean and low cost biogas energy. For these, the Company implemented Government of India (GoI) and Government of Gujarat (GoG) schemes entrusted to it, sold agricultural inputs through its Agri Business Centres (ABCs) which were either purchased or manufactured at its own plants. The Company has two Production Units¹ (PUs), 18 Agro Service Centres (ASCs) and 1,849 ABCs² as on 31 March 2017. The ASCs handle the distribution of fertilizers and pesticides to the ABCs and monitor the sales and recovery there from.

3.1.2 The core activities of the Company consisted of: (i) implementing GoG/ GoI schemes³ like Agriculture Infrastructure Projects, agriculture fairs, Krishi Mahotsav, setting up bio-gas plants etc. as a nodal agency (ii) trading activities like purchasing & selling fertilizers, pesticides and other agricultural equipment through its ABCs and (iii) manufacturing liquid bio fertilizers and pesticides at its plants and selling them through the ABCs. The non-core activities of the Company consisted of treasury operations. Though the Company had no implementing role in the non-core activities, the funds deployed for them enabled the Company to earn interest on unspent balances, which converted the operating losses into net profit before tax.

3.1.3 As regards the core activities, though sale of traded fertilizers constituted 92.75 to 95.22 *per cent* of the total sales, the Company had little role in the activity as it was under GoI fertilizer subsidy scheme wherein the

¹ Pesticide Formulation Unit at Gondal and Liquid Bio-Fertilizer Unit at Naroda.

² The ABCs are the dealers appointed by the Company for sale of Company's products.

³ As on 31 March 2017, there were 56 such schemes being implemented by the Company.

suppliers, the quantity allocation and price to be paid was decided by GoI. The supplies of these fertilizers were also directly made by the fertilizer manufacturers to the ABCs and only the purchase and sales invoices were routed through the Company. Further, the trading of fertilizers being a low margin activity had little contribution in the operating profits of the Company. The remaining trading turnover was contributed by sale of other agricultural equipment purchased under various GoG schemes, wherein again the value addition of the Company was limited. On the other hand, though sale of manufactured fertilizers and pesticides constituted only 1.55 to 4.23 *per cent* of the total sales, the Company was required to plan for production, capacity utilisation, marketing and pricing. Considering the nature of the activities of the Company, Audit was carried out for the period 2012-13 to 2016-17.

Overall Planning

3.1.4 Audit observed that the Company had not prepared Business Plan and Annual Plan for achievement of its objectives. Further, important policies like Production Policy, Marketing Policy, *etc.*, were not formulated for efficient business operations. It did not prepare any production plans, marketing plans during the period under audit.

The last review on "Performance of production, sales and nodal agency functions of the Company" was included in Audit Report (Commercial) for the year ended 31 March 2005, GoG. The Committee on Public Undertakings (COPU) discussed the Performance Audit in October 2010. The review highlighted the following important issues:

- ¹/₂ The capacity utilisation of Gondal Pesticide Formulation unit was around 11 *per cent* in case of Dust Product formulation and around 31 *per cent* in case of Liquid Product formulation during 2000-04.
- ¹/₂ The sale of fertilizers comprised 84 to 91 *per cent* of the Company's total turnover.
- ¹/₂ Several internal control deficiencies were observed in implementation of GoI/ GoG schemes by the Company.

Audit review of the activities undertaken by the Company during the period 2012-17 revealed little improvement in the above issues as discussed in subsequent paragraphs.

Financial position and working results

3.1.5 The Company had finalised (November 2017) its accounts up to 2015-16 and accounts for the year 2016-17 was in arrears. Analysis of the financial position and working results revealed that the total revenue from operations increased from ₹ 341.80 crore in 2012-13 to ₹ 381.96 crore in 2015-16. However, the revenue from operations was not sufficient to meet the expenditure of the Company. The non-operating revenue included the interest income earned mainly on grants/ funds parked with Gujarat State Financial Services Limited (GSFS) and Fixed Deposits (FDs) with banks. The interest income significantly increased from ₹ 11.08 crore in 2012-13 to ₹ 53.19 crore in 2015-16. The profit before tax of the Company was ranging from ₹ 8 crore

in 2012-13 to ₹ 47.47 crore in 2015-16 that was mainly contributed by interest income. Cash flow from operations of the Company indicated that during 2012-16, the Company had incurred operating losses. The cash flow generated from investing activities (mainly interest earned on unspent balances) converted the operating losses into net profit before tax.

Cash, cash equivalent and short term loans & advances as on 31 March 2016 included balance of ₹ 556.10 crore received for execution of various schemes parked as deposits. As *per* GoG circular dated 22 December 2015, the liability for payment of interest received/ accrued on investment of government grants to Government was to be booked in the accounts of the Company. However, the Company credited the interest as its own income and did not provide for the liability in violation of the GoG circular. Thus, the Company showed profits because of interest income earned from grants.

The Management stated (September 2017) that the interest income is the integral part of the Company's business model. The reply is not convincing as crediting the interest income earned on the unspent balances of government grants in violation of GoG circular did not tantamount to Company's profit. This was also pointed out in the comments of the C&AG of India on the financial statements of the Company for the year 2015-16.

Implementation of Government schemes

3.1.6 The Company had received grant of ₹ 313.92 crore (excluding opening grant balance of ₹ 16.50 crore) during 2012-17 and utilised ₹ 241.54 crore for implementation of 56 schemes. As on 31 March 2017, the Company had unutilised grant of ₹ 62.50 crore after surrender of ₹ 26.38 crore. The unutilised grants increased from ₹ 16.50 crore in 2012-13 to ₹ 62.50 crore in 2016-17.

These 56 schemes included seven infrastructure schemes and 49 other GoG/GoI schemes. A general review of the 49 schemes revealed that:

- in respect of 12 schemes mainly for participation in Agriculture fairs, various projects of Gujarat Horticulture Mission, construction of cold storage and schemes under *Rashtriya Krishi Vikas Yojana* (RKVY) the Company completely utilised the grants received;
- ¹⁄₂ in respect of 18 schemes mainly related to *Krishi Mahotsav*, Agro Vision 2010, construction of cold storage, Branding, Marketing, Participation in international summit and National Mission on Food Processing, the Company had received grant of ₹ 212.51 crore (excluding opening grant balance of ₹ 9.86 crore) during 2012-17 and after surrender of ₹ 10.88 crore grant, had un-utilised grant of ₹ 51.10 crore (24 *per cent*) as on 31 March 2017;
- ¹⁄₂ in respect of 11 schemes, grant of ₹ 1.94 crore received prior to 2012-13 remained un-utilised even as on 31 March 2017; and

¹⁄₂ the Company received ₹ 8.58 crore under three schemes⁴ during 2012-17 that remained unutilised even as on 31 March 2017.

Test-check in Audit of three infrastructure projects implemented by the Company revealed the following:-

Violation of O&M agreement in Cobalt 60 Irradiation plant

3.1.6.1 The Cobalt 60 based Irradiation Plant (CIP) was constructed (June 2014) under RKVY at the cost of \gtrless 16.05 crore⁵ to provide irradiation⁶ facility to the exporters of fruits, vegetables, spices, grains, *etc.* The Company handed over the Operation and Maintenance (O&M) of CIP to Universal Medicap Limited, Baroda (UML) for five years from 17 July 2014. As per the O&M agreement, UML was required to fix the irradiation charges and rates for customers in consultation with the Company. The Company was to provide Cobalt 60 up to 1000 kCi for five years. The Company was to receive minimum user fees of \gtrless 8.05 crore⁷ at the rate of 11 *per cent* in the first year, 35 *per cent* in the second year and 39 *per cent* of the estimated revenue every year thereafter. The outsourcing of the O&M contract was meant to create a revolving fund to meet the future implementation cost.

Audit observed that UML did not submit details of product-wise quantity irradiated, service charge received, *etc.*, to enable the Company to indicate the actual revenue. Further, UML fixed the charges and rates for customers without consulting the Company. The CIP was handed over to UML on 17 July 2014 but the user fees was worked out from 1 August 2014. Further, the Company did not apply the correct rate while calculating the third year user fee. These errors resulted in shortfall in recovery of user fees of ₹ 70.79 lakh⁸ (up to May 2017). Further, RKVY had sanctioned cobalt cost for 1000 kCi only and the future operation of the project would require sourcing of cobalt on a regular basis. However, the Company did not create revolving fund for meeting the future operation cost (September 2017).

The Management stated (September 2017) that UML has submitted the required details from May 2017 and the Company would recover shortfall in revenue after receipt of audited financial statements. It also stated that discrepancy in rent paid would be resolved with mutual consultation. The reply is not convincing as the Management did not ensure compliance with the terms of the O&M agreement. Besides, the Company did not state the time by which the revolving fund would be created.

 ^{4 (1)} Gujarat Organic Farming Policy (0.99 crore); (2) Organic Farming-Deesa for potato Cluster (₹ 6 crore); and (3) Upgradation/ Modification - IPH Naroda (₹ 1.59 crore).

⁵ Out of the construction cost of ₹ 16.05 crore, ₹ 3.83 crore was incurred up to 31 March 2012. The construction expenditure of ₹ 12.22 crore incurred during 2012-17 *plus* the fund of ₹ 3.77 crore utilised for purchase of 500 kCi Cobalt 60 represents the utilisation.

⁶ Irradiation is the process by which something is exposed to radiation.

⁷ Minimum user fees first year - ₹ 19.06 lakh, second year - ₹ 1.30 crore, third year - ₹ 2.05 crore, fourth year - ₹ 2.19 crore and fifth year - ₹ 2.32 crore.

⁸ Non-recovery of user fees of ₹ 0.80 lakh for July 2014 *plus* short recovery of user fees for July 2015 of ₹ 4.63 lakh and ₹ 3.12 lakh for July 2016 *plus* short recovery of ₹ 62.24 lakh in 10 months from August 2016 to May 2017.

Idling of the Rice Flake Manufacturing Unit at Kosamba

3.1.6.2 The work of construction of Rice Flakes (Poha) Manufacturing Unit (RFMU) at Agriculture Produce Market Committee, Kosamba under RKVY was awarded (25 July 2012) to an agency at a cost of \gtrless 2.77 crore. However, the contract was terminated (31 January 2014) as the agency discontinued (29 January 2013) the work seeking price escalation. Subsequently, the construction work was completed (February 2015) by employing another contractor. The Company incurred expenditure of \gtrless 4.90 crore (up to March 2017) against \gtrless 5.60 crore received under RKVY.

Audit observed that the installation of Effluent Treatment Plant (ETP) was mandatory for operation of the unit which was not included at the time of deciding components of the projects. Subsequently, the work order for construction of ETP was awarded (10 October 2016) at a cost of \gtrless 2.78 lakh which was in progress (May 2017). It was further observed that the Company could not select an agency for operation, maintenance and management (O&M) of RFMU due to non-receipt of bid in spite of extending the bid submission five times up to 8 March 2016. Thus, the project remained non-functional due to delay in completion of various components of work and inability to find an O&M agency.

The Management stated (September 2017) that it was decided to take up the work of ETP at a later stage. The reply is not convincing as the installation of ETP was mandatory for operation of the unit and the financial viability of the RFMU should have been considered at stage of approving the project.

Non-commissioning of Modern Potato cold storage, Deesa

3.1.6.3 The Company awarded (March 2010) turnkey contract for commissioning of the Modern Potato Cold Storage plant to Blue Star Limited (BSL) at \gtrless 8.98 crore to be completed by 30 June 2011. However, the work was stopped (October 2011) as the Company had not obtained requisite approvals⁹ for the construction of the plant from Deesa Nagar Palika. The work commenced again from October 2013.

BSL was paid ₹ 7.65 crore until June 2017 and bills of ₹ 1.06 crore were pending as on 30 June 2017. However, there was nothing on record to establish that the plant had been completed and handed over by BSL. Pending the same, the Company awarded (April 2016) the operation and maintenance (O&M) of the cold storage to an agency at a license fee of ₹ 25 lakh and ₹ 30 lakh for the first and second year, respectively. The O&M agreement was yet to be entered into (September 2017). Though the unit was inaugurated (20 May 2017), no records were available to show that the unit had started operations. Consequently, license fee of ₹ 7.19 lakh for the period April 2017 to June 2017 had not been remitted to the Company by the O&M contractor.

⁹ Verification of compliance to terms and conditions for allotment of land by collector, submission of land measurement and land documents, submission of way out approved earlier by collector, attested copy of the earlier approved plan to ensure that the cold storage constructed with fibre fabricated material had adequate safety measures in place for safety of life and goods, copy of the documents submitted for obtaining approval for construction of cold storage *etc*.

However, Audit noticed that electricity bills of \gtrless 9.02 lakh raised by Uttar Gujarat Vij Company Limited for the period April to June 2017 indicated that the plant was being operated. The Company needs to expedite the formal handing over of the plant by BSL and enter into an agreement with O&M contractor at the earliest so that the revenue earning can start.

The Management while accepting (September 2017) the delay stated that full load trial for one complete season could not be done and only partial load trials could take place in March 2017 as potato crop season was over. It was further stated that the cold storage was handed over to O&M Contractor with pending works and efforts are on to get the same completed. It was also stated that electricity bills have been recovered from BSL and O&M contractor paid ₹ 8 lakh towards license fee. The reply is not convincing as it did not state the time frame for completing pending works. Further, the Company has not entered into an agreement with the O&M Contractor to safeguard its interest till date (December 2017).

Production Planning and production activity

3.1.7 The Company has two Production Units (PUs) *viz.*, Pesticides Formulation Unit (PFU) at Gondal (set up in 1981) and Liquid Bio Fertilizers (LBF) Unit at Naroda (set up in March 2012). For running the production operations with optimum utilisation of capacities, the Company needed to prepare a production plan, which would cover aspects like product mix, the quantities to be produced and timing of production based on the study of market for its products and its production capacity. Audit observed that the Company had no such production plan.

The capacity utilisation of the two PUs during 2012-17 is given in Table 3.1

Year	Liquid bio fertilizer (LBF)		Dust Product Formulation (DPF)		Liquid Product Formulation (LPF)	
	Installed capacity (lakh Litres PA)	Capacity Utilisation (in <i>per cent</i>)	Installed capacity (MTPA)	Capacity Utilisation (<i>per cent</i>)	Installed capacity (KLPA)	Capacity Utilisation (<i>per cent</i>)
2012-13	2.59	56.76	7200	8.24	900	10.22
2013-14	2.59	173.36	7200	7.61	900	16.22
2014-15	6.09	70.11	7200	5.01	900	25.44
2015-16	6.79	35.94	7200	2.79	900	20.00
2016-17	6.79	43.45	7200	2.04	900	29.11

 Table 3.1: Capacity utilisation of the production units

Source: Data as provided by the Company.

From the above, it may be seen that the capacity utilisation of LBF was in the range of 35.94 to 173.36 *per cent* during 2012-17. In respect of DPF and LPF pesticides, the capacity utilisation ranged from 2.04 to 8.24 *per cent* and 10.22 to 29.11 *per cent* respectively during this period. The capacity utilisation of LBF was high in 2013-14 due to deployment of multiple shifts. We observed that the capacity utilisation reduced after increase in capacity in 2014-15 as the demand for the product did not keep pace with the increased capacity. Audit analysis of the low capacity utilisation revealed that production was linked to demand under Government schemes and no efforts were made to sell these products in the open market. Out of four products of DPF that the Gondal unit

was licensed to manufacture, one product¹⁰ had no market hence was not produced. In remaining three products¹¹, only blending was done by purchasing crushed Soap Stone Powder¹² (SSP). This contributed to the lower capacity utilisation as the machinery for crushing soap stone remained unutilised since 2007-08. Further, no attempt was made by the Company to introduce any new product mix in accordance with market demand, to replace the product having no market and utilise the existing capacity.

Audit further observed that the Water Dispersible Product Formulation plant installed at Gondal Unit with a capacity of 1500 MT per annum was not utilised since 1995. No efforts have been made for the disposal of the plant.

The Management stated (September 2017) that it had not aggressively marketed its products in the open market due to shortage of professional staff and assured to form a new team of professionals. It was further stated that the Company's products were promoted at various events organised by GoG *viz., "Krushi Mahotsav* and *Khedut Sibir"*, radio programmes and by organising street plays. The reply is not convincing as in spite of promotional activities by the Company, the utilisation of additional capacity installed for LBF in 2014-15 remained low.

Thus, in the absence of effective market promotion and production plans, the capacity utilisation of DPF and LPF remained low because their production was mainly confined to sale under Government schemes.

