

Exposure Draft

Guidance Note on

Performance Appraisal Report

(Ref. Form-III to the Companies (Cost Audit Report) Rules, 2011)



The Institute of Cost Accountants of India

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For comments and suggestions in respect of any part of this Guidance Note, please write to the Secretary, Professional Development Committee, Institute of Cost Accountants of India, CMA Bhawan, 3, Institutional Area, Lodhi Road, New Delhi – 110 003.

PERFORMANCE APPRAISAL REPORT

[Refer Form III to the Companies (Cost Audit Report) Rules, 2011]

1.1 Introduction

1.1.1 The cost audit helps to ascertain whether an organization's cost accounting records are maintained in such a way so as to give a true and fair view of the cost of production, processing, manufacturing, and mining of a product. Therefore, cost audit will be useful to management, consumers and shareholders in identifying weaknesses in cost accounting systems, and in driving down costs by detecting wastages and inefficiencies. Cost audit is also of assistance to Central and State Governments in formulating tariff and taxation policies.

1.1.2 On the issue of audit, assurance and good governance, the International Federation of Accountants (IFAC), in its various documents, has observed that:

- (a) creation and optimization of stakeholders value should be the objective of governance;
- (b) the conformance and performance dimensions of governance are both important to optimize shareholder value;
- (c) cost accounting that includes the accumulating and assigning of costs to the organization's various activities enables the organization's cost structure to be understood, explained and improved; and
- (d) costing is an important tool in assessing organizational performance in terms of shareholder and stakeholder value.

IFAC further emphasized that costing methodologies applied in organizations, measures the consumption of economic resources and support the accountability of business performance. This is best achieved within a financial management system that helps to ensure the fulfillment of external reporting and other compliance requirements. As per IFAC, larger and more complex organizations usually develop reliable costing information to support both performance and conformance (against legal and regulatory requirements) decisions at both operational and strategic levels.

The performance dimension focuses on strategy and value creation. The focus is on helping the board to:

- a) make strategic decisions;
- b) understand its appetite for risk and its key drivers of performance, and
- c) identify its key points of decision making.

The real assessment of the improvement in performance or otherwise can be judged only when there is a trend analysis over a period. The assessment should have a performance



management focus. The inefficiencies disclosed by such assessment will be more useful to the company to have control on all activities relating to production and operation.

1.1.3 Audits like Cost Audit and Corporate Social Responsibility (CSR) are important elements of any corporate governance system. Some experts use the term enterprise governance to refer to this new concept of corporate governance. Enterprise governance substitutes corporate governance in the context of contemporary competitive scenario and increased consciousness to align the company to the global practices and standards. Corporate reporting system need to be strengthened through appropriate efficiency audit practices. In this connection it is significant to appreciate the need to position cost audit in the enterprise governance structure.

1.1.4 Clause 49 of SEBI guidelines on Listing Agreements mentions about performance monitoring. Accordingly, as per sub-clause (F) of Management mentioned under Clause II of Audit Committee, the Listed Companies as a part of the Directors' Report or as an addition thereto under "Management Discussion and Analysis Report" need to include inter-alia discussion on the following points:

- (a) Segment-wise or product-wise performance.
- (b) Risks and concerns.
- (c) Internal control systems and their adequacy.

1.1.5 The *National Performance Review (NPR)* has set the stage for reforms to create a government that works better and costs less. On the importance of management information systems, such as managerial cost accounting, NPR states: "*Management is not about guessing, it is about knowing. Those in positions of responsibility must have the information they need to make good decisions. Good managers have the right information at their fingertips. Poor managers do not...Good information comes from good information systems...If federal decision-makers are supplied the same type of financial and performance information that private managers use, it too will show up on the bottom line...and cut the cost of government.*"

1.1.6 The Expert Group constituted on 21st January, 2008 by the Ministry of Corporate Affairs, Government of India, on the issue of sharing any part of cost management trends/ information/ data with the shareholders had noted that there was no consensus among the different stakeholders/interest groups on the said issues. It was further mentioned that the data once shared, becomes public information. Since the cost data is sensitive in the competitive environment, it was, therefore, proposed that key-performance indicators might be shared with the shareholders in the Annual Report.

1.1.7 As a part of recommendations by Expert Group it mentioned "*.... that circulation of selected information to the shareholders of the company, containing cost trends, key performance indicators, risk assessment or key risk indicators, CSR details, trends or factors like external economic conditions and internal efficiency, etc., as part of the management analysis section of the annual report to meet with the overall objectives of good corporate governance, should be*



left to the discretion of the management. ICWAI should work out a model format in consultation with SEBI. This would align with the findings of IFAC survey on external financial reporting.”

