

## ***Query No. 14***

***Subject: Accounting treatment of energy generation during trial run and used internally in manufacturing of final products.<sup>1</sup>***

### **A. Facts of the Case**

1. A Company (hereinafter referred to as ‘the Company’) is a Public Sector Undertaking. It has two manufacturing units, one at city A and another at city B; and is in the business of manufacture and trading of fertilizers and chemicals. The Company follows Indian Accounting Standards (Ind ASs), as notified under section 133 of the Companies Act, 2013. Both the units manufacture industrial chemicals and fertilizers. The manufacturing process of final products involves purchase and consumption of raw materials, utilities and self-generated utilities and intermediaries. Power, steam and water are few of the major utilities used in the manufacturing process of chemicals and fertilizers. The Company has its own boilers to produce steam, which is captively consumed as a utility in intermediary/end products.

2. To augment its power and steam requirements and as a cost saving measure, a scheme was conceived of installing Gas Turbine Generators (GTG) and Heat Recovery Steam Generators (HRSG) at city A. The contract was awarded on lump sum turn key (LSTK) basis for installing Gas Turbine Generators (GTG) and Heat Recovery Steam Generators (HRSG) plant with capacities of GTG as 2X25 megawatt hour (MWH) and HRSG as 2X65 metric tonnes per hour (MTPH) after duly scrutinising the applications and with due approvals from the competent authority at an estimated total project cost of Rs. 426.72 crore.

3. The process entails running the GTG-HRSG plants in co-generation mode. Co-generation is also known as combined heat and power and it is the most efficient way of utilising fuel. A co-generation system drives a gas turbine by using primary energy (fuel), and produces multiple types of secondary energy (in the said instance, electricity is generated through the Gas Generator Turbine and process steam through HRSG) continuously. A HRSG is a kind of heat exchanger that recovers heat/energy from the high temperature exhaust gases of a gas turbine. The heat is recovered in the form of steam which is served as the source of energy to drive downstream plant turbines such as, Synthesis Gas Turbines, PAC and CO<sub>2</sub> turbines of Ammonia-V Plant and other plants in city A.

4. The querist has stated that the project is currently under commissioning and testing phase, and is expected to commission in next 3 months. The generated power and steam are meant only for captive consumption. The commissioning activities entail:

- (i) HRSG Lit-up: First Initial Lit-up (burner firing) to check the air and firing systems, interlocks, individual equipments running etc.
- (ii) Steam Blowing: The purpose of steam line blowing is to remove pipe slag, weld bead deposits, Silica removal and other foreign material from the main steam systems prior to turbine operation.
- (iii) Safety Valve Floating: The objective of this procedure is to check setting of the safety valves to the designed set pressure before allowing the boiler to go for commercial operation as per regulator.

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<sup>1</sup> Opinion finalised by the Committee on 15.7.2022.

Subsequently, the plant is tested for continuous operations as envisaged.

5. The querist has further stated that during the commissioning and testing phase of this project, some units of power and steam have been generated from the said plants as trial run generation. In accordance with Indian Accounting Standard (Ind AS) 16, 'Property, Plant and Equipment', the commissioning expenses being directly attributable to the project have been recognised under Capital Work in Progress (CWIP) amounting to Rs. 45.52 crore during the half year ended 30<sup>th</sup> September 2021. However, since the steam and power generated during commissioning have significant commercial value and since these have been internally consumed, the Company has charged off the value of the trial run production to the Statement of Profit and Loss and only net commissioning expenses have been included under Capital Work in Progress.

6. The value of power and steam generated and internally consumed, during the testing phase of the said plants has been derived considering the cost of purchased power and steam generated from boilers, which the Company would have incurred. Accordingly, an amount of Rs. 25.77 crore has been charged off to the Statement of Profit and Loss with corresponding credit to Capital Work in Progress and thus net expenditure of Rs. 19.75 crore has been included under Capital Work in Progress. A suitable disclosure of this fact has been made in the results for the period ending 30<sup>th</sup> September 2021, along with a statement that this matter is being referred for an Opinion.

7. There's an alternate view, that while the Company has rightly recognised the commissioning expenses being directly attributable to the project under Capital Work in Progress, the Company's treatment with respect to amount credited to CWIP for the value of trial run generations and internally consumed is not in accordance with Indian Accounting Standard (Ind AS) 16, 'Property, Plant and Equipment' read with Ind AS 115, 'Revenue from Contracts with Customers'. The cost of commissioning after deduction of net proceeds from sale of any items produced can be included in the cost of Property, Plant and Equipment (PPE), only when such sale meets the recognition criteria as prescribed in Ind AS 115. As per this view, in the given context, there is no contract of sale in the absence of any customer and hence, such credit to CWIP is inappropriate.