Marketing Management

3.1.8 The Products sold by the Company consists of fertilizers, pesticides, liquid bio-fertilizers and other agricultural inputs. The observations relating to sales and marketing is discussed in succeeding paragraph:

Absence of Marketing Policy

3.1.8.1 Marketing is a process by which a product or service is introduced and promoted to potential customers. The Company had a separate division for Marketing and Project (M&P) and an Agro Services and Chemical division for overseeing all ASCs. However, the Company had not framed a marketing policy for sale of its products. This would have facilitated the top management in framing of marketing strategy, sales forecasts, market analysis, assessment of competition, *etc.* The Company did not take up any activities to educate prospective consumers about the suitability and benefit of the Company's products or advertise its products. The fertilizer constituted major portion of the traded commodities that did not require any marketing effort. No separate targets were fixed for manufactured products, which required marketing thrust. Further, the Management also did not fix any sales targets for its managerial staff at the marketing and projects division or the agro

¹⁰ Agroquin 1.5% DP.

¹¹ Agropara 2% DP, Agrofen 0.4% DP and Agromala 5% D.P.

¹² Soapstone is a metamorphic rock largely composed of mineral talc and rich in magnesium. The Company uses Soapstone powder for formulation of pesticides by blending the technical (raw material) in soapstone powder.

services and chemical division. Audit visited 12 ABCs to study their functioning. During the visit, five out of the 12 ABCs informed that the products of the Company were received after expiry of demand for the season. As the products of the Company have a short shelf life, it is necessary that the Company frame a marketing policy and a concomitant production plan to ensure that the products reach the ABCs before the demand period.

The absence of a marketing policy is reflected in the low percentage of sales of non-fertilizer products of the Company.

The Management did not reply to the paragraph (December 2017).

Internal Control and Monitoring

3.1.9 Internal control provides reasonable assurance for an efficient system to maintain financial discipline, run operations efficiently and comply with applicable laws and regulations.

Audit observed the following deficiencies in the internal control and monitoring mechanism:

- ¹/₂ The Company had not finalised its accounts for the year 2016-17 till date (December 2017).
- 1/2 The Company had not prepared business plan and annual plan for undertaking activities and had not framed a production plan, marketing policy and credit policy for business operations. The budgets were not approved in time.
- ¹/₂ The Company did not have a system to monitor the implementation of the terms of revenue sharing agreements to ensure correct receipt of its share in the revenue.
- ¹/₂ The Company did not have system to monitor collection of security deposit (SD) from Agri Business Centres (ABCs) nor the extension of credit to ABCs against the available SD.
- ¹/₂ The Company did not have a system for monitoring of critical processes *viz.*, timely destruction of expired pesticides accumulated over the years in violation of the applicable laws/ rules.
- ¹⁄₂ Under National Biogas and Manure Programme, the Company did not have system to ascertain whether the Self Employed Biogas Supervisor¹³ engaged by the Company had inspected the biogas plant after its construction and provided requisite guidance to the beneficiaries. Further, no evaluation was carried out to ascertain the benefits derived from the programme
- ¹⁄₂ The Company had neither awarded Annual Maintenance Contract for maintenance of the fire protection equipment nor got the fire protection system refilled/ reactivated after its expiry at Gondal pesticide unit.

¹³ Persons trained for construction of biogas plants.

- ¹⁄₂ The Company did not make efforts to dispose of the Water Dispersible Product Formulation plant at Gondal lying unutilised since 1995.
- ¹/₂ The Company purchased (December 2009) land for its own office building. However, it did not make efforts for its construction and continued incurring expense on rented accommodation (December 2017).
- ¹⁄₂ Due to incorrect estimation of income, the Company short paid advance tax which resulted in payment of interest of ₹ 76 lakh for the AY 2012-13 to 2015-16 indicating ineffective control over budgeting and estimation by the top management.

Adequate internal control mechanism should include proper system of timely finalisation of accounts, timely recovery of trade receivables, efficient utilisation of assets besides management of accumulated stock of hazardous wastes to prevent damage to environment.

Conclusion and Recommendations

3.1.10 **Guiarat Agro Industries Corporation Limited (Company)** was incorporated in 1969 to promote agricultural activities. The Company acted as a nodal agency for implementation of GoI / GoG schemes, trading agent of fertilizer & minor agri-inputs, and manufactured pesticides and bio-fertilizers. The Company did not have a business plan and annual plan for achievement of its objectives. The Company had not framed production and marketing policy which was critical for promotion and sale of its own products. The Company incurred operating losses during the period 2012-16. In trading activities, the sale of fertilizers accounted for 93 to 95 per cent of the total sales during 2012-16. Audit observed deficiencies in implementation of infrastructure projects and schemes meant to augment the agro potential of the State by GoI / GoG. Lacunae were observed in internal control and monitoring mechanism as was highlighted in non-preparation of business plan, operations, policies, annual accounts, ineffective monitoring of infrastructure projects and contractual arrangements. The Company did not have a system for monitoring critical processes like destruction of expired pesticides, which resulted in violation of environmental laws.

Recommendations:

The Company may

- frame a business plan, production plan and marketing policy for its operations.
- comply with Environment Laws with reference to destruction of expired products.

The matter was reported to Government/ Management (July 2017). The reply of Government is awaited (December 2017).

Gujarat Water Resources Development Corporation Limited

3.2 Tube-wells and Lift Irrigation Schemes implemented by Gujarat Water Resources Development Corporation Limited

Introduction

3.2.1 The state of Gujarat has 125 lakh hectares (ha.) of land under cultivation of which 60 lakh ha. is dependent on rainfall, 20 lakh ha. on ground water, 18 lakh ha. on surface water and remaining 27 lakh ha. are covered by Sardar Sarovar Yojana and Sujalam Safalam Yojana (SSY). The state has water resources of 55,608 million cubic metres (mcum) of which 38,100 mcum is surface water and 17,508 mcum is ground water. Gujarat Water Resources Development Corporation Limited (the Company) was incorporated in May 1971 with a view to concentrate on ground water investigation, exploration, management and recharge works in the State of Gujarat. The Company falls under the administrative control of Narmada, Water Resources, Water Supply and Kalpsar Department (the Department), Government of Gujarat (GoG). The paid-up capital of the Company as on 31 March 2017 was ₹31.49 crore and accumulated losses as on 31 March 2015¹⁴ were ₹ 27.38 crore. The main activities of the Company are to construct, run and maintain tube-wells for agricultural, industrial, drinking, domestic and other purposes, implement lift irrigation schemes; construct check dams, investigate ground and surface water availability and lay pipelines for recharging ground water through SSY.

The activities of the Company are carried out by 10 divisions headed by the Executive Engineers (EE)/ Geo-hydrologists and monitored through three Circle Offices headed by Superintending Engineers (SE) under the overall supervision of the Managing Director and governed by the Board of Directors (BoD).

Scope of Audit and Methodology

3.2.2 The scope of this Audit is limited to construction and operation of tube-wells, creation of Pressurised Irrigation Network System (PINS) with Micro Irrigation System (MIS) on operational tube-wells and implementation of Lift Irrigation Schemes (LIS).

The Company receives grants as part of regular state budget as well as under specific scheme like Tribal Area Sub-Plan (TASP). During the years 2012-13 to 2016-17, GoG provided grants of ₹ 20.67 crore, ₹ 107.65 crore and ₹ 278.36 crore for drilling of tube-wells, construction of PINS with MIS and implementation of LI Schemes. Against these grants the Company incurred expenditure of ₹ 4.95 crore (24 *per cent*), ₹ 56.22 crore (52 *per cent*) and ₹ 268.42 crore (96 *per cent*) respectively.

¹⁴ Accounts have been finalised only up to 2014-15.

This Audit covers the period of five years from 2012-13 to 2016-17. The records maintained at the Department, Corporate office of the Company and its implementing units (Circles and Divisions) were reviewed.

Audit Findings

Drilling of new tube-wells and maintenance and management of existing tube-wells

3.2.3 Prior to December 1988, the Company carried out the construction of tube-wells and also operated and maintained them. In December 1988, the Company decided to transfer tube-wells to *Juths/Mandalis*¹⁵ for its operation and maintenance. The transferred tube-wells continued to remain the property of the Company, hence the responsibility of asset management and its safeguard rested with the Company. Till 31 March 2012, the Company had constructed/ acquired¹⁶ 4,506 tube-wells and during the period 2012-13 to 2016-17, only one scheme of drilling of 226 tube-wells in 43 tribal *talukas* was taken up under Tribal Area Sub-Plan (TASP) of the GoG. Of these 226 tube-wells, 112 were considered successful.

Out of 4,506 tube-wells which were constructed/ acquired till 31 March 2012, 4,504 tube-wells were transferred to *Juths/ Mandalis* prior to the year 2012. Out of 112 successful tube-wells drilled during the audit period, *Mandalis* were formed in respect of 86 tube-wells and the process of transfer was in progress (March 2017).

All the contracts awarded for the drilling of the 226 tube-wells were selected for audit scrutiny. In case of 4,506 tube-wells, out of which 4,504 were handed over to *Juth/ Mandalis* for operation, Audit has selected 100 tube-wells for detailed test-check.

Drilling of 226 exploratory tube-wells under TASP

3.2.4 The Company prepared (December 2012) a Detailed Project Report (DPR) for drilling of 226 tube-wells with an aim to create irrigation facility in 43 tribal *talukas* of the State under TASP. Based on the DPR, the Department accorded (March 2013) Administrative Approval (AA) of ₹ 2.80 crore for geo-hydrological and geophysical investigations, drilling cost and pump test in respect of these 226 tube-wells.

For drilling of these 226 tube-wells, the Geo Hydrologist Unit-1 Ahmedabad (package-1 & 2) and Geo-Hydrologist Unit-3, Kherva (package-3) invited (April 2013) tenders in three packages¹⁷. All the three packages were awarded (between June 2013 and July 2013) to a contractor being lowest in all the packages at the lowest bid price of ₹ 73.88 lakh, ₹ 73.80 lakh and ₹ 44.54 lakh respectively. The contractor drilled 213 tube-wells out of 226 planned. The

¹⁵ Juths/ Mandalis are group of farmers. For Juth, minimum four members and for Mandalis minimum 11 members are required.

¹⁶ The Company acquired 899 tube-wells from district panchayats in 1978.

¹⁷ 89 tube-wells in package-1, 94 tube-wells in package-2 and 43 tube-wells in package-3.

remaining 13 tube-wells were not drilled due to non-availability of site in eight cases and lack of equipment in five cases. This was because the scope of work was for DTH (Down the hole) rig drilling, however, the topography of the area required Combined Rings drilling indicating deficiencies in DPR in these cases.

The Company fixed norms that the tube-wells would be declared successful during pumping test only if the minimum discharge of water was 240 Litres *per* Minute (LPM). Tube-wells without this minimum discharge would be declared as a hydrological failure. Based on the above norms, the Company declared 112 tube-wells successful. Thereafter, the Company prepared a DPR (April 2015) for the energisation of these tube-wells and the Department accorded (July 2015) AA of ₹ 5.08 crore for the installation of machineries and electrification of these 112 tube-wells so as to irrigate 1,190 ha. of land. DPR envisaged that all the tube-wells were to be energised by March 2016. However, out of 112 tube-wells only 37 tube-wells were energised till March 2017.

Audit observations on the high rate of failures in the tube-wells and delay in energisation of tube-wells are discussed below:

Failure of exploratory tube-wells

3.2.4.1 We observed that in respect of 183 tube-wells awarded for drilling under package I and II by Geo-Hydrologist Unit-1, Ahmedabad, 170 tube-wells were drilled and only 73 tube-wells were declared successful. The success rate was less than 43 *per cent*. Audit analysis of the failure of 97 tube-wells revealed that in respect of 24 tube-wells drilled at Dahod and Panchmahal districts, the tube-wells were declared as failure without carrying out the pumping test. Further, the Geo Investigation Wing of the Company had anticipated a discharge of less than 240 LPM in respect of 92 of these 97 tube-wells. Despite reservations based on scientific investigations, the Company went ahead with the drilling resulting in predictable failure. The expenditure incurred on these failed tube-wells amounted to ₹ 78.27 lakh which was avoidable.

Government replied (July 2017) that as per the proposal to the Government a success rate of 60 *per cent* only was anticipated. It was further stated that the scientific surveys are carried out to minimise the chances of failure and failures cannot be eliminated in hard rock areas.

The reply is not correct because the Company had the data on the expected discharge at each of the site it selected for drilling. Undertaking drilling at sites with anticipated discharge below par was a waste of resources which could have been better utilised. The Management needs to fix accountability for waste of scarce resource.

Electrification of successful tube-wells

3.2.4.2 Harnessing¹⁸ of 112 successful tube-wells was done between March 2014 and August 2014. The feasibility of installing solar/ diesel pumps on successful tube-wells was explored between August 2014 and December 2014. However, based on request of beneficiaries it was finally decided (December 2014) to opt for the electrification of all the successful tube-wells and the DPR for the installation of machinery and electrification was prepared by April 2015. Based on the AA received from the Department in July 2015, order for installation of electric pump-sets was placed between December 2015 and January 2016. Installation was completed between June 2016 and October 2016. The electricity distribution Companies (DISCOMs¹⁹) were approached between June 2016 and October 2016 for getting the required connection. Till March 2017, only 37 out of the 112 tube-wells had been energised.

Audit observed that the Company took around eight months in the preparation of the DPR for energisation of the successful tube-wells after its harnessing. Thereafter, a period of around six months was taken in placing of orders for electrical pump sets after the receipt of AA. For the timely energisation of tube-wells, the electricity connection should be available when the installation of pump-sets is completed. But the Company had approached the DISCOMs only six to ten months after the placement of orders for machinery. Consequently, the energisation was delayed.

As a result of the delays and lack of synchronisation of activities, only 37 tube-wells were energised as on March 2017.

Out of the 75 tube-wells remaining to be energised, 26 tube-wells were such, in which the Company was either not entitled to an electricity connection or had not complied with the requisite condition as discussed in the succeeding paragraph.

The DPR had envisaged irrigation of 1,190 hectares of land through these 112 tube-wells which has been achieved only to the extent of 410.81 ha. (March 2017). Due to delay in electrification, the pumping equipment amounting to \gtrless 1.35 crore installed in the remaining 75 tube-wells remained idle from October 2016.

Government replied (July 2017) that the delays were due to various milestones involved in pump set installation. One of the main reasons pointed out by the Government for the delay was the time consuming process of formation of Juths/ *Mandalis* for regular operation and maintenance before approaching for electric connection.

The reply is not convincing because the formation of Juth/ Mandalis can be taken up simultaneously along with the work of energisation as the

¹⁸ Harnessing means testing of the yield and usability of the water which in turn will determine the capacity of pumps required for the operation of the tube-wells.

¹⁹ Uttar Gujarat Vij Company Limited (UGVCL), Madhya Gujarat Vij Company Limited (MGVCL) and Dakshin Gujarat Vij Company Limited (DGVCL).

connections are taken in the name of the Company. Through better inter departmental co-ordination, delays were avoidable.

Refusal of electricity connection in 26 tube-wells

3.2.4.3 GoG banned (December 2003) providing electricity connection in dark zone *talukas*²⁰ for extraction of ground water by drilling tube-wells. The GoG lifted the ban (March 2012) with the condition that power connections would be provided only after implementation of micro irrigation system²¹.

The Company had drilled 14 tube-wells in Meghraj (six) and Amirgadh (eight) talukas, which were notified as dark zone. The Company approached (December 2015) the DISCOM for electricity connection for these 14 tube-wells. The DISCOM declined (February 2016 and March 2016) to provide electricity connection for them without installing drip irrigation system. The installation of drip irrigation system was in progress as on March 2017.

As per the policy of the DISCOM, two connections will not be given in one survey number. The Company drilled 12 tube-wells in those survey numbers where farmers already had private connections for their own tube-wells. Hence, the DISCOM declined (July 2016 and October 2016) to give power connections in these 12 tube-wells.

Thus, the action of the Company in drilling 14 tube-wells in dark zone without installing drip irrigation system and 12 tube-wells in survey numbers wherein electricity connection already existed, would further delay the energisation of 26 out of the 75 tube-wells pending energisation as on March 2017.

Government replied (July 2017) that out of 14 tube-wells in dark zone, six have been energised during the period February 2017 to May 2017. In case of 12 tube-wells where farmers already had private connections, the Company has requested (July 2017) the DISCOM for connection in its name.

In conclusion, out of the 226 tube-wells planned to be drilled under the TASP, benefit of irrigation had been passed on to the tribal population only in respect of 37 tube-wells, even after expending ₹ 4.82 crore during the period from 2012-13 to 2016-17.

Maintenance and management of existing tube-wells

3.2.5 The Company decided (December 1988) to handover the tube-wells constructed by it to *Juths/ Mandalis* of farmers of concerned command area for the purpose of operation and maintenance on an annual rent of $\gtrless 11 \text{ per annum}$, which was revised to $\gtrless 5,000 \text{ per annum}$ (December 1997). As on 31 March 2017, only two out of the 4,506 tube-wells existing as on 31 March 2012 were operated by the Company and remaining

²⁰ Area where the ground water has receded to dangerous levels.