1.1.8 In view of above recommendation, the Ministry of Corporate Affairs vide Companies (Cost Audit Report) Rules, 2011 notified by GSR 430(E) dated 3rd June 2011 introduced “Performance Appraisal Report”.

1.1.9 In terms of above Notification dated 3rd June 2011, from 1st April 2012, every cost auditor is required to submit the Cost Audit Report in three (3) parts as under:

Form I: General Information of the Company

Form II: Cost Audit Report

Form III: Performance Appraisal Report

As per sub-rule (1) of rule 4 of Cost Audit Report Rules, the Performance Appraisal Report, duly authenticated by the cost auditor is to be submitted to the Board/Audit Committee of the company in the Form III and is not required to be filed with the Ministry of Corporate Affairs as a part of Cost Audit Report.

The contents of Performance Appraisal Report may be treated as “Key Performance Indicators” or “Early Warning Systems”.

1.2 Objective and Purpose of Performance Appraisal Report

1.2.1 The objective of Performance Appraisal Report is to bring out efficiency in operations by drawing on sub-optimal operations which can be improved to add value to the company by providing information on key performance indicators, risk assessment, mitigation, fuel/energy efficiencies, R&D expenditure and arm's length pricing of product.

Since the Performance Appraisal Report is used by Management, it is pertinent that the performance appraisal criterion used in the report should be based on verified information. The indicative areas for which performance appraisal report is to be submitted by the Cost Auditor is in the nature of Management Audit. The Management Audit inter-alia focusses all aspects of operations such as waste, inefficiency and excessive costs etc.

1.2.2 The purpose of measuring performance of a company is not only to know how a business is performing but also to enable it to perform in a better way. Therefore, the Performance Appraisal Report (PAR) to Cost Audit Report is to assess the performance of an enterprise so that it can visualize where it stand/belongs & enable it to take remedial/corrective steps to improve it further so that it can better serve its customer, employee, owners & other stake holders.

1.2.3 The performance appraisal enables an enterprise to plan, measure & control its performance according to pre-defined strategy to enhance shareholder value. A well-documented



Performance Appraisal Report will be instrumental for internal & external shareholder in taking informed decision for variety of purpose.

1.3 Contents of Performance Appraisal Report

1.3.1 Although the Cost Audit Report Rules provide indicative areas, more areas may be included or excluded depending upon the size/scale and type of operations, nature of the industry, management requirements, etc. The frequency of this report may be half yearly/annual to be decided by the cost auditor in consultation with the company management. The opinions, observations and suggestions expressed in Performance Appraisal Report should be based on verified data.

1.3.2 The indicative areas provided under FORM III of the Companies (Cost Audit Report) Rules, 2011, are elaborated as under:

1. Capacity Utilization Analysis

The Cost Auditor needs to estimate the impact on costs and profitability, Product-wise, Product Group-wise and Unit-wise taking the following areas into account:

- Under-utilization of Capacities
- Idle Capacities
- Non-Productive Assets
- Trend Analysis
- Opportunity Analysis
- Outsourcing/Sub-Contracting Vs. Internal Capacities
- Plant Break-down hours with impact on productivity, costs and profitability
- Scope of Expansion and likely cost-benefit analysis

While doing this, each plant operation has to be taken if it is a Process Industry and cost centre analysis of utilization has to be done bringing out the down time which can be minimized by controllable factors. This exercise has to be done with reference to Cost Accounting Standard on Determination of Capacity (CAS-2) issued by the Institute and it gives Practical/achievable capacity determination.

For engineering industry, the basis should be cost centre analysis for capacity determination/utilization.

While doing this exercise, shutdown due to imbalancing in sequential operations and other factors should be identified to improve the capacity.

Major reasons for under-utilization of capacity under controllable, e.g preventive maintenance and non-controllable causes, e. g. machine break-down, availability of sunshine/wind in case of the solar/wind energy plant.



Controllable causes should be analysed into internal and external factors. Examples of internal causes are manpower planning, preventive maintenance, plant/ machine scheduling, layout, utility scheduling (peak and non-peak load), critical insurance spares , inventory control (VED analysis).

Examples of external causes are external, e.g. lack of demand, technical obsolescence etc.

Steps are required to be taken to eliminate controllable causes for under-utilization e.g. in case of the power sector, Geographical conditions of the plant also plays the major role.

Check List

- Records in support of calculation of installed capacity.
- Plant utilization percentage for major (Key) machines.
- Product-wise production data as per Central Excise and also as per internal records.
- Machine utilization records, machine-wise to ascertain any imbalance/bottleneck affecting optimum utilization of plant capacity.
- Machine-wise production Records e.g: press shop, weld shop etc. in case of Engineering Industry.
- List of idle/surplus machines and a note on how to make them usable/disposal.
- Statutory directions for capacity utilisation (if any). Few industries impose a ceiling on the capacity such as in the case of Fertiliser Industry by Fertilizer Industry Coordination Committee (FICC), Administrative Support Pricing. The norms are also specified for polluting industries.
- Justification in case of more than 100% utilization of plant capacity.
- Numbers of orders in backlog.