²¹ Micro irrigation is a water conservation method of agriculture where water is directly fed to the plant through a network of valves, pipes, tubing and emitters.

4,504 tube-wells are handed over to *Juths/ Mandalis*. The ownership and asset management of all these tube-wells remained with the Company. Out of the 4,506 tube-wells, as on 31 March 2017, only 2,131 were operational whereas 2,375 were not operational due to various reasons like hydrological failure, mechanical failure *etc.* In respect of the 112 tube-wells drilled during 2012-17, the process of handing over successful wells to *Juths/ Mandalis* was in progress (March 2017).

The audit findings in respect of the status of the existing tube-wells, their asset management and compliance with terms and conditions of operation and maintenance contract by the *Juths/ Mandalis* are discussed below:

Non-operational tube-wells

3.2.5.1 An analysis of the 2,375 non-operational tube-wells revealed that 945 tube-wells became non-operational due to hydrological failures *i.e.*, reduction in flow or poor quality of water, 588 tube-wells became non-operational due to mechanical reasons such as failure of equipment like pump motor or casing pipes²² used as a lining to the tube-well. Further, 842 tube-wells became non-operational because of loss of utility due to other reasons such as urbanization, industrialization, development of Narmada command area, *etc.*

Audit test-checked 33 cases wherein the tube-wells became non-operational during 2012-17 due to mechanical reasons. It was found that in 20 cases the motor pump was struck inside the well, in 10 cases casing pipes had burst and no reasons were recorded in remaining three cases. Though these were mechanical failures and could be rectified, the Company took no measures for rectifying the defects. As per the records of the Company, total Culturable Command Area (CCA) of 769 hectares was lost in the case of 15 out of 33 non-operational tube-wells, whereas, in remaining 18 tube-wells, details of lost CCA was not recorded.

The Company formulated (November 2008) a policy for re-drilling of hydrologically failed tube-wells handed over to *Juths/ Mandalis* and specified certain conditions like, No Objection Certificate (NOC) from Narmada/ any other irrigation command area, compulsory implementation of drip irrigation system, 100 *per cent* financing of cost of re-drilling by the farmers (later reduced to 20 *per cent* in September 2009) *etc.*, for giving permission for re-drilling.

Audit observed that during 2012-17, only 14 applications were received for re-drilling and out of these, eight applications were still pending for a period ranging between 2 to 23 months as on March 2017. This was due to time taken by the *Juths/ Mandalis* in satisfying the laid down conditions. It was also observed in Audit that the response to the scheme was not significant. It was left to the farmers to satisfy all the stringent conditions and the Company did not take any pro-active measures to explore the option of re-drilling.

²² Casing pipes is used as a lining to the tube-well.

Government replied (July 2017) that the conditions laid down in the policy are mainly to minimize excess drawal of ground water and decrease dependency on the ground water.

While the intent of the policy is appreciable, to leave the onus of re-developing the well entirely on the farmers may be beyond their wherewithal. Audit is of the view that the Company may rationalise laid down conditions and co-ordinate with the farmers for getting requisite permission for re-drilling.

Failure to obtain title deeds of lands on which tube-wells located

3.2.5.2 The Accounts Manual of the Company states that the tube-wells register should be maintained at division level wherein the various details of the tube-wells' cost *viz.*, land cost, drilling cost, civil works cost, energisation cost, capitalised over heads and capitalised interest are to be shown. However, it was observed that no such registers were being maintained at any of the test-checked divisions of the Company.

It was observed that each tube-well was established on land of 594.56 square meters. Hence, the total land held by the Company in these 4,435 tube-wells²³ came to approximately 651.59 $\operatorname{acres}^{24}$. As per the information furnished (July 2017) by the Company, it has title deeds only in respect of 1,453 tube-wells only (March 2017). The title deeds in respect of 2,982 tube-wells (67 *per cent*) covering an approximate area of 438 $\operatorname{acres}^{25}$ were not available with the Company, which could also affect the disposal of these tube-wells. Absence of title deeds is fraught with the risk of encroachment and embezzlement in disposing of assets could not be ruled out.

The Government stated (July 2017) that the land acquisition process is going on and after declaration of land awards and payment thereof, the entries for title deeds in revenue records would be made. However, the reply does not state the reasons for not maintaining tube-well register with relevant details in the test checked division.

Delay in disposal of non-operational tube-wells

3.2.5.3 The Company formed (December 2006) a Committee consisting of four officers²⁶ to dispose of 1,879 non-operational tube-wells as on that date. However, no action was taken by the Committee for disposal of these tube-wells. Subsequently, in November 2011, the Company approached the Department for approval for the sale. Based on the request of the Company, the Department approved (March 2012) the sale of tube-wells and proposed to constitute a Committee for the purpose. Accordingly, the Committee was formed (April 2012) consisting of Town Planner, Deputy

²³ 71 tube-wells drilled under an earlier TASP did not involve acquisition of lands hence only 4,435 considered.

²⁴ 4,435 tube-wells X 594.56 sq. mtr = 26,36,873.6 sq. mtr/4,046.86 = 651.59 acres.

 $^{^{25}}$ 2,982 tube-wells x 594.56 sq mtr = 17,72,977.93 sq mtr/ 4,046.86 = 438 acres.

²⁶ SE, Ground Water Management Circle-I (Mehsana), EE (GWRDC) Division, Deesa, EE (GWRDC), Vadodara and Senior Accounts Officer (GWRDC), Gandhinagar.

Commissioner of the District, Stamp Duty Registrar and Executive Engineer of the Company for evaluation of the base price of land of the non-operational tube-wells with the consent of the Revenue Department.

It was observed that for evaluation of the base price, Town Planner asked (April 2012) evaluation fees of two *per cent* of the base price of the land or ₹ 2,500 whichever was higher as per Government Resolution (GR) of July 2006. The Town Planner refused (January 2016) to waive the fees in spite of repeated requests of the Company. The Company finally agreed (September 2016) to pay the fees. Thus, the Company took four years (from 2012 to 2016) to arrive at the decision to make the payment. The disposal is still under progress (March 2017).

Thus, the Company has delayed the disposal of failed tube-wells for a period of over 10 years since the decision to dispose them was taken in 2006. The absence of title deeds in certain cases as brought out in *Paragraph 3.2.5.2* will further delay the final disposal. As a test-check, Audit estimated the value of the land on which eight tube-wells were located in and around Ahmedabad city. Based on prevailing *jantri* rates²⁷, the land in respect of these eight tube-wells was valued at $\gtrless 2.98$ crore. Further, 123 of the failed tube-wells are in urban areas. Delay in disposal will delay realisation of the funds to the Company.

Government replied (July 2017) that the process of disposal of tube-wells is quite complex so comprehensive planning is being made for disposal. The reply is not convincing because though the process may be complex, the decision taken in 2006 is yet at planning stage even after more than ten years. This indicates the lackadaisical approach of the Company.

Huge stock of Tube-wells Machinery

3.2.5.4 As discussed in *Paragraph 3.2.5.1*, 588 tube-wells became non-operational due to mechanical reasons such as failure of equipment and idling of machineries used in these tube-wells. A further review in Audit of the Physical Verification Reports as on 31 March 2017 revealed that pumping machinery valued at ₹ 1.40 crore was lying idle at Dabhoda stores since 2002. Further, at Vijapur stores, 5,793.08 meters of 6" Diameter MS Pipes valued at ₹ 0.60 crore and 3,633.03 meters of 10" Diameter pipes valued at ₹ 0.47 crore were lying idle for 5 to 10 years. This led to blocking of funds in stores costing ₹ 2.47 crore. It was also observed (March 2017) that no proposal was made for utilisation of the idle stock in LIS works or tube-wells drilling during 2012-2017.

Government replied (July 2017) that the materials will be used in future works.

Failure to enforce the terms of transfer of tube-wells to Juths/ Mandalis

3.2.5.5 The Company had handed over till date (March 2017) 4,504 tube-wells to *Juths/ Mandalis* for its operation and maintenance subject

Annual statement of rates (ASR) being used for land valuation propose. Here ASR 2011 considered.

to compliance of terms and conditions of the agreement. The major terms of handing over and our findings in the 100 test-checked cases are given below:

i) *Juth* registration had to be done at Registrar of Co-operative societies within six months of the agreement period. However, none of the *Juths* were registered with the Registrar of Co-operative Societies. Further, the number of farmers in *Juths* were less than the minimum prescribed of four farmers in 125 tube-wells²⁸ in Kherva (Civil) Division.

Government replied (July 2017) that powers were delegated to the Superintending Engineers (SE) for registration of *Juths* for irrigation works. Accordingly, the *Juths* were registered by concerned SE. However, Audit observed that the *Juths* were not registered even with the SE.

ii) During the agreement period, the Company officials were expected to inspect the tube-wells. However, in the 100 cases test-checked in Audit, no report of any inspection done by the Company was available on record.

Government stated (July 2017) that regular inspections were being carried out by the staff and also furnished few inspection reports along with the reply. Audit observed that the inspection reports furnished with the reply related to the inspections done during May/ June 2017 (*i.e.* after the field visit by Audit in February 2017). No inspection reports for the period 2012-17 were furnished to Audit.

iii) The *Juths/ Mandalis* would be responsible for the day-to-day operation and maintenance of the tube-wells and would collect irrigation fees from the farmers and audit the accounts. However, details of income and expenditure from the tube-wells certified by the head of *Juths/ Mandalis* were not available on record in any of the test-checked cases.

Government stated (July 2017) that it obtains income and expenditure details from the *Juths/ Mandalis* and furnished a few copies of such income and expenditure details. Audit observed that all the income and expenditure accounts furnished by the Company with the reply pertained to 2016-17 only. Since no accounts/ statements for the year prior to that have been submitted, Audit could not vouchsafe whether the same were obtained by the Department from the *Juths/ Mandalis*.

iv) Drip irrigation system had to be installed within six months of the agreement. However, out of 100 cases test-checked, drip irrigation was installed in two tube-wells only.

Government replied (July 2017) that the drip works were being taken up in a phased manner and it was planned to cover the remaining area to the extent possible.

v) It was the responsibility of the *Juths/ Mandalis* to recover all the dues of the Company in respect of the said tube-wells from the members of the *Juths/ Mandalis* immediately on taking over the operation of the tube-wells. Audit observed that no dues were pending for the period 2012-13 to 2016-17. However, the Company had accumulated old dues amounting to

²⁸ This was noticed only at Kherva (Civil) Division hence was included separately.

₹ 3.33 crore at the end of March 2017 for the period 1988-89 to 2011-12 during which the tube-wells were gradually handed over to the *Juths/ Mandalis*. There were no details on records about the periodicity of the dues, the principal amount, interest, the name and other details of the farmers involved.

Management did not furnish any reply (December 2017). Government replied (July 2017) that more emphasis had been given on collection of earlier recoveries and the old dues had reduced over the years.

Thus, from the above it can be concluded that in respect of the tube-wells handed over to *Juths* and *Mandalis*, compliance to the terms and conditions of handing over were not being ensured. Out of the 4,506 tube-wells other than those drilled under TASP, 2,375 tube-wells were non-operational and their disposal was still pending as on 31 March 2017.

Implementation of Pressurised Irrigation Network System (PINS) with Micro Irrigation System (MIS) on operational tube-wells

3.2.6 The Department accorded (March 2013) Administrative Approval (AA) of \gtrless 222.84 crore²⁹ to implement PINS with MIS on 1,293 operational tube-wells (Culturable Command Area-CCA of 14,855 hectares) which were handed over to *Juths/ Mandalis*. The scheme was approved by the Government at \gtrless 1.5 lakh per hectare of land covered by each tube-well.

The system of pipes after the ball valve in the fields is MIS and the equipment before the ball valve is PINS. The PINS creates the required water pressure which results in continuous dripping of water through the pipes created under the MIS in the fields. This prevents wastage of water. The **figure 3.1** below is a diagrammatic illustration of PINS with MIS.



Figure 3.1: Illustration of PINS with MIS

Source: Information furnished by the Company.

²⁹ At the rate of ₹ 1.5 lakh *per* hectare *i.e.* (14,855 hectares x ₹ 1.5 lakh).

The Company invited tenders for implementation of PINS with MIS on 555 tube-wells under 11 packages (*Annexure 6*). Work orders were issued between May 2013 and October 2016 and were to be completed between November 2013 and September 2017. Out of the 11 packages, works of eight packages were completed between April 2014 and January 2016. These eight packages covered 364 tube-wells against estimated 389 tube-wells. Works of three packages covering the remaining 166 tube-wells were in progress as on March 2017. Scrutiny of the works of 11 packages revealed the following:

Invitation of tender

3.2.7 The Company invited tenders under all the 11 packages with shorter than prescribed tender notice, lesser than prescribed completion period and higher than required turnover requirement resulting in receipt of less number of bids as discussed below. No justification for variation in the prescribed tender conditions was found on record.

3.2.7.1 As per Government Resolution (GR) of October 2011, e-procurement was introduced for orders having value of \gtrless 50 lakh and above and the following time period was to be maintained between the date of uploading of tender and last date of submission of tender:

1⁄2	For works valued up to ₹ one crore	15 days
1⁄2	For works valued between ₹ one to three crore	21 days
1⁄2	For works valued more than ₹ three crore	30 days

Audit observed (February/ March 2017) that in 10 packages the time given between the date of tender uploading and the last date of date of submission of tender was less than what was prescribed in the GR. It ranged between 12 days to 22 days against the required 30 days.

Government replied (July 2017) that only in five packages the time was reduced with a view to complete the project before the agriculture season.

The reply is not convincing because even after reducing the time limit, none of the works were completed within the stipulated time limit. Extension was granted by the Company to the extent of 4 to 14 months.

3.2.7.2 Further, GR of January 2013 also stipulated scheduled time limit for completion of the works based on order value as under:

1⁄2	Estimated cost between ₹ one to three crore	11 months
1⁄2	Estimated cost between ₹ three to 10 crore	15 to 18 months
1⁄2	Estimated cost more than ₹ 10 crore	18 to 24 months

The Company had, however, fixed time limit of six months in five packages, seven months in five packages and eleven months in one package for completion of the work. As per the GR, it should have been atleast 15 months in seven packages and 18 months in four packages.

It was further observed that in eight completed packages, none of the works were completed within the time limit stipulated for completion as per the contract. The actual time taken by the contractors ranged from 11 months to 20 months against the specified time limit of six to seven months. The Company eventually granted extension for completion of these works.

Government replied (July 2017) that compression of time limit was done for speedy deliverance of benefit to the farmers and the rates received were well below the estimated cost.

The reply is not convincing due to the fact that none of the contractors completed the works within the time limit fixed and extension to the tune of 4 to 14 months had to be given. Consequently, benefits of irrigation facility were also delayed to the farmers.

3.2.7.3 The Company while fixing the annual turnover for the pre-qualification of bidders adopted a formula³⁰, wherein annual turnover was dependent on stipulated time limit.

As the stipulated time limit was taken as the denominator, a lower time limit fixed would increase the turnover requirement of the bidder. As per the formula adopted by the Company, against the estimated cost of the packages ranging from \gtrless 4.44 crore to \gtrless 12.55 crore the annual turnover requirement for the bidders ranged from \gtrless 5 crore to \gtrless 18.83 crore. Thus, the turnover requirement under pre-qualification was 113 *per cent* to 150 *per cent* of the amount put to tender. Had the Company adopted the time limit for completion of 15 and 18 months as per the Department GR, the turnover requirement would have been \gtrless 2.66 crore³¹ to \gtrless 7.53 crore³². This turnover would have been around 50 *per cent* of the amount put to tender. In fact, even the CVC guideline of December 2002 requires the annual financial turnover of the bidder to be at least 30 *per cent* of the amount put to tender.

All the above three factors of short tender notice, lesser time for completion and consequent higher pre-qualification turnover had implication in bidder's eligibility by increasing the resource requirement. As a result, the Company got only two to five bidders for the packages.

Government replied (July 2017) that minimum annual turnover should be equal to 100 *per cent* of the amount of estimated cost of the work. It further stated that the number of bidders in each case were more than one, *i.e.*, two to five and all the bids received were below the estimated rates.

The reply is not convincing as keeping higher turnover requirement by adopting shorter time limit for completion of work in contravention to the Department's GR of January 2013. Audit observed that Gujarat Green Revolution Company Limited (GGRCL), which also undertook similar kind of

³⁰ Annual Turnover requirement of the bidder should be equal to estimated cost of the package multiplied by nine months (excluding monsoon period) divided by stipulated time limit of completion.

³¹ (₹ 4.44 crore X 9) / 15 months = ₹ 2.66 crore.

³² (₹ 12.55 crore X 9) / 15 = ₹ 7.53 crore.

works had 66 registered contractors who carried out similar works. Audit is of the view that if the Company had adhered to the methodology prescribed by the Government, more bidders could have participated in the tender.

Deletion of service contract from the tenders

3.2.8 As per Schedule B-1 of the tender document, services of the bidder would be available for a period of five years to help and guide each and every farmer for efficient use of MIS with the cropping pattern. For this, the bidder was allowed to quote a separate rate. The scope of work under this service, included maintaining MIS in working condition, training and guiding farmers on use of the system and cropping pattern and providing information to the Company on cropping pattern, increased yield and tube-wells wise irrigation details. Though the contractors had quoted for these services and were ready to undertake the same, the Company, while awarding the work removed the service contract clause (except replacement of MIS components) from the scope of work in all the packages.

The Government replied (July 2017) that agronomical consultancy was already available in the price schedule of the tender. Audit observed that agronomical consultancy was available in the price schedule of the tender for the first year only. Deletion of the service contract for the ensuing period of five years deprived the farmers of the required guidance and the Company of the feed-back information. Deletion of the service contract was also not warranted financially as the Company was entitled to subsidy of ₹ 1.50 lakh *per* hectare against which the cost without the service contract was ₹ 1.30 lakh *per* hectare. Therefore, the service contract could have been easily covered within the available subsidy and benefit passed on to the farmers.

Higher estimation of CCA coverage

3.2.9 It was observed that on completion of eight packages; against the estimated coverage of CCA of 5,084 hectares under PINS and MIS, the Company achieved a CCA of 4,227 hectares only. The actual achievement was lesser by 857 hectares because the Company prepared its estimates of hectare coverage by multiplying the estimated discharge of the tube-well with the estimated hectare coverage at that discharge. The actual area that was under cultivation in the vicinity of the tube-well, which could be covered by that tube-well was not considered.

Government replied (July 2017) that measuring of pump discharge is a cost incurring and time consuming job hence estimates were prepared based on the original discharge of the tube-well.

The reply of the Government confirms the fact that estimates were not prepared on the basis of actual discharge and area to be irrigated in the vicinity.

Implementation of Lift Irrigation Scheme (LIS)

3.2.10 Lift Irrigation Scheme (LIS) is a method of irrigation in which water is lifted from large water bodies using pumps or other mechanical means with the help of power and carried to hilly terrain and uneven topography where water cannot reach through natural gravity flow. The LIS consists of civil structure for installation of electrical pump set, installation of distribution system for the required water flow etc. The Department entrusted (December 2009) the Company the responsibility to survey, estimate and execute the LIS works in Gujarat. The scheme was financed through budgetary grants. The pictures below are of a model LI system.





Intake point where water pumps from water body Source: As furnished by the Company.

Delivery point where water delivers to farms

During the years 2012-13 to 2016-17, the Company undertook 339 LIS works and completed 327 of them. Forty-four LIS works were selected for detailed audit examination.

Audit findings on award of works and deficiencies noticed in the implementation of the 44 LIS works test checked are discussed below;

Award of work to Non-Government Organisations (NGOs)

3.2.11 As per the Gujarat Public Works Manual, (the Manual), tenders should invariably be invited publicly, in the manner prescribed in it.

The Company decided (July 2010) to execute the LIS works through NGOs as the successful operation of LIS required formation of *Juths* and *Mandalis* by NGOs. It also involved handing over the operation and maintenance of LIS to them after a period of three years. Based on the above decision, certain qualifications criteria for registering NGOs were finalised (November 2011) by the Board of Directors. Any NGO applying for registration to execute the LIS works were graded as A, B, C, D and AA depending on marks allotted to them based on the earlier works executed by such NGOs.

The Company entrusted 307 out of the 339 LIS works to 110 NGOs during 2012-13 to 2016-17 at a contract value of ₹ 184.56 crore. The works were entrusted to the NGOs based on the request of the NGO considering its

eligibility as per the grade attributed to it by the Company. Five NGOs were entrusted with 60 works (19 *per cent*) valuing ₹ 58.92 crore (32 *per cent*).

Audit observed that the action of the Company in directly entrusting the works to NGOs without calling for open bids lacked transparency and thus the competitive advantage to the Company available in an open tender process was lost. Audit is of the view that considering that the procedure adopted by the Company was a departure from the normal process of awarding public works, the approval of the GoG for the methodology adopted should have been obtained.

Government stated (July 2017) that the provisions of GPW Manual were not violated in view of the exception available in the Manual which allows that the contracts can be entrusted to Labour Co-operatives.

The reply is not convincing as only labour intensive works could be entrusted to the labour co-operative society registered in specified Districts with financial limit of ₹ 13 lakh and maximum works to the extent of three times of financial limit. However, the works awarded to NGOs involved civil and mechanical works. Further, the GPW Manual provides exception to Labour Co-operatives and not to NGOs.

Abandoning of operation and maintenance works of LIS by NGOs

3.2.12 One of the main reason for entrusting the LIS works to NGOs was that the contractors were incapable of forming *Juths/ Mandalis* for operation and maintenance of the LIS.

However, it was observed that out of 307 LIS works entrusted to NGOs during 2012-16, in 81 LIS works, the NGOs had abandoned the Operation and Maintenance (O&M) works without forming *Juths/ Mandalis*. The Company is in the process of arranging the O&M for these LIS works. Thus, the purpose of entrusting the LIS works to the NGOs has not been achieved to the full extent.

Government replied (July 2017) that precautions were taken by retaining 2.5 *per cent* of the security deposit after completion of construction works to deal with such defaults. However, the fact remains that despite the handing over works to NGOs, the Company has not been able to get faster and efficient LIS works done and handed over for operations and management by *Juths/Mandalis*.

Deficiencies noticed in implementation of test-checked LIS works

3.2.13 The implementation of LIS works test-checked in 44 cases revealed the following:

Delay in completion of works

3.2.13.1 In respect of 44 works awarded between April 2012 and April 2016, the scheduled date of completion was between August 2012 and

January 2017. Out of these, only 21 works (less than 50 *per cent)* were completed on or before the scheduled date of completion of works and 19 works were completed with a delay of 24 days to 495 days due to standing crops, monsoon and higher water level in the reservoirs which could have been avoided with better planning. One work is in progress as on March 2017 and three contracts were terminated for abnormal delay. It was envisaged that these 44 works would create CCA of 4,350 hectares of land. However, CCA of 3,940 hectares has been created as of March 2017 due to non-completion of works.

Government replied (July 2017) that delays where the NGOs were responsible have been dealt with as per contract conditions.

The fact remains that due to this delay, the ultimate benefit of the scheme has not been realised within the stipulated time frame.

Delay in electrification of LIS

3.2.13.2 Audit observed that out of 40 completed LIS works only eight were electrified on time *i.e.*, before actual completion of civil work. Remaining 32 LIS works were electrified with a delay ranging from one month to 22 months from completion of civil work. Out of these 32 cases, Audit observed that in seven cases the delay was more than 10 months. An analysis of these cases revealed that the delay was on the part of the Company in applying for the required electric connection. The application was made two to 11 months after the work completion or less than three months before the work completion. The lack of synchronization between work completion and applying for electricity connection resulted in delay of more than 10 months in seven cases.

Government replied (July 2017) that the works pointed out by audit were not completed in time hence there was delay in applying for electricity connection.

The reply is not correct as in the cases pointed out in Audit, delay was calculated from the date of completion of work.

Non/ Short recovery of interest on advance payment

3.2.13.3 As per the BoD decision (December 2010), the Executive Engineer could pay 50 *per cent* of the estimated cost of the work as advance payment to the NGO subject to submission of bank guarantee/ indemnity bond of the same amount. If bills of the equivalent amount or more were not submitted by the end of three months from the date of advance, the advance attracted an interest of 15 *per cent per annum* on the unrecovered amount till the date of actual recovery.

The Ukai Division (Civil) paid (between June 2012 and July 2013) ₹ 8.10 crore advance to NGOs in 10 out of 44 works test-checked in Audit. Though there were delays ranging from four to nine months in submission of bills and interest of \gtrless 61.21 lakh³³ was leviable on the NGOs, the division recovered only \gtrless 3.18 lakh (in two cases). This resulted in short/ non-recovery of interest amounting to \gtrless 58.03 lakh from NGOs.

Government replied (July 2017) that interest was recovered in all cases where the period of executing the work as per recording of measurements had exceeded the period of three months from the date of advance.

The reply is not correct because the interest was to be collected from the date of advance till the date of recovery of advance as per tender condition and not from the date of completion of three months from the recording of measurements, as done by the Company.

Procurement of PVC pipes from dealers

3.2.14 The specification of materials as per contract condition states that the PVC pipes shall be offered for inspection at the manufacture's site/ factory. The pipe shall be approved by Central Institute of Plastic Engineering and Technology (CIPET) or the third party agency approved by the Executive Engineer (EE). The EE shall appoint his representative for testing of material in his presence.

It was observed that the cost of PVC pipes procured for the 44 LIS works was \gtrless 31.90 crore. However, no invoice from the manufacturers was produced to audit. As per the records available for Audit, the pipes were procured from the hardware stores. The test results available on record showed that the PVC pipes were tested at Vasani Polymers Private Limited, Talod by Gujarat Industrial Research and Development Authority. However, the pipes were procured from Shubhlaxmi Hardware, Surat. It was also observed that no representative of the Company was present when the tests took place. The invoices available on record did not contain many important details like rate per kg/cm², total amount of invoice, TIN number, whether the party was an authorized dealer *etc.* In view of these deficiencies, Audit could not vouchsafe the quality and quantity of the PVC pipes used in the 44 test-checked works.

Government replied (July 2017) that specification do not provide that the pipe should be procured only and directly from the manufactures. The reply is not convincing as it did not explain that how the testing of material in presence of the representative of EE was ensured. Further, the Government did not furnish any reasons for not recording important details in the invoices.

In conclusion, the LIS works were entrusted to NGOs without a transparent tender procedure and the test-checked cases revealed delays in completion and electrification besides non-compliance to contract conditions.

Internal Control

3.2.15 Internal control is a management tool used to provide reasonable assurance that management's objectives are achieved in an

³³ Advance amount x 15 *per cent* x Delay in days.

efficient, effective and orderly manner. Audit observed the following weakness in the Internal Control system of the Company:

- ¹/₂ The title deeds of 2,982 tube-wells covering an area of 438 acres were not available with the Company, which was fraught with the risk of encroachment and could affect the disposal of these tube-wells.
- ¹/₂ The disposal of failed tube-wells was still at planning stage even though the decision to dispose them was taken in 2006.
- $\frac{1}{2}$ No proposal was made for utilisation of idle stock of pumping machineries.
- $\frac{1}{2}$ No *Juths* were registered with the SE despite powers being delegated in this behalf.
- ¹/₂ The Company officials were expected to inspect the tube-wells, however, no report of any such inspection done by the Company was available on records.
- ¹/₂ The details of income and expenditure from the tube-wells certified by head of *Juths/ Mandalis* were not available with the Company.

Conclusion and Recommendations

3.2.16 Gujarat Water Resources Development Corporation Limited (Company) carried out activities related to drilling of tube-wells, creation of Pressured Irrigation Network System (PINS) with Micro Irrigation System (MIS) on tube-wells; and implementation of Lift Irrigation Scheme. Though Company was established with the main purpose of drilling and maintenance of tube-wells, it had ceased to carry out maintenance activities after transfer of tube-wells to Juths / Mandalis since 1988. Failure in drilling activities and delays in electrification of successful tube-wells were observed under the tribal scheme. Due to a lackadaisical approach, non-operational tube-wells were not disposed. Fixation of higher pre-qualifications criteria put forth in the tender for PINS with MIS led to limited competition for the same. Out of 1,293 tube-wells planned to be taken up for implementation of PINS with MIS, only 555 had been taken up till March 2017. As a result, 16.86 per cent of estimated Culturable Command Area remained un-achieved in eight completed works. The LIS works were awarded to Non-Governmental Organisations without following the due tendering procedure. Instances of delays in completion and electrification as well as non-compliance to tender conditions were also observed in test checked cases of LIS works.

Recommendations:

- > The Company may consider taking up drilling operations based on scientific investigations.
- The Company may ensure compliance by the Juths/ Mandalis to the conditions of transfer of tube-wells.
- > The Company may take early action for disposal of non-operational tube-wells.

Tourism Corporation of Gujarat Limited

3.3 Deviation in tender conditions led to unfair advantage to the Operator

The Company gave unfair advantage to the Operator by deviating from the tender conditions and allowing *Visamo*, a tourist facility centre for day tourists to be turned in to a resort thereby defeating GoG's objective of development of *Visamo* in Saputara.

Government of Gujarat (GoG) identified (October 2009) Saputara, a hill-station, to be developed as a tourist destination. Tourism Corporation of Gujarat Limited (Company) and Collector, Dangs district were entrusted with this work. GoG decided (November 2010) to undertake the project in three phases. The *Visamo* shelter project was envisaged as a part of the first phase and was to be executed by the Company at its own cost. *Visamo* was conceptualised to facilitate the halt of tourists passing through Saputara or having a short stay (morning to evening) at Saputara with provision of facilities such as parking of vehicles (four wheeler and buses), cooking and resting pavilions, toilets and baths and a small recreational zone.

The Company awarded (April 2011) the work of constructing the *Visamo* to M/s D. H. Patel, Surat (contractor) of the Kinsfolk group. The contractor completed (November 2013) the work at a cost of \gtrless 7.01 crore. As per the scope of work, the contractor constructed (i) three bus shelters with kitchens, (ii) two dormitories, (iii) three sitting huts and two kiosks, (iv) parking facility for buses and cars, (v) one individual toilet block, (vi) children play area and other facilities.

The Company invited (November 2013) bids for operation and maintenance of *Visamo* on management contract basis. The Company issued (July 2014) letter of intent for management contract to M/s Kinsfolk Infra Engineering, Surat (Operator) also belonging to the Kinsfolk group for five years. The contract required the Operator to pay to the Company management fees of \gtrless 21 lakh *per annum* for the first year of operation with 10 *per cent* increase every following year. The Operator while accepting the offer sought (July 2014) Company's permission to make some internal changes at their own cost. It also furnished the proposed changes to be made in the design layout along with the letter seeking the permission. The Company approved (September 2014) the proposal and granted a time period of four months for incorporating the changes. The agreement was entered into with the Operator in April 2015 and the Operator paid \gtrless 21 lakh (April/ December 2015) for the first year of its operation.

Audit scrutiny (May 2016) of the design layout given by the Operator in July 2014 revealed that the Operator had proposed to convert three shelters and two dormitories into a resort with 32 rooms, 08 dormitories and a cafeteria. Audit observed that as per the terms and conditions of the bid invitation for the management contract, Operator could carry out improvements at his cost with the permission of the Company but could not construct, extend or bring any structural changes in the property. However, the changes proposed by the

Operator and approved by the Company were not for improvement but was a major structural change involving converting a single storey structure into a double storied and therefore was a violation of the tender terms. The Operator actually converted the property into a resort (White Feather Toran Resort) with 46 rooms, five kitchens and sitting area and commenced commercial operation on 29 April 2017. However, no permission for these further modifications sought by the Operator was on record (April/ May 2017).

Audit observed that while agreeing to the request of internal changes proposed by the Operator, the Company did not analyse the impact of the proposed changes with reference to the original concept of setting up of *Visamo*. It was also observed that the Company failed to monitor even the approved modification work and allowed the Operator to make additional modifications without approval.

Audit observed that the modifications made in the property led to creation of higher revenue potential for the Operator. By deviating from tender conditions, the Company gave unfair advantage to the Operator to earn higher revenue by converting *Visamo* into a resort. Against the management fees of \gtrless 21 lakh *per annum* finalised with the Operator, the Operator would earn revenue of \gtrless 1.35 crore³⁴ each year from letting out of the 46 rooms. Further, the revenue to be earned by the Operator through letting out of dormitories and income from restaurant has not been considered by Audit.

The Management stated (November 2017) that the approval for changes were given as per Board's permission and highest authority was apprised of the matter. It was further stated that it has been decided to renegotiate the revenue terms of the management contract based on the changed status of the property and higher revenue potential. The Company would also ensure facilities to day time visitors with separate area allocation to serve the purpose as *Visamo* by taking an undertaking from the Operator in this regard.

The reply indicates that the Management accepted the changed status of the project thus, defeating the objective of *Visamo*. Audit is of the view that renegotiation of the revenue terms of the management contract would be in further violation of the tender conditions inviting the bids for the operation and maintenance of *Visamo*.

Thus, the Company gave unfair advantage to the Operator by deviating from the tender conditions and allowing *Visamo*, a tourist facility centre for day tourists to be turned in to a resort thereby defeating GoG's objective of development of *Visamo* in Saputara.