For more details, readers may refer Cost Accounting Standard on Determination of Capacity (CAS-2) issued by the Institute of Cost and Works Accountants of India.

2. Productivity/Efficiency Analysis

The Cost Auditor needs to estimate the impact on costs and profitability, Product-wise, Product Group-wise and Unit-wise taking the following areas into account:

- Production/Operations/Process Cycle Time and Productivity
- Input-Output Analysis compared with Budgets or Standards or Industry Norms
- Conversion Efficiency Analysis
- Cost of wastages in operations

The above exercise would lead to continuous improvement in the method of operation and labour productivity.

The measures of productivity/ efficiency for three factors of production are:



Factor of Production	Measures of productivity/ efficiency
Material	(i) Obtaining higher output for same input. (ii) Obtaining same output with lower input
Labour	(i) Labour hour per unit of product. (ii) Output per man hour (iii) Added value per capita or per rupee of labour cost.
Capital	(i) Physical output per rupee of investment (ii) Value of production per rupee of investment (iii) Value added per rupee of investment.

The Cost Auditor should enquire into the major reasons for loss in efficiency percentage, and corrective action should be taken accordingly.

Input/ output ratio (yield %) should be compared with the standard/industry norms and with previous year. If company is having more units producing same product group, the same should be compared within units also.

Key Performance Indicators (KPIs) should be measured more frequently—

- quality deviations should be monitored and measured in real time;
- operational metrics and schedule compliance should be measured daily;
- metrics that measure assets such as inventory should be measured weekly;
- Stock pile up and storage should be monitored.

Check List

Material:

- Internal Benchmarks like standard consumption e.g. Bill of Materials. External Benchmarks i.e. Industry norms
- Records for consumption of Inputs
- Records for production of Output
- Wastage / losses records including sale returns with reason such as quality problem, late delivery etc.
- Comparative records for previous years.

Labour:

- Records of mandays available and worked.
- Records of workload assignment to production staff.
- Records for manpower deployment.

Machine:

- Machine hours available vis-a-vis its utilisation in normal terms.



Capital:

- Records pertaining to funds obtained for working capital.
- Records pertaining to funds applied in various activities of the company.

3. Utilities/Energy Efficiency Analysis

The Cost Auditor needs to estimate the impact on costs and profitability: Utility-wise, Product-wise, Product Group-wise and Unit-wise taking the following areas into account:

- Utility Productivity compared with Budgets or Standards or Industry Norms
- Input-Output Efficiency – impact on costs and profitability
- Energy Conversion Ratio highlighting wastage & inefficiency
- Energy Consumption Ratio for each product/operation and each product/activity group compared with Budgets or Standards or Industry Norms

A list of common utility/service centres in any industry is given below showing common list of utility/service centres and the measures to be taken for analyzing the performance of the same.

List of utilities	Service/Product	Data to be measured	Unit	Suggested analytical measures
1.a.Power generators	Power to other depts.	Units Produced	Kwh	Unit Per Litre of Fuel
b. Captive power plant		Fuel Consumed	Litre	Kwh Per Unit of Product Kwh Per Unit of Equivalent production.
2.Humidification/A.C plant	Humidification to other depts.	Water consumed	Litre	Water/cubic meter Humidified
		Power consumed	Kwh	Unit in kwh/cubic meter Humidified
		Volume humidified	Cubic feet	Efficiency of the humidification plant <i>(volume humidified/ capacity of plant x 100)</i>
3.Steam Boilers	Steam	Steam Produced	M.T	Steam/Unit of fuel
		Water Consumed	Litre	Steam/unit of product
		Fuel Consumed	M.T	Steam produced/ capacity of boilerX100



4.Compressor	Compressed Air	Power Consumed Compressed Air produced Hours Run/Shift of 8hrs Run	Litre KWH CFM	Unit/Hour CFM Produced/Capacity CFM X100
5.Solvent recovery towers/Plant	Recovery of solvent	Quantity recovered Chemicals used if any Power and/or other utilities	Kg/Litre Kg/Litre KWH/ Others	Chemical consumed/ Litre of recovery Power or other utility/ Litre recovered
6.Workshop/Maintenance	Repairs/ Maintenance	Time spent on Work Down time due to breakdown on other Depts.	Hour/ Minutes Hour/ Minutes	Man Hrs. on Routine or preventive maintenance/ Total Man Hrs.
7.Quality control (QC) /Quality Assurance (QA)		Man Hours on QC Man Hours on QA Number of samples Tested		Man Hours per Sample test
8. Water plant like R.O DM and Softener plants as separate utilities if needed	Provide water for other	Raw Water consumed R.O water produced DM water produced Chemical consumed	Litre Ltr Ltr Ltr	HCL/ Litre of DM water NAOH/Litre of DM water