The matter was reported to Government/ Management (June 2017); the Government reply is awaited (December 2017).

³⁴ Calculated at the tariff rate of ₹ 2,000 (lowest tariff for the month of November 2017 of the rooms of the Company's own Hotel *i.e.* Toran Hill Resort in Saputara) x 46 rooms x 365 days x 40.23 *per cent* occupancy (average occupancy of Toran Hill Resort during the last three years 2014-17.

Sardar Sarovar Narmada Nigam Limited

3.4 Avoidable expenditure

The Company finalized electricity contract demand without considering the progress of civil works and pumping stations which led to avoidable payment of ₹ 47.91 crore towards demand charges.

The scope of the Sardar Sarovar Project (SSP) included construction of Kachchh Branch Canal (KBC) off-taking at chainage 385.814 kilometre (km) of the Narmada Main Canal (NMC). To make Narmada water available upto the tail end of the KBC, water was required to be lifted at three locations³⁵ of the KBC by constructing pumping stations (PS).

The Sardar Sarovar Narmada Nigam Limited (Company) awarded (March 2011) contracts for construction of three Pumping Stations (PSs). PS 1 and 2 were commissioned in April 2015 and PS 3 was commissioned in May 2017. To run these PSs, the Company applied (April 2011) for Contract Demand (CD) of 27,000 Kilo Volt Ampere (KVA) each for PS 1 and 2 and 20,000 KVA for PS 3 to Paschim Gujarat Vij Company Limited (PGVCL). Power release orders were issued by PGVCL in April 2015. In respect of PS 1 and 2, the billing by PGVCL started from mid of April 2015 and in case of PS 3 from June 2015.

Review of electricity bills from April 2015 to March 2017 of these three PSs revealed that:

- ¹⁄₂ For PS-1 and 2, power supply commenced in April 2015. The actual demand for PS 1 remained between 1,925 KVA and 6,925 KVA during May 2015 and March 2017 which was only seven to 26 *per cent* of the CD of 27,000 KVA. Similarly, the actual demand for PS 2 remained between 113 KVA and 7,750 KVA which was less than one to 29 *per cent* of the CD. However, demand charges bill for each PS every month was raised for 22,950 KVA³⁶. The Company paid demand charges of ₹ 45.04 crore (PS 1: ₹ 22.52 crore and PS 2: ₹ 22.52 crore) from April 2015 to March 2017.
- 1/2 In case of PS 3, there was no consumption of electricity between June 2015 and January 2016 due to non-commissioning of PS. Further, during February 2016 to March 2017, actual demand remained between 44 and 2,850 KVA which was 0.44 to 14.25 *per cent* of the CD of 20,000 KVA. However, demand charges bill every month was raised for 17,000 KVA³⁷. The Company paid demand charges of ₹ 15.88 crore from June 2015 to March 2017 in respect of PS 3.

The Company had requested PGVCL for release of only 5,000 KVA for both PS 1 and 2 in March 2015, even before the release of connection, as it was aware of the incomplete distribution network and consequent lesser

³⁵ Manjuvas, Ch. 100.970 Km (PS 1), Nani-Hamirpur, Ch. 111.75 Km (PS 2) and Bhachau, Ch. 189.977 Km (PS 3).

³⁶ being 85 *per cent* of 27,000 KVA as per agreement. ³⁷ being 85 *per cent* of 20,000 KVA as per agreement.

³⁷ being 85 *per cent* of 20,000 KVA as per agreement.

requirement of power. Nevertheless, without following up on this request or waiting for the reply of PGVCL, the Company accepted release of connection for PS 1, 2 and PS 3 in April and June 2015. Later in June and July 2015, the Company again requested PGVCL for reduction in contract demand to 6,000 KVA for PS 1 and 2 and 4,000 KVA for PS 3. PGVCL, however, refused (August 2015) the request stating that as per the agreement, minimum period of two years had to expire from the date of connection before the request for reduction could be considered. After completion of minimum period of two years, the Company again requested (May and July 2017) to PGVCL for reducing the contract demand from 27,000 KVA to 12,000 KVA for PS 1 and 2 and from 20,000 KVA to 8,000 KVA for PS 3. Response is awaited from PGVCL (August 2017).

Thus, the Company should have assessed the requirement of power in a phased manner as per requirement and demanded increase in load subsequently because this was allowed in the agreement. Considering the actual power demand during the period April 2015 to March 2017, the maximum CD of 6,000 KVA each was sufficient in PS 1 and 2 and 4,000 KVA was sufficient in PS 3. This could have saved \gtrless 47.91 crore which was paid by the Company as demand charges as given in *Annexure* 7.

Management stated (August 2017) that due to issues relating to forest land and other activities, the canal work between PS 2 and PS 3 was badly hampered and delayed. Therefore, the request was made for reduction in CD to PGVCL in March 2015 which was not considered by PGVCL. It was further stated that after completion of two year of power release, it had again requested PGVCL for reduction in CD and the same was under consideration.

The reply of the Company is not convincing as the status of the progress of the construction of KBC and its distribution system was known to the Company even before commencement of supply. Further, the request of the Company in March 2015 was not specifically refused by PGVCL and the refusal quoted by the Company was to the request made by them for reduction of load in June/July 2015 after the release of connection. Therefore, release of electricity connection could have been better planned/ phased till the completion of canal works in order to avoid this expenditure of ₹ 47.91 crore.

Thus, the Company finalized electricity contract demand without considering the progress of civil works and pumping stations and made avoidable payment of \gtrless 47.91 crore towards demand charges.

The matter was reported to Government/ Management (June 2017); the Government reply is awaited (December 2017).

3.5 Excess payment of price variation

Incorrect calculation of value of work done by the Company led to excess payment of price adjustment of ₹ 3.80 crore to the contractors.

The Sardar Sarovar Narmada Nigam Limited (the Company) awarded (between February 2007 and July 2012) four construction works for the sub branch of Limbdi and branch canal of Morbi to four different contractors at a total cost of ₹ 294.35 crore. These works were scheduled for completion

between August 2008 and January 2014. The execution of three works were completed by December 2014 and one work was in progress (May 2017). For these works, the Company had paid price adjustment of \gtrless 32.60 crore on labour, material and POL (petrol, oil and lubricants) to the contractors under a clause of the contract conditions (up to May 2017).

As per the clause of the tender conditions, the contract price shall be adjusted during performance of the contract for increase or decrease in cost of labour, material and POL as per the prescribed formula. The price adjustment in respect of the above components was to be calculated on the value of work done (denoted as R) during the quarter under consideration. While computing the value of work done (R), the value of lumpsum works and extra items was to be excluded. A further deduction was to be made for the value of cement and steel brought in by the contractor. This amount of cement and steel to be deducted was based on the value of star rate plus increase/ decrease for which price adjustment was to be done under another clause.

Audit observed (April 2015, January 2016 and May 2017) that in the above four works the respective divisions while working out the value of 'R' had deducted the amount for the quantity of cement and steel valued at star rate. However, the price adjustment paid on cement and steel during that quarter was not considered as was required under another sub-clause of that clause. The variance in the two formula are depicted below:-

Provisions as per tender clause	Methodology adopted by the Company			
R = Total value of work done during the quarter under consideration	R = Total value of work done during the quarter under consideration			
While working out "R"	While working out "R"			
(i) The value of lumpsum and value of extra item shall be deducted from the value of "R"	(i) The value of lumpsum and value of extra item was deducted from the value of "R"			
(ii) The value of cement and steel brought by the contractor valued at star rate <i>plus increase/</i> <i>decrease for which price adjustment shall be</i> <i>done</i> , which shall be deducted from "R"	(ii) The value of cement and steel brought by the contractor valued at star rate was done, which was deducted from "R"			

The incorrect working of 'R' value and the consequent payment of price adjustment led to excess payment of price adjustment to the extent of \gtrless 3.80 crore (*Annexure 8*).

The Management stated (August 2017) that the price escalation has been worked out on the same principle as considered in the approved Draft Tender Paper (DTP) after deducting the input cost of cement & steel involved in the value of work done. It was further contended that the methodology adopted by the Company was correct because while working out the basic 'Total Value of Work Done', the basic cost of cement and steel (star rate specified in the tender) were considered and not the actual cost of cement and steel after due price adjustment.

The reply is not correct because the tender clause explicitly specify that value of cement and steel brought by the contractor valued at star rate plus increase/ decrease for which price adjustment shall be done is deductible from the value of "R" (*i.e.* the value of work done). Further, in another instance, the Company had itself clarified in February 2014 that for computing the value of work done

during the quarter, the value of cement and steel at star rate plus price adjustment thereon shall be reduced. Audit also observed that in another work³⁸ done by the same division (Limbdi 4/1), the 'R' value had been calculated after deducting price adjustment cost of cement and steel as per the tender conditions.

Thus, incorrect computation of value of 'R' led to excess payment price adjustment to the extent of \gtrless 3.80 crore.

The matter was reported to Government/ Management (June 2017); the Government reply is awaited (December 2017).

Gujarat State Petronet Limited

3.6 Non recovery of interest

The Company did not recover interest of \gtrless 2.97 crore on the delayed payments made by customers for the supplementary invoices raised for implementing the tariff order of Petroleum and Natural Gas Regulatory Board.

Gujarat State Petronet Limited (the Company) is engaged in the business of transportation of natural gas from supply source to demand centres across Gujarat, through its gas transmission pipe-line network. The Petroleum and Natural Gas Regulatory Board (PNGRB) is entrusted with the responsibility of regulating the rates of transportation of gas for common/ contract carrier pipelines.

The Company enters into Gas Transmission Agreements (GTAs) with its customers for transmission of gas. As per the terms of the GTA, interest shall mean a charge for late payment on the amounts remaining unpaid or disputed, applicable from the due date to the date of actual payment of such amount. The recovery of interest on delayed payments was at the Prime Lending Rate of State Bank of India *plus* stipulated percentage³⁹ specified in the GTA.

PNGRB notified (11 July 2014) revised tariff rates to be levied on the customers of the Company's high pressure gas grid wherein the tariff was effective retrospectively from 27 July 2012. The Company issued (August 2014) supplementary invoices of ₹ 287.67 crore as per revised tariff order of 11 July 2014 to 28 customers to make the payments within the stipulated due dates. The Company recovered (August 2014 to October 2015) ₹ 245.12 crore⁴⁰ against the supplementary invoices.

Audit observed (February 2016) that out of 28 customers, only eight customers made payments within the due dates. Of the remaining, 16 customers had made payments after the due dates, two customers had not

 ³⁸ Construction of canal earthwork, structures and service road for Limbdi Sub Branch canal (Ch.43.080 to Ch.55.766 Km) Slice – VIII awarded in April 2007

³⁹ The stipulated percentage in addition to the SBI PLR for the GTAs varied in each case. In case of the 28 customers whom supplementary invoices were issued, this percentage ranged from one *per cent* to seven *per cent* over the SBI PLR.

⁴⁰ The Company is yet to recover ₹ 42.55 crore from four customers *viz*. Partial payment from Essar Steel Limited (₹ 18.97 crore) and Torrent Power Limited (₹ 22.05 crore) and entire payment in case of JBF Industries Limited (₹ 0.91 crore) and Videocon Industries Limited (₹ 0.62 crore).

made any payments and two customers had made only partial payments. The Company, however, did not claim or recover interest on the payments received after stipulated due dates in accordance with the terms of the GTA from these 16 customers. This resulted in non recovery of interest of \gtrless 2.97 crore⁴¹ on account of the delayed payments of supplementary invoices.

The Government stated (November 2017) that such supplementary invoices raised for specific PNGRB orders were not specifically covered in the GTA. Such retrospective applicability of tariff in the PNGRB orders led to lumpsum payments. It was further stated that the revised PNGRB tariff orders did not provide for collection of interest from consumers and hence imposing interest on delayed payment would have led to legal cases. Therefore, the Company did not have any legal and contractual basis to claim interest on the supplementary invoices.

The reply is not correct because the invoices raised by the Company demanding the increased tariff specified the due dates for payment. If the interest for delayed payment was not to be imposed, there was no sanctity of the due dates mentioned in the invoice. This led to treating all the 28 customers at par thereby extending undue benefit to those who have delayed the payments for periods ranging from two days to over one year beyond the due dates.

Audit is of the view that a clear policy regarding the time that would be allowed for payment of such supplementary invoices giving effect to regulatory orders should have been put in place.

State Power Distribution Companies (State DISCOMs)

3.7 Distribution losses in Rural Feeders

Introduction

3.7.1 Electric power is normally generated at 11-25 Kilo Voltage (KV) in a power station. To transmit this power over long distances, it is stepped up⁴² and carried through a transmission network of high voltage lines. These lines terminate into a 66/33 KV sub-station where the voltage is stepped-down for power distribution through 11 KV lines. The 11 KV lines connecting the 66/33 KV sub-stations to the distribution transformers for further distribution of power to the end consumers are called the feeders. The power distribution network of 11 KV feeders and lines downstream of the 66/33 KV sub-stations constitute the distribution network.

In Gujarat, there are four power Distribution Companies (DISCOMs) *viz.*, Dakshin Gujarat Vij Company Limited (DGVCL), Madhya Gujarat Vij Company Limited (MGVCL), Paschim Gujarat Vij Company Limited (PGVCL) and Uttar Gujarat Vij Company Limited (UGVCL) based on their

⁴¹ The interest on delay payments is worked out @ SBI PLR 14.75 *per cent* + stipulated rate as per respective GTAs. The interest is calculated for 16 customers who delayed payments.

⁴² Power generated in generating stations is stepped up to 400 KV, 220 KV or 132 KV for the purpose of transmission.
geographical area of coverage. All the DISCOMs were incorporated on 15 September 2003 under the Companies Act, 1956. Upon unbundling of erstwhile Gujarat Electricity Board (GEB), the assets of GEB pertaining to the distribution circles were transferred to the four DISCOMs.

Categorisation of feeders

3.7.2 In the DISCOMs, there are three main categories of 11 KV feeders *viz.*, Urban/ Town feeders, Industrial feeders, and Rural⁴³ feeders. The categorisation refers to the consumer base they cater to. The rural feeders for all the DISCOMs form the largest component and together constitute around 70 *per cent* of the total feeders of all DISCOMs.

Bifurcation of Rural feeders

3.7.3 Till 2003, common rural feeders supplied power to all types of rural consumers viz., domestic, industrial, commercial and agricultural. Since irregular, inadequate and unpredictable power supply to domestic, industrial and commercial users in rural areas, affected the overall development of such area, the Government of Gujarat introduced (September 2003) Jyoti Gram Yojana (JGY). Under JGY, rural feeders were bifurcated into Agricultural (AG) and JGY feeders in order to supply consistent and reliable power to the rural areas. The AG feeders catered predominantly to demand for agricultural purposes whereas JGY feeders catered to other than agricultural users in rural areas. The AG feeders supplied eight to ten hours of three-phase power⁴⁴ to the agricultural consumers for running the agricultural pump sets and single-phase power⁴⁵ thereafter. The single-phase power catered to the residential electricity requirements of the agricultural consumers living in the farms and was separately metered. The JGY feeders supplied continuous three-phase power to all other residences, commercial establishments and industries in the rural area. As JGY scheme involved setting up of a separate distribution system for the rural areas, 78,453 Kms of new lines, 2,120 numbers of JGY feeders and 18,724 numbers of new transformer centres⁴⁶ were installed under the scheme. All the 18,065 villages in the State were covered under the scheme with a total expenditure of \gtrless 1,290.30 crore. The feeder bifurcation was completed in March 2006 in all the four DISCOMs.

Scope of Audit

3.7.4 Audit of distribution losses in rural feeders covered the period 2012-13 to 2016-17 under two themes *viz.*, (i) Extent of distribution losses in rural feeders and reasons thereof, and (ii) adequacy and effectiveness of the efforts made by DISCOMs in reducing the distribution losses in these feeders.

⁴³ Rural feeders supply electricity in the rural areas and comprise of Agriculture and Jyoti Gram Yojana Feeders.

⁴⁴ Three-phase supply is 415 V supply generally used in large businesses, as well as industry and manufacturing sector.

⁴⁵ Single-phase supply is a 230 V supply generally used in most homes and small businesses.

⁴⁶ A distribution transformer centre provides the final voltage transformation in the electric power distribution system, stepping down the voltage used in the distribution lines to the level used by the consumer.

Audit test-checked the records of two DISCOMs *viz.*, **PGVCL** and **MGVCL**. Four divisions involving 94 feeders in **PGVCL** and three divisions involving 47 feeders in **MGVCL** in which there were more rural feeders with continuous losses above 50 *per cent* in all the four years (2012-16) were selected for detailed audit scrutiny.

Audit Findings

Calculation of distribution losses in rural feeders

3.7.5 AG feeders supply power to both metered and un-metered consumers. From 2004-05 the distribution losses in respect of AG feeders were calculated as the balancing figure which was worked out by reducing the assessed consumption⁴⁷ of the un-metered consumers and the actual consumption of the metered consumers from the units sent out from these feeders. In respect of JGY feeders mostly⁴⁸ all the consumers are metered hence the distribution loss is worked out by reducing the actual metered consumption from the units sent out from these feeders.

Extent of distribution losses in rural feeders

3.7.6 The extent of distribution losses in rural feeders have been analysed overall in respect of all DISCOMs and specifically in respect of the two DISCOMs test checked in Audit.

Analysis in respect of all DISCOMs

3.7.7 The DISCOM wise overall distribution losses along with the AG and JGY feeder losses for the period 2012-17 are given in *Annexure 9*. The overall distribution losses of the four DISCOMs which ranged from 11.95 *per cent* to 27.63 *per cent* in 2012-13 reduced to 8.18 *per cent* to 19.06 *per cent* in 2016-17. The overall distribution losses in three DISCOMs have been brought to a level below 11 *per cent* in 2016-17 though it remained at 19.06 *per cent* in **PGVCL**. The rural feeders comprising of AG and JGY feeders contributed a substantial percentage of this loss.

The trend of distribution losses in respect of AG and JGY feeders in each DISCOM is depicted in **Figure 3.3** and **Figure 3.4** as under:

⁴⁷ The un-metered AG consumption is assessed at the rate of 1,700 units *per* HP *per* annum depending on the connected load of these un-metered consumers.

⁴⁸ Consumers who own agricultural land in the periphery of urban and rural areas where there are no agricultural feeders, un-metered connections have been given from JGY feeders by restricting supply to eight hours. Once such load gets converted into non-agricultural load the consumer gets metered. Such feeders are less and the consumption is assessed like un-metered AG consumers.



Figure 3.3: Chart showing the distribution losses in AG feeders

Figure 3.4: Chart showing the distribution losses in JGY Feeders



As could be seen from **Figure 3.3**, the distribution losses in AG feeders showed a varying trend as the actual consumption/ demand was dependent on rainfall. There was a sudden dip in the distribution losses in 2013-14 due to good rains and consequent lower demand for electricity. The lower demand reduced the units sent out; and resultantly, the distribution losses, derived by deducting the assessed consumption from units sent out, also reduced. In **DGVCL**, the distribution loss in AG feeders was negative for 2013-14 as units sent out were lesser than the assessed consumption indicating that assessment of consumption of the unmetered AG consumers may not be reliable. In **PGVCL**, the AG feeder losses still continue to be very high as compared to the other DISCOMs.

In respect of JGY feeders, the losses were in a reducing trend during the period 2012-13 to 2016-17. Though the losses in JGY feeders reduced in 2016-17 as compared to 2012-13 in all the DISCOMs, they remained significantly high ranging from 20.00 *per cent* to 40.07 *per cent* during 2016-17 with reference to the overall distribution losses of the DISCOMs. **DGVCL** had the highest percentage of JGY feeder losses followed by **PGVCL** and **MGVCL**. The lowest JGY feeders losses were in **UGVCL** though these were at 20 *per cent*.

PGVCL stated (September 2017) that the losses are showing decreasing trend in all categories due to various technical, commercial and vigilance activities.

It also stated that there are various constraints in further reduction of losses such as a large geographical area, scattered industrial zones, area being prone to natural calamities, coastal belt, *etc.* It was further stated that in case of AG feeders, excess power was drawn by the farmers to save their crop due to delayed or scanty rain in 2015 and 2016 and 10 hours power was supplied to AG consumers against the scheduled 8 hours. Besides, in calculation of AG feeder loss, sold units of un-metered AG consumers were assessed at the rate of 1,700 unit *per* HP *per* year irrespective of actual hours of power supply which adversely affects losses of AG feeders

The reply is not convincing because **PGVCL** is already aware of the reasons for continuous high losses in both AG and JGY feeders. The action plan needs to be specific to each feeder considering the factors contributing to the losses in the said feeder. The losses in the AG and JGY feeders of **PGVCL** continue to remain high. **GUVNL** and other DISCOMs have not replied to the audit observation (December 2017).

Analysis for test checked DISCOMs

3.7.8 The table below gives the year-wise details of units sent, units sold and units lost in two test checked DISCOMs *i.e.* **PGVCL** and **MGVCL** during the period 2012-17. For the purpose of comparison, feeders other than AG and JGY have been referred to as 'other feeders'.

	(In Thousand Million Units)						Units)		
Year	Over all			JGY Feeders			AG Feeders		
	Units	Units	Units	Units	Units	Units	Units	Units	Units
	sent	sold	Lost	sent	sold	Lost	sent	sold	Lost
				PGVC	L				
2012-13	25.17	18.21	6.96	4.31	2.33	1.98	9.97	6.00	3.97
2013-14	23.98	19.05	4.93	4.28	2.54	1.74	8.32	6.07	2.25
2014-15	27.58	21.30	6.28	4.70	2.90	1.80	10.13	6.60	3.53
2015-16	29.88	23.13	6.75	5.03	3.22	1.81	11.05	7.06	3.99
2016-17	30.38	24.59	5.79	5.22	3.51	1.71	10.06	6.93	3.13
Total	136.99	106.28	30.71	23.54	14.50	9.04	49.53	32.66	16.87
MGVCL									
2012-13	9.21	8.02	1.19	1.83	1.14	0.69	1.22	1.02	0.20
2013-14	9.57	8.54	1.03	1.93	1.24	0.69	1.01	0.96	0.05
2014-15	10.59	9.34	1.25	2.16	1.37	0.79	1.25	1.09	0.16
2015-16	11.27	9.96	1.31	2.31	1.50	0.81	1.42	1.21	0.21
2016-17	11.14	10.02	1.12	2.28	1.55	0.73	1.32	1.21	0.11
Total	51.78	45.88	5.90	10.51	6.80	3.71	6.22	5.49	0.73

 Table 3.2: Units lost in selected DISCOMs under rural feeders

 (In These and Million Units)

Source: Data furnished by DISCOMs.



Figure 3.5: Pie Charts showing the units lost by JGY and AG feeders out of the total units lost during 2012-17 for PGVCL and MGVCL

In **PGVCL**, as depicted in **Table 3.2**, of the 136.99 Thousand Million Units (Th MUs) of power sent out, 23.54 Th MUs and 49.53 Th MUs were sent through JGY and AG feeders respectively while 63.92 Th MUs were sent through the other feeders during 2012-17. Out of this, JGY feeders lost 38.40 *per cent* and AG feeders lost 34.06 *per cent* of the units sent out whereas the other feeders lost only 7.51 *per cent*⁴⁹ of the units sent out as distribution losses during 2012-17. Consequently, as depicted in **Figure 3.5**, the JGY feeders and AG feeders contributed 29 *per cent* and 55 *per cent* of the distribution losses respectively. Other feeders contributed only 16 *per cent* of the total distribution losses in **PGVCL**.

In **MGVCL**, as depicted in **Table 3.2**, out of the 51.78 Th MUs of power sent out during 2012-17, 10.51 Th MUs and 6.22 Th MUs were sent out through the JGY and AG feeders respectively and 35.05 Th MUs were sent out through other feeders. Out of this, JGY feeders lost 35.30 *per cent* and AG feeders lost 11.74 *per cent* of the units sent out while the other feeders lost only 4.17 *per cent* of the units sent out. Consequently, as depicted in **Figure 3.5**, the JGY feeders contributed 63 *per cent* of the distribution losses whereas AG feeders contributed 12 *per cent* of the distribution losses while other feeders contributed 25 *per cent* of the distribution losses.

Continuous high loss rural feeders

3.7.8.1 An analysis was made in Audit to identify rural feeders with continuous losses over 50 *per cent* in **PGVCL** and **MGVCL** over the period of five years 2012-17. The details of such feeders are tabulated in **Table 3.3** below:

⁴⁹ [{30.71 Th. MUs Overall Unit Lost *minus* (9.04 Th. MUs JGY Unit Lost *plus* 16.87 Th. MUs AG Unit Lost)} *divided by* {136.99 Th. MUs Overall Unit Sent *minus* (23.54 Th. MUs JGY Unit Sent *plus* 49.53 Th. MUs AG Unit Sent)}]*100 = 7.51 *per cent*

⁵⁰ [{5.90 Th. MUs Overall Unit Lost minus (3.71 Th. MUs JGY Unit Lost plus 0.73 Th. MUs AG Unit Lost)} divided by {51.78 Th. MUs Overall Unit Sent minus (10.51 Th. MUs JGY Unit Sent plus 6.22 Th. MUs AG Unit Sent)}]*100 = 4.17 per cent.

				(In number)	
Name of	Rural feeders	Feeders having	JGY feeders	AG feeders having	
DISCOMs	as on March	losses more than	having continuous	continuous losses	
	2017	50 per cent as on	losses over 50 per	over 50 per cent	
		March 2017	<i>cent</i> (2012-17)	(2012-17)	
PGVCL	4,489	741	136	75	
MGVCL	1,070	145	54	1	
Total	5,559	886	190	76	

 Table 3.3: Continuous high loss rural feeders in PGVCL and MGVCL

Source: Compiled by Audit based on information given by DISCOMs

From the above, it could be observed that out of 4,489 rural feeders in **PGVCL**, 16.51 *per cent* were incurring losses of more than 50 *per cent* as on March 2017. Out of 741 such rural feeders, there were 136 JGY feeders and 75 AG feeders reporting continuous losses of more than 50 *per cent* throughout the five years 2012-17. In **MGVCL**, 145 rural feeders (13.55 *per cent*) out of 1,070 rural feeders reported losses of more than 50 *per cent* as on March 2017. Of these 145 feeders, 54 JGY feeders and one AG feeder were incurring losses of over 50 *per cent* in all the five years 2012-17.

The Committee on Public Undertakings (COPU) while discussing the Performance Audit on Power Distribution Utilities in Gujarat of Audit Report (Commercial) for the year ended 31 March 2011, Government of Gujarat recommended (August 2016) that distribution losses in JGY feeders was excessive and should be made as low as 12 *per cent*. Despite the specific recommendation of COPU, **PGVCL** had lost additional 1,522.27⁵¹ MUs in the JGY feeders during the period 2012-17. Similarly, **MGVCL** had lost additional 1,077.44⁵² MUs in JGY feeders during 2012-17.

PGVCL/ **MGVCL** attributed the high distribution losses mainly to large geographical area, long distance 11 KV Low Tension lines, very few High Voltage Distribution Systems, pilferage of power, defective meters, non-replacement of electro-mechanical meters⁵³ with static meters⁵⁴, unmetered agricultural power supply, *etc*.

PGVCL stated (September 2017) that out of 172 JGY feeders which had continuous losses of more than 50 *per cent* from 2012 to 2016, losses of 161 JGY feeders were in decreasing trend and 37 JGY feeders were having losses of less than 50 *per cent* as on March 2017. Out of 101 AG feeders which were having continuous losses of more than 50 *per cent* from 2012 to 2016, losses of 93 AG feeders were in decreasing trend and 29 AG feeders were having loss less than 50 *per cent* at the end of March 2017. Thus, loss level was improving, though there are number of feeders still at high loss level.

⁵¹ Total distribution loss - 1,849.56 MUs (units sent *less* units sold) of JGY feeders *less* 12 *per cent* COPU recommended loss level – 327. 29 MUs = 1,522.27 MUs.

⁵² Total distribution loss - 1,291.82 MUs (units sent *less* units sold) of JGY feeders *less* 12 *per cent* COPU recommended loss level - 214.37 MUs = 1,077.45 MUs.

⁵³ Electro-Mechanical Energy Meters are the combination of Mechanical and Electrical Technology. A mechanical disk present inside the meter rotates when the load is applied. The speed of disk is directly proportional to the amount of load applied. With the rotation of disk, dial of the Energy Meter increase its value.

⁵⁴ Static Meter is based on Digital Micro Technology and uses no moving parts. In Static meter, the accurate functioning is controlled by a specially designed IC called ASIC (Application Specified Integrated Circuit).

The fact remains that as on 31 March 2017 there were still 741 rural feeders having losses more than 50 *per cent*. **MGVCL** did not furnish specific reply to the audit observation.

Adequacy and effectiveness of the efforts made by DISCOMs in reducing losses in rural feeders

3.7.9 The DISCOMs had identified and undertaken activities for loss reduction such as feeder bifurcation, load balancing, installation of high voltage distribution system, review of Distribution Transformer Centres *etc.* Further, activities like replacement of faulty meters, replacement of electro mechanical meters with static meters, providing aerial bunch cables, shifting meter out of the premises, removing AG-JGY crossing, *etc.*, were identified to reduce commercial losses⁵⁵.

Our observations in relation to the adequacy and effectiveness of such measures are discussed below:

Feeder-wise plans for loss reduction

3.7.9.1 Gujarat Urja Vikas Nigam Limited (GUVNL) fixed category-wise loss reduction targets for the DISCOMs⁵⁶ during the three years 2014-15 to 2016-17. Details of loss reduction targets, if any, fixed prior to this period were not produced to Audit. For the years 2014-15 to 2016-17, the overall loss reduction target fixed in respect of **PGVCL** and **MGVCL** was five *per cent* for JGY feeders and 10 *per cent* for AG feeders. Further, in respect of high loss JGY feeders having more than 50 *per cent* losses, the target reduction was 10 *per cent* for both the DISCOMs. The achievement against the targets is tabulated below:

	Years in which reduction targe		High loss JGY feeders in which loss reduction targets achieved			
DISCOM	JGY	AG	Number of JGY feeders selected for all the three years 2014-15 to 2016-17	Feeders in which target achieved		
PGVCL	Not achieved in any of the three years	2014-15 and 2015-16	219	81 (36.99 per cent)		
MGVCL	2014-15 and 2015-16	2015-16	115	18 (15.65 per cent)		

Table 3.4: Details of achievement against PBIS targets

Source: Information furnished by DISCOMs

It can be seen from **Table 3.4** that overall loss reduction targets were achieved by **MGVCL** in one year in case of AG feeders and two years in case of JGY feeders. However, **PGVCL** did not achieve the loss reduction target in JGY category in any of the three years. In AG category, **PGVCL** achieved the target in 2014-15 and 2015-16. The achievement in respect of loss reduction

⁵⁵ Commercial losses are caused by pilferage, defective meters, errors in meter reading and drawl of unmetered power.

⁵⁶ Under the PBIS, overall targets for loss reduction were fixed for the different categories of feeders like GIDC, JGY, AG *etc.*, and separate loss reduction targets were fixed for the high loss feeders under the different categories.

in the selected high loss JGY feeders stood at 36.99 *per cent* and 15.65 *per cent* in **PGVCL** and **MGVCL** respectively.

We observed that both the DISCOMs had a system for determining the feeder wise losses and therefore, were in a position to identify the high loss feeders under all categories. Considering that the PBIS specifically targeted JGY and AG feeders having losses above 50 *per cent* for loss reduction, Audit reviewed the nature of feeder wise planning done for the loss reduction in the high loss rural feeders in the two selected DISCOMs.

We observed that systematic efforts like first identifying the reasons for losses, deciding the activities to be undertaken, laying the targets for such activities and then monitoring the achievement against the same was absent. Though loss reduction activities were carried out in the high loss feeders, a feeder specific plan showing the target of loss reduction set for each feeder was made available to Audit only by **MGVCL** for one year *i.e.* 2016-17. The DISCOMs had appointed feeder managers for monitoring high loss feeders and their performance was also reviewed at corporate office level.

The deficiency in the system can be assessed from the fact that only 36.99 *per cent* and 15.65 *per cent* of identified JGY feeders in **PGVCL** and **MGVCL** respectively, could achieve the targets fixed for loss reduction during three years. Consequently, even as on 31 March 2017, **PGVCL** had 211 rural feeders having continuous losses over 50 *per cent* in the last five years and **MGVCL** had 55 such rural feeders.

Further, we also analysed the data of achievement in identified high loss JGY feeders under PBIS for 2015-16 and 2016-17. In **PGVCL**, 17 feeders were identified as high loss feeders both in 2015-16 and 2016-17. Out of these, marginal improvement was observed in loss reduction in 12 feeders whereas in case of remaining five feeders, the loss reduction activity did not yield desired results. On the contrary, the losses in these five feeders increased in 2016-17 when compared to 2015-16. Similarly, in **MGVCL**, 15 feeders were identified as high loss feeders both in 2015-16 and 2016-17. Of these 15 feeders, only two feeders achieved the target of reduction in loss. There was marginal improvement in case of nine feeders whereas in case of four feeders, the losses increased or remained at the same level in 2016-17 as compared to 2015-16. Continuous high loss in these feeders indicated that the DISCOMs might require reworking of its plans for undertaking loss reduction activities so that the desired results could be obtained.