9.Effluent treatment plant	Treat Effluent	Power consumed	KWH	Power/Litre of effluent treated
		Chemicals consumed	Litre/Kg	Chemical / Litre of effluent treated

Also appraisal on the efficient working of the utility could be ascertained by calculating the overall requirement of the facility and its ratio to the actual quantity of facility provided. This will enable to ascertain the optimum usage of the utility centre and comment on the same by reporting the financial/cost involved in excess to management.

Energy consumption per unit of production should be endeavored to be kept as low as possible. A Standard measure may be referred for industry wise norms. This can be done by taking the capacity utilization for each of the utilities like refrigeration, air-conditioning etc. and improving the utilization of those utilities which are working at sub-optimal levels. Individual utility consumption (in units) per unit of production should be compared with the standard/industry norms and with previous year.

Energy consumption per unit of product in excess of the norms should be treated as abnormal cost and need not be charged to cost of production or the cost of product, reason being to avoid overloading of cost with the energy cost lost.

Check List

- Energy consumption statements daily / monthly / yearly -department wise.
- Type of utilities used—boiler, power (generation and outside purchase) AC plant, DM water treatment plant, Effluent Treatment Plant (ETP)/ STP, Humidification plant, compressed air, waste heat recovery plant etc.
- Log Book maintained for each “Generating Unit”.
- Annual Returns filed with Excise Authorities for energy consumption.
- Individual utility consumption (in units) per unit of production or per machine shift etc.
- Utility generation as well as purchase records e.g. log books-monthly / yearly.
- Reconciliation statement showing generation / purchase quantities duly reconciled with consumption quantities & wastages.
- Such data should also be reconciled with data furnished in Directors Report of the Annual Report.
- Energy Audit Report, if any.

Energy Audit Check List of various areas of utilities is given in Appendix.



4. Key-Costs & Contribution Analysis

The Cost Auditor needs to estimate the impact on costs and profitability: Product-wise, Product Group-wise and Unit-wise taking the following areas into account:

- Key-Expense Ratios vs. Cost of Production / Cost of Sales
- Abnormal & Non-Recurring Costs – impact on profitability
- Key Costs Trend Analysis indicating estimated impact on future profitability
- Cost-effectiveness Analysis: Cost of Operation/Process vs. Benefits
- Cost of Management vs. Net Turnover or Gross Margin or Net Margin
- Cost Variance Analysis vs. Standards or Budgets – impact on profitability
- Volume Variance Analysis vs. Standards or Budgets – impact on profitability
- Marginal Cost and Contribution Analysis for each product/activity, each product/activity group, each market segment, each customer segment, etc.
- Service Department-wise cost trends (element-wise)

The above analysis should take into account, activity wise direct cost and find solutions to improve the same.

5. Product/Service Profitability Analysis

The Cost Auditor should give the analysis for key products/ services only for the following:

- Turnover Analysis, %age to Total
- Profitability Analysis, %age to Total
- Break-Even Analysis, in case of multi products, Multiple Break-Even Analysis
- Capital Employed (CE), %age to Total CE
- Gross Margin, %age to Total
- Gross Margin/Turnover, %age to Total
- Gross Margin/Capital Employed, %age to Total
- Net Margin/Capital Employed, %age to Total
- Net Margin/Turnover, %age to Total,
- Net Margin/Capital Employed, %age to Total,
- Foreign Exchange Variation Impact
- Derivatives Impact, etc.

Product-wise contribution analysis of newly introduced products v/s product dropped/replaced may be done. Justification for lower contribution of newly introduced products should also be provided, if required.



Inter-firm comparison of product-wise sale price with best of industry competitor and Justification for lower sales price may be provided, if required.

In undertaking Product/Service Profitability Analysis exercise, the direct and indirect cost for each of the products & services should be determined as near to the incidence of cost.

Sale Price is market controlled over which the company may not have any control and therefore the analysis of cost becomes necessary for the purpose of internal control.

Value analysis of process and product may be undertaken to reduce cost. Scope for reverse engineering technique to compare with competitors' product and scope for cost reduction thereof may be explored by the cost auditor.