MGVCL/ PGVCL stated (September 2017) that every year high loss feeders are identified as per specified criteria. Feeder managers are nominated for the selected feeder who prepare feeder wise plan. The execution of work on each feeder is monitored at Circle and Corporate level. **MGVCL** also stated that in 2016-17, 17 AG feeders and 126 JGY feeders were above 50 *per cent* which showed reducing trend. **MGVCL** has agreed to the Audit suggestion regarding requirement of feeder specific plans which include reasons for the losses on the high loss feeders and then identifying the activities that are required to prevent both technical and commercial losses.

Examination of the only feeder wise plan 2016-17 prepared by Feeder managers did not identify the reasons for high losses and the consequential specific remedial measures planned to be taken for reducing them. It did not identify the causes for high losses like feeders crossing, faulty meter on distribution transformer, higher load than the configuration of the feeder, power theft in overhead lines *etc.* and specify feeder wise solutions like attending to feeder crossing, meter replacement/ re-calibration, feeder bifurcation, converting overhead lines into underground lines, *etc.* Thus, there was no feeder wise plan to identify reasons for losses and undertake requisite remedial measures, which was agreed to by **MGVCL**.

It is recommended that **GUVNL/ DISCOMs** may document the reasons for the high losses in the feeders and link the feeder specific plans to such reasons and carry out identified activities in the feeders within a fixed time frame.

Low level of loss reduction activities in high loss feeders

3.7.9.2 During 2012-17, **PGVCL** and **MGVCL** carried out various loss reduction activities⁵⁷ to control both technical and commercial losses. Though the targets for these feeder wise activities were not made available to audit, **MGVCL** provided the feeder-wise action plan with the reference to the target and its achievement under PBIS for 2016-17.

Based on the data provided by **MGVCL**, we analysed the extent of loss reduction activities carried out on high loss feeders *vis-à-vis* total loss reduction activities. During the period 2012-17, **MGVCL** incurred an expenditure of ₹ 584.89 crore on 17 loss reduction activities in 6,789 feeders. However, an expenditure of only ₹ 51.60 crore was incurred in the 54 continuous high loss feeders of JGY. Thus, only 8.82 *per cent* of the expenditure was incurred on the 54 high loss feeders during 2012-13 to 2016-17. We analysed eight⁵⁸ of the above activities to determine the extent of work done in the high loss feeders. During the above period, **MGVCL** installed 2,216 HVDS at an expenditure of ₹ 18.34 crore, out of which only 48 were installed in the 54 high loss feeders at an expenditure of ₹ 0.40 crore.

Similarly, **MGVCL** undertook conversion of overhead cables to underground cables for a distance of 175 kms at a cost of ₹ 38.63 crore out of which no expenditure was incurred in the 54 high loss feeders during 2012-17. In the remaining six activities analysed, three to twenty *per cent* of the activities was carried out in the high loss feeders except in one loss reduction activity *i.e.* PDC LT line⁵⁹ removal where the achievement was 76 *per cent*. The fact, however, remains that these feeders continue to have distribution losses of

⁵⁷ Attending AG-JGY Crossing, Distribution Transformer Centre meter installation, Faulty Meter Replacement, Feeder Bifurcation, Installation Checking, Installation of High Voltage Distribution System (HVDS), Load Balancing, Old EM Meter Replacement, Over Head to Underground line, PDC LT Line Removal, Providing of 2wire Arial Bunch Cable, Providing of 4wire Arial Bunch Cable, removal of AG-JGY Crossing, Service Line Replacement, etc.

⁵⁸ Attending AG-JGY Crossing, HVDS, Old EM Meter Replacement, Over Head to Underground line, PDC LT Line Removal, Providing of 2wire Arial Bunch Cable, Providing of 4wire Arial Bunch Cable and Service Line Replacement.

⁵⁹ Permanent Disconnected Consumer Low Tension Line.

over 50 *per cent* even in 2016-17, which only goes to prove that required activities have not been adequate or effective in these feeders.

MGVCL/ **PGVCL** stated (September 2017) that activities, like feeder bifurcation, conductor augmentation, reconfiguration of feeder, overhead to underground cable, *etc.* are not only implemented with the objective of loss reduction but also for system strengthening and improving power system reliability.

MGVCL also stated that the loss reduction activities largely depend upon various factors such as *modus operandi* of power theft, level of technical losses, per consumer energy consumption, etc. Further, it would not be financially viable solution to convert overhead line to underground cable on all the 54 number of high loss feeders. As regards to High Voltage Distribution System (HVDS), the same was not widely implemented on these 54 number of identified JGY feeders, mainly because of specific *modus operandi* of hooking of JGY HT line. Since HVDS is more effective, where direct hooking with LT line is predominant, it was not widely implemented on these 54 numbers of feeders.

The reply is not convincing because the loss reduction activities on 54 high loss feeders of MGVCL was nominal as can be seen from the expenditure incurred on these feeders. This indicated that the loss reduction activities included in the feeder specific plans for these feeders were not as per the requirement of these feeders. Further, the reply does not state the kind of activities which could be effective on such high loss feeders.

PGVCL expressed (September 2017) its inability to give feeder wise expenditure incurred on high loss feeders for loss reduction activities.

Implementation of LT less system

3.7.9.3 High voltage distribution System takes the high tension lines closer to the consumer end and is, therefore, an effective method for reduction of technical losses, prevention of theft, improvement of voltage profile and better consumer service. The HT-LT ratio of the two test-checked DISCOMs in respect of the rural feeders for 2012-17 is given in table below:

_						(in kms)	
Year		PGVCL		MGVCL			
	HT Lines	LT Lines	Ratio	HT Lines	LT lines	Ratio	
2012-13	1,07,653	1,02,450	1.05	38,885	42,780	0.91	
2013-14	1,24,802	1,03,072	1.21	43,341	46,467	0.93	
2014-15	1,30,526	1,05,398	1.24	46,249	48,948	0.94	
2015-16	1,37,315	1,07,678	1.28	48,442	52,176	0.93	
2016-17	1,61,054	1,05,790	1.52	51,641	53,614	0.96	

Source: Information obtained from DISCOMs

It would be seen from the above table that the HT-LT ratio in **PGVCL** has improved gradually during 2012-17 though in terms of absolute kilometres, LT lines did not reduce substantially during 2012-17. However, in **MGVCL** even though the length of lines involved is much lesser, the improvement in HT-LT ratio except 2015-16 is only marginal. Improving the HT-LT ratio can help in reduction of distribution losses.

MGVCL stated (September 2017) that it has adopted HVDS system and made continuous efforts to reduce LT line and improve HT to LT ratio.

The reply is not convincing because though **MGVCL** has improved the HT-LT ratio, the increase in the new LT lines would negate the benefit accruing out of installing HT lines.

Inadequate checking of installation of consumers

3.7.9.4 During 2012-17, **MGVCL** checked only 10,24,865 (50.04 *per cent*) out of 20,48,118 consumer's installations in the rural feeders. Installations of 10,23,253 consumers were not checked even once within a period of five years (2012-17). Out of the installations checked in **MGVCL** during 2012-17, thefts worth \gtrless 54.98 crore were noticed in 68,201 cases (6.65 *per cent*) and out of this only \gtrless 7.74 crore (14.08 *per cent*) could actually be realised. Considering the number of theft cases detected, **MGVCL** needs to increase its installation checking so as to cover all consumers at least once in five years. It also needs to enforce recoveries more effectively to deter consumers from theft.

In case of **PGVCL**, 37,70,647 installations were checked during the five years (2012-17) against the 27,71,298 consumer's installations in the rural feeders. Out of the installations checked in **PGVCL** during 2012-17, thefts worth \gtrless 483.45 crore were assessed in 6,14,689 cases (16.30 *per cent*) and out of this only \gtrless 254.88 crore (52.72 *per cent*) could be realised. **PGVCL** may ensure that all consumers are covered in a period of five years and increase the effectiveness of the recovery process.

MGVCL stated (September 2017) that installation checking is very specialised and distinct activity compared to testing of meter at consumer's premise. It was also stated that in case of installation checking, a detailed investigation of every aspect that may have bearing on consumption of consumer, is carried out, which is time consuming exercise. It was further stated that such activities are mostly concentrated and repeated frequently on those feeder areas where losses are higher.

The reply is not convincing as all the consumers were not checked even once within a period of five years. The reply does not elaborate the details of results which **MGVCL** was able to achieve by adopting the above approach for checking installations. Besides, the amount of recoveries assessed on account of theft were not fully realised.

PGVCL stated (September 2017) that it organizes frequent installation checking drives to minimise cases of pilferage/ loss of energy. Further, it was stated that it takes necessary action for recovery of dues like disconnection of defaulter consumers, filing of civil suits and settlement of dues through Lok

Adalats. However, Audit is of the view that **PGVCL** can make more concerted efforts for effecting higher recoveries.

Slow progress in metering of Agriculture Consumers

3.7.9.5 The DISCOMs have two types of tariff for agriculture sector, *viz.*, unit based tariff for the metered consumers and Horse Power (HP) based tariff for the un-metered consumers. Under the HP based tariff, the entire connected load of the un-metered consumers is charged at the rate of \gtrless 2,400 *per* HP *per* annum irrespective of the actual consumption. In respect of metered consumers, tariff is charged on the actual units consumed as *per* meter recording. As *per* Section 55 of the Electricity Act, 2003, no electricity consumption should be un-metered. Further, GERC also directed (Tariff order 2004) the DISCOMs to complete cent *per cent* metering of all its consumers.

The DISCOMs do not release new agricultural connections under the un-metered category but the existing un-metered consumers have still not been fully metered as on March 2017. On review of the progress of metering of un-metered consumers in **MGVCL**, it was observed that out of 26,043 un-metered consumers as on 01 April 2012, only 318 consumers (1.22 *per cent*) have been metered during 2012-17 leaving 25,725 un-metered consumers as on 31 March 2017. Therefore, the progress of metering of un-metered consumers need to gather pace.

Similarly, in **PGVCL** also, out of 2,59,734 un-metered consumers as on 01 April 2012, only 504 consumers (0.19 *per cent*) have been metered during 2012-17 leaving 2,59,230 un-metered consumers as on 31 March 2017. Hence the progress in metering un-metered consumers was negligible in both the DISCOMs.

While accepting slow progress in metering, **MGVCL** stated (September 2017) that every effort was being made to install the meter on un-metered consumers but because of stiff resistances from the farmers, the desired results could not be achieved. It was further stated that since October 2000, all new connections were being released with meter tariff only due to which the total share of un-metered consumers had reduced from 39 *per cent* in 2009-10 to 20.38 *per cent* in 2015-16. As regards the working of assessed units for un-metered consumers, **MGVCL** stated that the consumption of un-metered consumers was assessed as 472 MUs *i.e.* five *per cent* of total consumption which was not substantial.

The reply is not convincing because the reduction in percentage of un-metered consumers was primarily due to the release of new connections with meter. However, the pace of metering of un-metered consumers was very slow during 2012-17 and requires efforts to encourage metering. The contention that the assessed consumption of un-metered consumers to total consumption was not substantial does not hold good as the absolute number of un-metered consumers remained almost the same during 2012-17 and the decrease in percentage of assessed consumption to total consumption was due to increase in the base of metered consumers.

PGVCL stated (September 2017) that no new connection was released without meter since 2001. As a result, the ratio of un-metered consumers to the metered consumers was on a decreasing trend. Further, it was stated that due to stiff resistance from farmers, representation from Kisan Sangh, *etc.*, it was difficult task to install meter at un-metered consumers.

The fact, however, remains that there was marginal improvement in the pace of metering of un-metered consumers.

Reconnection of Permanent Disconnected Consumers with unmetered connection

3.7.9.6 The Electricity Act, 2003 and GERC Tariff order 2004 requires the DISCOMs to complete *cent per cent* metering of all un-metered consumers. In contravention to the above requirements, **GUVNL** *vide* circular dated 24 October 2013 gave an option to the HP based Permanent Disconnected AG Consumers (PDC) to avail the facility of metered or un-metered tariff at the time of applying for reconnection.

In terms of the above circular, **PGVCL** released reconnections to 291 PDCs as unmetered connections during 2012-17. **MGVCL** gave reconnections to eight such PDCs as un-metered connections during the said period. Audit observed that the above circular not only contravened the directions of GERC and requirements of the Electricity Act, 2003 but also resulted in connections continuing to be under the unmetered category. Audit is of the view that metering should have been made compulsory for PDC AG consumers opting for reconnection so as to increase the pace of metering.

MGVCL/ PGVCL stated (September 2017) that PDC reconnection of HP based agriculture consumer cannot be considered as 'new connection' as the minimum charges during the period of PDC is also being recovered from the consumer seeking PDC reconnection of his existing AG connection. Further, **GUVNL** had issued guidelines *vide* circular dated 24 October 2013 as per decision of Committee formed by State Advisory Committee (SAC) constituted by GERC under Section 87 (1) of the Electricity Act, 2003.

The reply is not convincing as Section 55 of the Electricity Act, 2003 stipulates that no electricity consumption should be un-metered. Audit scrutiny of minutes of SAC did not indicate any decision to treat PDC reconnection as existing AG connection which would justify the option given by GUVNL in its circular. Thus, the Circular of GUVNL is not in the line with the provisions of the Electricity Act, 2003.

Slow replacement of conventional meters/ electro-mechanical meters with static/quality meters

3.7.9.7 The Central Electricity Authority instructed (March 2006) that all interface meters, consumers and energy accounting and audit meters should be of static type. In the Detailed Project Report of Accelerated Power Development Reform Programme (APDRP) Scheme, 2003, the DISCOMs estimated that replacement of old conventional meters/ electro-mechanical

meters with static/ quality meters would increase energy reading by 19.06 units *per* month *per* meter replaced. In other words, it would give a more accurate consumption and thereby help reduce distribution losses.

The Forum of Regulators⁶⁰ (FOR) also stated (August 2009) that the State Electricity Regulatory Commissions should lay down a time frame for replacing conventional meters/ electro-mechanical meters with advanced technology meters focusing on high loss areas. As per the roadmap for this, **MGVCL** was to complete the replacement by 2016 and **PGVCL** was to replace the meters by 2018-19. Though this was one of the identified loss reduction activities, even after lapse of more than 10 years, neither **MGVCL** nor **PGVCL** were able to replace all the conventional meters/ electro-mechanical meters with quality/ static meters in the rural feeders (March 2017).

Audit observed that in **PGVCL** only 9,14,883 (59.81 *per cent)* conventional meters/ electro-mechanical meters out of 15,29,756 meters as on 1 April 2012 had been replaced with static/ quality meters during 2012-17. As at March 2017, balance 6,14,873 conventional meters/ electro-mechanical meters (40.19 *per cent*) were still to be replaced.

In case of **MGVCL**, out of 15,40,233 conventional meters/ electro-mechanical meters as on 1 April 2012, only 8,48,142 (55.07 *per cent*) conventional meters/ electro-mechanical meters had been replaced with static/ quality meters during 2012-17. As at March 2017, remaining 6,92,091 conventional meters/ electro-mechanical meters (44.93 *per cent*) were still to be replaced.

The MGVCL/ PGVCL stated (September 2017) that in the report of FOR an advisory was issued to all SERCs to devise a time bound Action Plan for replacement of conventional meters/ electro-mechanical meters by static meters. On the directions (April 2013) of GERC, DISCOMs submitted time bound Action Plan for replacement by December 2018 as the conventional meters/ electro-mechanical meters procured till the year 2008 were having guarantee period of 10 years *i.e.*, upto 2018. PGVCL had planned to replace all the pending conventional meters/ electro-mechanical meters/ electro-mechanical meters by the end of the year 2018-19.

The reply is not convincing because **MGVCL** was to complete the replacement by 2016. Even as per the above roadmap, 44.93 *per cent* of the conventional meters/ electro-mechanical meters were yet to be replaced in **MGVCL**. In case of **PGVCL**, the target of replacement is not likely to be achieved looking at the slow pace of replacement work. As on 31 March 2017, 40.19 *per cent* conventional meters/ electro-mechanical meters were pending for replacement with static meters.

Monitoring of rural feeders

3.7.9.8 As per the information furnished by **PGVCL** and **MGVCL** and observed in Audit from system controls in practice in the two DISCOMs, the

⁶⁰ A statutory body constituted under Section 166(2) of the Electricity Act, 2003 headed by the Chairperson, Central Electricity Regulatory Commission (CERC), with Chairpersons of all State Electricity Regulatory Commissions (SERCs) as its members.

distribution losses of rural feeders were reviewed on monthly basis at different levels *i.e.*, at division, circle and Corporate level. In the meetings, loss reduction activities were reviewed and directions/ instructions were also issued to the concerned officials. The status of the efforts made for reduction in distribution losses were reported to GERC in the tariff petitions filed by DISCOMs every year. Regular monitoring led to reduction in distribution losses in rural feeders from 85.68 *per cent* to 63.84 *per cent* in **PGVCL** and from 53.80 *per cent* to 40.42 *per cent* in **MGVCL** of the total distribution losses.