Check List (For Key-Costs & Contribution Analysis and Product/Service Profitability Analysis)

- Product –wise/Product Group wise Cost statements
- Cost centre-wise expenses.
- GL wise expenses.
- Annual Report

6. Market/Customer Profitability Analysis

Profitability analysis for the key products/services should be carried out market-wise (export, domestic, government supply etc.) and customer-wise (distribution channel wise —distributor, wholesaler, retailer, direct bulk sale, franchise sale etc) and profitability/ contribution analysis of customer country-wise/ invoice-wise should be carried out. Reasons for lower profitability v/s expected profitability and corrective action taken may be ascertained and steps required to replace less profitable segment by higher profitable segment may be undertaken. In addition to above, the cost auditor needs to carry out the following analysis also:

- Market Distribution– Indigenous vs. Overseas broken into smaller geographical divisions/segments
- Customer Distribution – in order of percentage share in each product/activity and in each product/activity group
- Indicate cost of servicing each market/customer and its efficiency in terms of business, contributions, gross/net margins, scope of sustainability, etc.
- Indicate cost of each supply chain vs. benefits
- Indicate impact of Foreign Trade Agreements (FTAs) and Dumping on each product, product-group or each market/customer.



The analysis for market segment, customer wise, and pricing adopted for each of the segments with discounts will reveal profitability of each of the segments, and pricing adopted for sales. This analysis will also help management to restructure marketing strategies and decide where expenditure has to be incurred on advertisement, sales promotion etc. to give thrust on weak areas and low sales. The attempt should be to bring out revenue Vis-a-Vis Costs in relation to multiple markets.

Check List

- Market segment-wise sales records - location wise / customer wise.
- Market segment-wise profitability data.
- Records of repeat orders and new customers added during the year.
- Records of Customer Complaints.
- Records of Goods returned due to expiry/product defects/ delay in executing orders, etc.
- Records of Warranties and after-sales service cost.

7. Working Capital & Inventory Management Analysis

Working Capital should be determined for each product group, sequential activity and, any additional load due to reasons which can be controlled like excess inventory delay in realization or heavy incidence of cost of operations should be brought to the notice of the management. In addition, the cost auditor needs to carry out the following analysis also:

- Movement of Debtors vs. Credit Sales
- Days Debtors Analysis – impact on cash flow and profitability
- Overseas Debtors – impact of likely Foreign Exchange Variations
- Movement of Creditors vs. Credit Purchases
- Days Creditors Analysis – impact on supplies and product-line
- Inventory Turnover
- Cash Flow Turnover – impact on profitability

Latest inventory management techniques—ABC analysis, Just in Time (JIT), disposal of slow-moving and nonmoving inventory should be applied.

Para 9 'Financial Position and Ratio Analysis' of the Annexure to the Cost Audit Report will be useful for the preparation of this para.

Loan Rates for Term Loan and Working Capital loan may be optimized. Similarly, Treasury/FOREX management—exchange rate optimization and use of F&O instruments may be exercised. Prepayment to suppliers and obtaining maximum discounts in case of availability of unused Cash Credit limit and other surplus funds would be prudent.



Check List

- Physical inventory records.
- Inventory valuation records.
- Inventory ageing reports.
- Papers relating to Working capital loan obtained and invested including the average cost for borrowing of term loan and working capital loan.
- Statements of Debtors / Creditors ageing.
- Records for investment of surplus funds, if any.

8. Manpower Analysis

The analysis should be for function-wise, Unit-wise, Product/Activity-wise, Product/Activity Group-wise and should take into account the controllable factors like absenteeism, skill of the workers, to achieve optimal levels. The company should have continuous skill development program to reduce incidence of man power cost on an overall basis. The following analysis may assist the cost auditor to provide the desired details:

- Manpower Productivity vs. Returns compared with Budgets or Standards or Industry Norms
- Manpower Pyramid – Ratio of Top Management to Middle Management to Officers to Workmen to Contract Labour
- Idle Man-hours to Total Man-hours with reason-wise analysis and impact on productivity, costs and profitability
- Manpower Absenteeism Vs. Total paid Man-days
- Cost of Manpower Pyramid Analysis – broken into broad categories (including contract labour)
- Cost of Training to Total Employee Cost and Time in training (Days/year).
- Employee turnover.

The above will be worth analyzing, provided manpower cost is significant. Analysis of personnel utilisation and surplus, if any should be carried out.

Check List

- Total mandays Available.
- Mandays worked.
- Idle mandays with reasons.
- Manpower deployment records segregating into permanent, temporary/ contract labour etc.



- Records of activities outsourced—securities, maintenance, housekeeping, transportation, canteen, warehousing, material handling, production etc.

9. Impact of IFRS on the Cost Structure, Cash-Flows and Profitability Cash-Flows and Profitability

The Cost Auditor should give the impact of fair value on cost of product/activity, product/activity group element wise as follows:

- Due to change in the recognition of Incomes
- Due to change in the recognition of Expenses
- Due to change in the valuation of Assets
- Due to change in the valuation of Liabilities
- Due to change in the valuation of Inventories
- Due to change in the valuation of Future Financial Obligations (Futures, Derivatives, Foreign Exchange Contracts, Hedge Operations)
- Due to change in the treatment of either Incomes or Expenses
- Due to change in the treatment of Intangible Assets or Liabilities

Check List

Since IFRS has not become effective so far, this aspect has been dealt with in brief only.

- The steps taken by the company for first time introduction of IFRS, where it may be applicable in near future.
- Significant changes in accounting policies and consequent impact on profit and loss account.
- Impact on assets and liabilities due to fair valuations incorporated in financial statements including intangible assets.
- Impact on depreciation.
- Impact on cost of inventories due to fair value adoption or realizable value against cost of inventory as required under Cost Accounting Records Rules and Cost Audit Report Rules, 2011. Recognition of expenses and write-offs or crediting back.
- Impact on work-in-progress, especially where contracts require long time to execute an order like engineering industry/construction contracts etc — provision for expected losses.
- Impact on borrowing costs due to provisions in complying with IFRS.
- Impact on government grants and deferred payment assistance from authorities like sales tax/VAT deferral, likely interest costs.
- Provisions for contingent events and non-recognition of contingent assets.
- Impact of future liability/service costs for customer warranties/ incentives/ returns after expiry bad debts, etc.



- Fair valuation of leases.
- Insurance claims.
- Fair valuation of investments and consequent impairment of assets.
- Impact on valuation of non-current assets and discontinued operations.
- Fair value measurement of joint ventures/ collaborations and partnerships.
- Remuneration to employees, especially stock options/retirement schemes/ incentives schemes, etc.
- Impact on direct and indirect taxes on inventories or revenues.
- Financial impact on tax liability, Minimum Alternate Tax (MAT), carried forward stocks.
- Impact on related party disclosures, particularly for long term contracts.
- Fair value of revenue, barter of goods, elimination of finance costs from revenue. Sale under repurchase agreement/consignment sales.
- Serviced sector contracts —special financial costs/revenue
- Reconciliation of Balance Sheet and Profit and Loss Account due to impact brought about by IFRS.

10. Application of Management Accounting Tools

Use of modern Management Accounting Tools and Techniques such as Activity Based Costing, Total Cost Management, Target Costing, Lifecycle Costing, Quality Costing, Value Engineering, Supply Chain Management, Balanced Scorecard, Performance Pyramid, Lean Accounting, Theory of Constraints, Throughput Accounting, Kaizen Costing, Customer Valuation, Strategic Cost Management, Six Sigma, Budgetary Control System etc. and benefits availed, if any.

The Break-Even Point Analysis for each activity/segment & product group will reveal, the importance of the product continuation, with reference to alternate products, based on market conditions.

Check List

Details of the management accounting techniques are in vogue in the company i.e. Activity Based Costing, Total Cost Management, Balance Score Card, Six Sigma, Value Analysis/ Value Engineering, Reverse Engineering, Budgetary Control System, Costing MIS and their effectiveness etc.

8.4 Additional Areas for Performance Appraisal

In Performance Appraisal Report the following areas may also be included depending on the size, nature and activities of the Company:

11. Cost Centres / Cost Objects

The Cost Auditor should comment on the following areas in respect of cost centres and cost objects:



- Approach followed for identification of, cost objects, cost centers and sub-cost centers
- Adequacy to the size, scale and type of operations
- Effectiveness of the system followed for collection of costs and revenues
- Cost objects requiring separate cost centers and/or sub-cost centers

12. Budgetary System

The Cost Auditor should comment on the following areas with respect to Budget System:

- Adequacy to the size, scale and type of operations
- Frequency of Review
- Linkage of Cost Information
- Extent of Variance Analysis

13. Management Information System (MIS)

The Cost Auditor should comment on the following areas with Management Information System (MIS):

- Coverage of cost information
- Analysis and Review linked to operational decision making

14. Inventory Analysis

The Cost Auditor should comment on the following areas on Inventory Analysis:

- Basis of Valuation and Consistency
- Turnover efficiency: Cost of Goods Sold/Average Inventory
- Return on Inventory: Gross Margin/Average Inventory, Net Margin/Average Inventory
- Non Moving and Slow-moving or dead inventory
- ABC Analysis
- Period in term of inventory holding
- Policy for Insurance Spares
- Inventory Policy due to changes in technology, changes in production process, obsolescence, etc.