Conclusion and Recommendations

3.7.10 Rural Feeders constituted 70 per cent of the total distribution feeders of the DISCOMs and contributed more than 50 per *cent* of the distribution losses in the State. Audit examined the adequacy and effectiveness of the activities undertaken by the DISCOMs to reduce the Distribution losses in rural feeders. The scope of audit focused on the high loss rural feeders having losses of more than 50 per cent. It was observed that the overall distribution losses had reduced during 2012-17 in the rural feeders from 30.97 to 23.42 per cent. DISCOMs undertook various measures like installation of High Voltage Distribution System, conversion of Low Tension (LT) lines into High Tension (HT) lines, metering of unmetered consumers, etc. to reduce the feeder losses, however, the progress of metering of unmetered agricultural consumers and replacement of conventional meters with static meters was slow. Further, there was scope in improving the HT-LT lines ratio to augment the momentum of DISCOMs in reducing the losses in rural feeders.

Recommendations

The DISCOMs may:-

- prioritise loss reduction activities in high loss rural feeders by identifying the reasons for high losses and carry out specific requisite activities within a fixed time frame.
- > increase the pace of metering of all unmetered consumers.
- increase the pace of replacement of all conventional meters with static meters.

The matter was reported to Government/ Management (June 2017); the Government reply is awaited (December 2017).

Uttar Gujarat Vij Company Limited

3.8 Blockage of funds due to purchase of unsuitable land

Decision of the Company to acquire land despite being aware of construction constraints led to blockage of funds of ₹ 78.45 crore.

Uttar Gujarat Vij Company Limited (the Company) sought (September 2006) Government land measuring 21,388 square metres (sqm) at Ambli village, Bopal, Ahmedabad for construction of division office, sub division office, electric substation and a few other utilities (for the Company) and one 66 KV substation (for GETCO⁶¹). The proposed land fell under the jurisdiction of Ahmedabad Urban Development Authority (AUDA) and was classified as Residential Zone-3 (R-3 zone) in the AUDA's Development Plan 2002. As per the General Development Control Regulations⁶² (GDCR), the maximum permissible Floor Space Index⁶³ (FSI) and built up area for R-3 zone was 0.30 and 15 *per cent* respectively.

The Company, in anticipation of relaxation to construct up to 45 *per cent* built up area, decided to acquire the land. The District Collector, Ahmedabad initially allotted (October 2007) the land and accordingly, the Company deposited (March 2008) ₹ 7.82 crore as interim cost towards acquisition. However, the allocation of the land was not approved by the Government of Gujarat (GoG) and the Revenue Department of GoG directed (September 2008) the Company to look for availability of alternate land in the adjoining area. As no clear land was available in the vicinity, the Company expressed (April 2009) its readiness to curtail the requirement to 10,000 sqm on the condition that the land was allotted in the same plot.

The District Collector allowed the Company (April 2013) to take advance possession of 10,000 sqm of land by depositing the interim cost of the land. The Company deposited (May 2013) ₹ 23.34 crore towards differential value of land after adjusting ₹ 7.82 crore already paid. The Company took (October 2013) possession of the land and secured it by constructing compound wall at a cost of ₹ 19.09 lakh. The District Collector finally allotted (August 2015) the land to the Company at the cost of ₹ 55,000 per sqm⁶⁴. The Company paid (January/ February 2016) ₹ 44.60 crore towards final cost which included the cost of land, other charges, interest cost and levies. The Company, thus, acquired the land at a total cost of ₹ 78.45 crore⁶⁵ including stamp duty.

After acquisition, the Company requested (June 2016) for changing the zone from R-3 to Residential Zone-1 (R-1) which had FSI of 1.8 for better utilization of the land as the built up area allowed in R-3 zone was not sufficient to cater to its requirement. Soon thereafter, the Company decided (September 2016) to surrender the land to the Government citing high cost of land and lesser built up area due to prevalent FSI of 0.30. The Board of Directors (BoD) in the meeting when this decision was taken, did not analyse important aspects like the procedure for getting refund from the Government, the time that it would take, whether any alternate land was identified/ available, etc.

⁶¹ Gujarat Energy Transmission Corporation Limited.

⁶² These Regulations are framed under Gujarat Town Planning and Urban Development Act, 1976 and apply to all the developments within the Development Areas of the Development Authority. They form part of the Development Plan of AUDA. They come into force on the date the Development Plan is notified and remain in force till a new Development Plan is approved.

⁶³ Means the quotient of the ratio of the combined gross built-up area of all floors, to the total area of the Building-unit.

⁶⁴ The cost of the land was approved by a State Level Valuation Committee. This Committee is constituted by Government of Gujarat for assessment of market value/ cost of Government land above ₹ 1 crore.

⁶⁵ ₹ 7.82 crore (31.03.2008), ₹ 23.34 crore (29.10.2013), ₹ 44.60 crore (19.01.2016) and stamp duty of ₹ 2.69 crore (25.02.2016).

Audit observed (October 2016) that the Management was aware in July 2007 itself that the identified land fell in R-3 zone and consequently had an FSI of only 0.30 which would not suffice their requirement of constructing offices and other utilities. Audit further observed that the Company did not initiate action for changing the zone from R-3 to R-1 immediately after getting possession of land in October 2013 to enable early construction as per its own original plan. The proposal for surrender is under approval of GoG and consequently no refund of the amount paid has been received (November 2017).

Thus, despite being aware of the construction constraints, the Company acquired the land and subsequent failure to take timely action for zone change led to blocking up of \gtrless 78.45 crore.

Management stated (May 2017) that they anticipated that being a Government Company it would get the land from Government at lower rate and the permission for construction up to 45 *per cent* of the land area through zoning relaxation. It was further stated that the BoD decided on 30 September 2016 to surrender the said land as it was not worth to have such costly land with zoning restrictions.

Reply is not convincing as the Company was aware of the zoning restriction from July 2007. Nevertheless, the application for zoning relaxation was made in June 2016 only after the entire payment for the land was made. Had the application for zoning relaxation been made at the outset, the position would have been clear and the blocking of funds could have been avoided. Further, the Company at no point of time made any representation to the Government for reduction in rates but paid the entire amount without even applying for the zoning relaxation.

Thus, the blocking of funds of \gtrless 78.45 crore could have been avoided by taking proper and timely decisions on the acquisition of land at the outset.

The matter was reported to Government/ Management (March 2017); the Government reply is awaited (December 2017).

Sabarmati Gas Limited

3.9 Loss of revenue

The Company lost revenue of ₹ 58.09 lakh due to incorrect categorization of a commercial customer as an industrial customer.

Sabarmati Gas Limited⁶⁶ (Company) is engaged in procurement, transmission and selling of natural gas and related fuels in the districts of Gandhinagar, Mehsana and Sabarkantha. The Company entered (04 October 2011) into a Gas Sales Agreement (GSA) with M/s. Apollo Hospitals International Ltd. (AHIL), Gandhinagar for supply of Maximum Daily Contract Quantity of 700

⁶⁶ Joint venture promoted by Bharat Petroleum Corporation Limited (49.94 *per cent*), Gujarat State Petroleum Corporation Limited (22.47 *per cent*) and Gujarat State Petronet Limited (27.47 *per cent*).

Standard Cubic Meters per day (SCMD) of natural gas for a period of ten years. The Company started supplying gas to AHIL from October 2011.

As per the website of the Company, piped natural gas was supplied broadly under the categories of domestic, commercial⁶⁷, non-commercial and industrial⁶⁸. The tariff applicable to commercial customers is higher than those applied to industrial customers. We observed that AHIL though a commercial customer being in the Hospital industry as per the above categorization was erroneously classified as an industrial customer and accordingly billed at a lower tariff.

In order to supplement the indicative list in the website and aid the Company's decision making process in categorization of customers, the Company brought into effect detailed guidelines from 1 April 2017 for the categorization of customers. Even as per these guidelines, AHIL got classified under the commercial category. Incidentally, AHIL was the only hospital classified by the Company under the industrial category. Other hospitals⁶⁹ which were its customers were classified under the commercial category. This indicated that the Company did not adopt a uniform system of classifying similar customers under one category. Further, as per the prevailing industry practice, other city gas distribution Companies⁷⁰ had also classified hospitals under commercial category only. In view of above, the Company should have categorized AHIL as a commercial customer instead of an industrial customer and billed it as per the rates applicable for commercial customers since the commencement of GSA in October 2011.

The Management stated (May 2017) that at the time of the execution of the GSA with AHIL in 2011, there were no legal or policy restrictions on classification of customers as industrial or commercial. The Company's website was hosted only in April 2013 after the AHIL GSA and guidelines for customer classification approved only in March 2017. As per the load sheet provided by AHIL while applying for the connection, it required gas for boiler and industrial kitchen to the extent of 700 SCMD and technically this quantity of daily supply to AHIL could be handled by an industrial connection only. Further, electrical load provided by Torrent Power Ltd to AHIL was also under the industrial category.

Reply of the Company is not tenable as even prior to entering into the GSA with AHIL, the Company had a separate application form for domestic and commercial customers wherein hospitals were classified as commercial customers (as evident in case of GSA entered in June 2009 with the customer - Devanshi Maternity and Surgical Hospital). Both the website and the

⁶⁷ Establishments like hospitals, shopping mall, hotels, restaurants, bakery, sweets and snacks mart, small dairies, educational institutions, small industries, canteen/ pantry, *etc.*, fall under Commercial category.

⁶⁸ Industries like ceramics-tile manufacturing, metal, pharmaceuticals, crockery, glass, dyes and chemicals, food processing, textile, plastic, etc., were classified under Industrial category.

⁶⁹ Aashka Hospitals Pvt. Ltd., Apollo Hospitals International Ltd.-Food court, Civil Hospital Mehsana-Kitchen and Nursing Hostel, Devansi Maternity & Surgical Hospital, Maa Hospital & Nursing Home, Sir Pratap General Hospital – Laboratory, Hostel and Main Kitchen.

⁷⁰ Gujarat Gas Limited, Adani Gas Limited, Haryana City Gas Distribution Company, GAIL (India) Limited, Indraprastha Gas Limited and Mahanagar Gas Limited.

guidelines classify customers based on purpose of usage and does not differentiate the customers based on the load factor for classifying a customer. Therefore, the load of 700 SCMD was not a requisite criterion for classifying AHIL as industrial customer. Further, power distribution companies have their own policy for classifying customers and the same cannot be used to justify the Company's departure from its own policy.

Thus, due to incorrect categorization of AHIL the Company lost revenue of ₹ 58.10 lakh⁷¹ during the period October 2011 to March 2017.

The matter was reported to Government/ Management (April 2017); the Government reply is awaited (December 2017).

Statutory Corporations

Gujarat Industrial Development Corporation

3.10 Extension of unjustified concession

The Corporation allotted additional plots demanded by an allottee at discounted rates in violation of Board's decision resulting in extension of unjustified concession of \gtrless 2.97 crore.

Gujarat Industrial Development Corporation (Corporation) allots plots/ sheds in its industrial estates and recovers allotment price (AP) from the allottees. In order to attract Japanese units to the Japanese Industrial Zone (JIZ), which was coming up within the Vithalapur (Mandal) estate of the Corporation, the Board of Directors (BoD) of the Corporation decided (September 2012) to provide rebate on AP. The rebate was to be given to the first 10 small and medium enterprises (SME) and first 10 non-SME Japanese companies. Subsequently, the BoD decided (December 2013) the AP for the estate as ₹ 2,000 *per* square metre (sqm) and restricted the benefit of concession to 10 Japanese companies⁷².

Techno Trends Autopark Private Limited (TTAPL), a Japanese Company had applied (November 2014) for allotment of 1,98,115 sqm of land for developing an 'Industrial Engineering Park' in the JIZ. The BoD approved (July 2015) the allotment of land to TTAPL with 15 *per cent* rebate on the AP of \gtrless 2,000 *per* sqm. Further, the BoD also resolved (July 2015) that any additional land if demanded by TTAPL in future would be allotted at AP prevailing at that point of time without any rebate.

TTAPL had applied for specific Plot No. 28 to 45 in JIZ in its application of November 2014. As the Corporation was not in possession of certain pockets of the Plot 28 to 45, it requested TTAPL for selection of another chunk of land clearly available with the Corporation. However, TTAPL requested for allotting the reduced area of land of the said plots which was in possession of

⁷¹ Calculated based on difference in basic gas consumption charges applicable for Commercial and Industrial customers and quantity of gas supplied during the period October 2011 to March 2017.

⁷² Concession of 25 *per cent* to one company and 15 *per cent* to remaining nine companies.

the Corporation. Accordingly, 1,67,295 sqm of land was allotted against the application of 1,98,115 sqm (August 2015) at an AP of \gtrless 28.44 crore⁷³. TTAPL paid (September 2015) the total cost and took (October 2015) the possession of the allotted land.

Subsequently, TTAPL requested (May 2016) for allotment of approximately 85,300 sqm of additional land on the east side and on the south side of their land for expansion of its project. As the Corporation had not allotted the area of land initially demanded by TTAPL in November 2014, TTAPL requested for rebate of 15 *per cent* on the AP of \gtrless 2,000 *per* sqm. The Corporation sought (September 2016) the recommendations of Japan External Trade Organisation⁷⁴ (JETRO) on TTAPL's application for allotting additional land at discounted price. JETRO recommended (September 2016) that the application of TTAPL for additional land was for expansion of its existing unit and hence should be considered as one project. It was further recommended by JETRO that Corporation's support to grant 15 *per cent* rebate for the expansion project would be appreciated.

Considering the recommendation of JETRO, the Corporation decided (October 2016) to allot the additional land to TTAPL at a rebate of 15 *per cent* on prevailing AP considering it the seventh and eighth case of allotment under the BoD policy of December 2013. The Corporation allotted (January 2017) the 85,586.40 sqm of land to TTAPL with 15 *per cent* rebate on the AP of \gtrless 2,310 *per* sqm prevailing during January 2017. The total AP thus charged to TTAPL for the additional land was \gtrless 16.80 crore⁷⁵.

Audit observed (February 2017) that the decision of the Corporation to allot additional land to TTAPL with rebate of 15 *per cent* considering it as the seventh and eighth allotment violated the BoD policy of December 2013. The BoD had decided to provide concession to the first 10 companies in JIZ and not to the first 10 applications or allotments. Hence, the demand by TTAPL for allotment of additional plots should not have been considered for rebate as the allotment was not to a separate company as envisaged in the BoD policy. Audit further observed that this was in violation of the BoD's own decision taken in July 2015 not to grant any rebate in future allotments to TTAPL. This resulted in extension of unjustified concession of $\gtrless 2.97$ crore⁷⁶ to TTAPL.

The Management stated (September 2017) that the demand of TTAPL for 1,98,115 sqm could not be provided as certain area was not in possession of the Corporation. Thus, there was an obligation on the part of the Corporation to compensate the shortfall in area as per approval of Board. The allotment for additional plots to TTAPL was treated as separate allotments as per the usual practice of the Corporation and was granted concession considering them as

⁷³ 1,67,295 sqm X ₹ 1,700 per sqm (*i.e.*, 15 per cent rebate on the rate of ₹ 2,000 per sqm).

⁷⁴ JETRO is a non-profit organization established by Japan to provide information and support to foreign companies looking for an entry into Japanese market. An MOU was signed between Gujarat Industrial Development Corporation, Gujarat Infrastructure Development Board, Industrial Extension Bureau and JETRO to set up the above referred JIZ.

⁷⁵ 85,586.40 sqm X ₹ 1,963.50 *per* sqm (*i.e.* after allowing 15 *per cent* rebate on the rate of ₹ 2,310 *per* sqm).

⁷⁶ 85,586.40 sqm X ₹ 346.50 *per* sqm (*i.e.* ₹ 2310 *per* sqm *less* ₹ 1963.50 *per* sqm).

the seventh and eighth allotment out of the 10 companies/ allotments. The Management also stated that suitable amendment in the Board resolutions would be made to rectify the anomalies in the earlier Board resolutions.

The reply is not convincing because the Corporation had offered another area which was not accepted by TTAPL. Instead, TTAPL took the possession of the reduced area of 1,67,295 sqm. The allotment of subsequent additional land to TTAPL in January 2017 was in violation to the BoD decision of July 2015 which was taken after considering all the facts regarding allotment of lesser area.

Thus, the Corporation allotted additional plots to TTAPL at discounted rates in violation to Board of Directors decision resulting in extension of unjustified concession of \gtrless 2.97 crore.

The matter was reported to Government/ Management (April 2017); the Government reply is awaited (December 2017).

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