15. Inputs price volatility

The Cost Auditor should analyze inputs price volatility for key inputs only considering the following:

- Name, Whether Indigenous/Imported, Total Value of Consumption, %age to Total Inputs, 52-week high, low and company average,
- Foreign Exchange Variation Impact,
- Derivatives Impact, etc.



16. Price-Sensitivity Analysis

To check the Price sensitivity, the cost auditor may consider the following factors for analysis and then based on his analysis incorporate his findings in his Performance Appraisal Report:

- Upto 2%-5% variation in key-input's prices (cost auditor may analyze the variation in the range from 2% to 5% depending on volatility of inputs on final products).
- Upto 2%-5% variation in key-output's prices (cost auditor may analyze variation in the range from 2% to 5% for the final products having major impact on Profitability).

17. Environmental, Sustainability and Corporate Social Responsibility (CSR) Analysis

The Environmental, sustainability and CSR analysis is necessary due to importance attached to the subject. Now focus of the Company on sustainability while earning the desired profitability. As environmental issues and their related costs are growing, the cost auditor may like to incorporate the impact of environmental, sustainability and CSR costs into financial decisions and in his Performance Appraisal Report.

The Cost Auditor should give the impact of environmental, sustainability and CSR costs Product Group-wise, Unit-wise and Company as a whole considering the following points whichever applicable:

- Actual Pollution Parameters compared with Regulatory (National or International) or Industry Norms
- Waste and Emission Control Costs vs. Cost of Production
- Preventive and other Environmental Management Costs vs. Cost of Production
- Research and Development Costs relating to Environmental Issues vs. Cost of Production
- Domain Areas of Environment Affected (Air & Climate, Water, Soil, Ground Water, Noise & Vibration, Biodiversity & Landscape, Radiation)
- Usage of Renewable Energy vs. Total Energy (units and value)
- Usage of Non-Renewable Energy vs. Total Energy (units and value)
- Ratio of Total Exports to Total Imports
- Consumption of Indigenous Resources vs. Total Consumption
- Employment of Males vs. Female Employees
- Costs of Employees on Training, Welfare, Health & Safety, etc. (for Male and Female Employees separately)
- Payments made to the Government (taxes, duties, etc.) vs. Total Turnover
- Donations/Contributions for Community Development vs. Total Turnover, Gross Margin and Net Margin

18. Risk Mapping Analysis

The Cost Auditor should attempt the risk mapping of various activities of the Company having the impact on costs, profitability and sustainability by way of Ratio Analysis, Measuring the Concentration,



Trend Analysis and Benchmarking in respect of the following:

- Product/Service Lifecycle or Failure
- Product Development
- Technological Changes
- Compliance to Regulatory Requirements – Actions by Regulators
- Market Changes & Customer Satisfaction
- Competition from Existing/New Players
- Trademark/Brand Name Erosion
- Outsourcing
- Natural catastrophes and Environmental Factors
- Exchange Rate Movements
- Volume of business with a particular customer, supplier, lender, grantor or contributor
- Revenue from particular products or services
- Sources of supply of materials used in operations
- Market or geographic area within which operations conducted
- Price war from Competitors
- Obsolescence/Shrinkage

19. Future Financial Obligations

The Cost Auditor may work out the impact on costs and profitability of future financial obligations in respect of the following options:

- Futures
- Derivatives
- Foreign Exchange Contracts
- Hedge Operations etc.

20. Initial Public Offers (IPOs) / Follow-on Public Offers (FPOs)

If Company has gone for IPOs or/and FPOs for current year, the cost auditor may give the following analysis in Performance Appraisal Report:

- Utilization of Funds vs. Projected in the Offer Document;
- Achievement of Key Targets vs. Planned

1.5 Miscellaneous Records which may be required by cost auditor

For the purpose of cost audit and giving the Performance Appraisal Report, the Cost Auditor should obtain the following records:

- Annual Report.



- Columnar Profit & Loss aggregated to the company as whole figures.
- MIS Reports
- List of products manufactured, Classified in Product Groups and sold by the company.
- Returns pertaining to production usage of material and Energy filed with various government departments like Form 8 filed with the Ministry of Agriculture in case of Sugar Industry.
- Excise/VAT, Service Tax and other taxes Records.
- Cost Accounting Policy adopted by the Company.
- Cost Accounting System followed in the Company
- Internal Audit Reports for cost records and financial records.
- A Note on ERP/ SAP System followed by the Company
- Capital/Revenue Budgets.

1.6 Appendix -Energy Audit

Check List

(1) Power

- Improve power factor by installing capacitors to reduce KVA demand charges and also line losses within plant.
- Improvement of power factor in the range of 0.96 to unity.
- Avoid repeated rewinding of motors.
- Replace under-loaded/overloaded motors with proper size motors & replace the motors with energy efficiency motors.
- Optimize the tariff structure with utility supplier.
- Shift loads to off-peak times, if possible.
- Minimize maximum demand by tripping loads through a demand controller.
- Stagger start-up times for equipment with large starting currents to minimize load peaking.
- Relocate transformers close to main loads.
- Export power to grid, if you have any surplus in your captive generation

(2) DG Set

- Maintain diesel engines regularly.
- A faulty nozzle increases fuel consumption.



- Measure fuel consumption per KWH of electricity generated regularly.
- Use waste heat to generate steam/hot water/ power an absorption chiller or preheat process or utility feeds.
- Clean air filters regularly.

(3) Illumination

- Use of electronic ballast in place of conventional choke.
- Use of CFL lamp in place of GLS lamp.
- Clean the lamps & fixtures regularly.
- Use of 36W tubelight instead of 40 W tubelight.
- Use of sodium vapour lamps for area lighting in place of mercury vapour lamps.
- Change exit signs from incandescent to LED.
- Provide more transparent sheet instead of asbestos sheets to use natural light.
- Install energy saver for reducing the lighting load.

(4) Fuel – Coal and Oil

- Prepare a hard ground for stacking coal and avoid carpet loss.
- Sprinkle water on the coal before use to make it moist.
- Substitute coal by PET coke or lignite or baggas to reduce the effective cost of steam/power.
- Quality (calorific value) and size of coal should be tested regularly.
- Cost benefit analysis of various types of oil— Furnace Oil, LSHS Oil, HS Oil, LD Oil etc. should be evaluated from time to time for using as fuel for boiler and DG set.

(5) Boiler for Steam

- Use only treated water in boilers.
- Stop steam leakage.
- Maintain steam pipe insulation.
- Clean burners, nozzles, strainers, etc.
- Inspect oil heaters for proper oil temperature.
- Inspect for scale and sediment on the water-side.
- Add an economizer to preheat boiler feed water using exhaust heat.
- Ensure condensate is returned or re-used in the process.



- Reduce hot water wastage to drain.
- Preheat boiler feed-water.
- Inspect steam traps regularly and repair malfunctioning traps promptly.
- Use waste steam for water heating.
- Cleaning of tubes should be carried out periodically.

(6) Water

- Consider the installation of a thermal solar system for warm water for use in canteen etc.
- Use of water harvesting system.

(7) Air Conditioning

- Use of double doors, automatic door-closers, air curtains, double glazed windows, polyester sun films etc. reduces heat ingress and air-conditioning load of buildings.
- Consider reducing ceiling heights.

(8) Cooling Towers

- Replacement of inefficient aluminum or fabricated steel fans by moulded FRP fans with aerofoil designs.
- Instal automatic ON-OFF switching of cooling tower fans.
- Turn off unnecessary cooling tower fans when loads are reduced.

(9) Room Air Conditioners

- One will use 3 to 5 percent less energy for each degree air conditioner is set above 22°C (71.5°F), so set the thermostat of room air conditioner at 25°C (77°F) to provide the most comfort at the least cost.
- Using ceiling or room fans allows you to set the thermostat higher because the air movement will cool the room.
- A good air conditioner will cool and dehumidify a room in about 30 minutes, so use a timer and leave the unit off for some time.
- Keep doors to air-conditioned rooms closed as often as possible.
- Clean the air-conditioner filter every month. A dirty air filter reduces airflow and may damage the unit. Clean filters enable the unit to cool down quickly and use less energy.

(10) Compressed Air



- Change the oil filter regularly.
- Stop use of compressed air for floor/machine cleaning.
- Check for compressed air leakage.

(11) Furnace

- Recover & utilize waste heat from furnace flue gas for preheating of combustion air.
- Control excess air in furnaces.
- Reduce heat losses through furnace openings.
- Improve insulation if the surface temperature exceeds 200°C above ambient.
- Proper design of lids of melting furnaces and training of operators to close lids.
- Match the load to the furnace capacity.

(12) Computers

- Turn off your home office equipment when not in use. A computer that runs 24 hours a day, for instance, uses more power than an energy-efficient refrigerator.
- If your computer must be left on, turn off the monitor; this device alone uses more than half the system's energy.
- Setting computers, monitors, and copiers to use sleep-mode when not in use helps cut energy costs by approximately 40%.
- Battery chargers, such as those for laptops, cell phones and digital cameras draw power whenever they are plugged in and are very inefficient. Pull the plug and save.
- Screen savers save computer screens, not energy. Start-ups and shutdowns do not use any extra energy, nor are they hard on your computer components. In fact, shutting computers down when you are finished using them actually reduces system wear—and saves energy.

References

- Bureau of Energy Efficiency, New Delhi.
- PCRA—Energy Audit.