8. As per the view adopted in quarterly reporting, as these generated power and steam in the commissioning phase (and for which the cost of water, power and steam utilised in the trial run has been included in computing the aggregate trial production cost of Rs. 45.52 crore) have been internally consumed in the process of manufacture and the output generated has commercial significance, not assigning a value for its consumption in its end products is not in accordance with Ind AS 2, which would result in undervaluation of cost of such inventories where these have been consumed. Further, the Company is of the view that even if no trial run generation has happened, costs for such utilities would have been incurred and used in the products for regular manufacturing process.

9. Also, the querist has brought to the notice of the Committee that the Company has followed similar accounting treatment for trial run generated utilities in the past after Ind AS being applicable, which is summarised as below:

Value of generated utilities captively consumed, credited to CWIP and charged off to the Statement of Profit and Loss are as follows:

Year	Project Name	Credit to CWIP (Rs. in crore)	Revenue (Rs. in crore)	Total Assets (Rs. in crore)
2017-18	GTG city B	15.95	7281.96	6323.55
2018-19	-----	-----	8885.47	8920.49
2019-20	STP Project	0.01	9697.95	10291.38
2020-21	GTG city A	13.68	8281.18	7626.18

Considering the scale of the Company's operations, any adjustment on account of the above, in the opinion of the management, does not have material impact on its financial statements.

## B. Query

10. On the basis of above, the querist has sought the opinion of the Expert Advisory Committee on the following issues:

- (a) Whether the Company is correct in crediting CWIP with value of utilities internally generated during trial run and consumed in ongoing commercial production (in the above case, Rs. 25.77 crore) and consequently, charging off the said amount to the Statement of Profit and Loss.
- (b) Whether the method of determining the valuation of utilities so generated (considering the cost of purchased power and steam generated) is in accordance with the requirements of applicable Ind AS, as the utilities are captively consumed and there is no intention of such power or steam being sold; or some alternate methodology is suggested.
- (c) In the event the Company's treatment is not in accordance with the above, whether the Company will be required to correct its financial statements as per Ind AS 8, 'Accounting Policies, Changes in Accounting Estimates and Errors' for transactions done prior to financial year (F.Y.) 2021-22, considering the same being immaterial in nature.

## C. Points considered by the Committee

11. The Committee notes that the basic issue raised in the query relates to accounting treatment of utilities internally generated during trial run and consumed in manufacturing of finished products. The Committee has, therefore, considered only this issue and has not examined any other issue that may arise from the Facts of the Case, such as, accounting for purchase and consumption of raw materials and other utilities, whether the value of items generated during trial run and internally consumed or the adjustments, if any, required on the basis of the treatment suggested in the opinion hereinafter are material or not as per the requirements of Ind AS 1, 'Presentation of Financial Statements', determination of the stage or point at which the plant/project can be considered to be in the location and condition necessary for it to be capable of operating in the manner intended by management as per the requirements of Ind AS 16, etc. Further, the Accounting Standards referred hereinafter are Indian Accounting Standards, notified under the Companies (Indian Accounting Standards) Rules, 2015, as amended/revised from time to time. The opinion, expressed hereinafter, is purely from accounting perspective and not from the perspective of application or compliance of requirements of GST enactments, Income-tax Act or any other applicable legal requirements. Furthermore, since the query has been raised in the context of financial year

2021-22, requirements of Indian Accounting Standards applicable for such financial year have been taken into consideration while expressing the Opinion hereinafter.

12. In the context of the issue raised, the Committee notes that Ind AS 16, 'Property, Plant and Equipment' states the following:

**“Elements of cost**

16 The cost of an item of property, plant and equipment comprises:

- (a) its purchase price, including import duties and non-refundable purchase taxes, after deducting trade discounts and rebates.
- (b) any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management.
- (c) the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located, the obligation for which an entity incurs either when the item is acquired or as a consequence of having used the item during a particular period for purposes other than to produce inventories during that period.

17 Examples of directly attributable costs are:

- (a) costs of employee benefits (as defined in Ind AS 19, *Employee Benefits*) arising directly from the construction or acquisition of the item of property, plant and equipment;
- (b) costs of site preparation;
- (c) initial delivery and handling costs;
- (d) installation and assembly costs;
- (e) *costs of testing whether the asset is functioning properly, after deducting the net proceeds from selling any items produced while bringing the asset to that location and condition (such as samples produced when testing equipment)<sup>2</sup>; and*
- (f) professional fees.”

(Emphasis supplied by the Committee)

From the above, the Committee notes that paragraph 16 of Ind AS 16 requires that any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management should be included as the cost of an item of property, plant and equipment (PPE). Further, as per paragraph 17(e) of Ind AS 16, costs of testing whether the asset is functioning properly, after deducting the net proceeds from selling any items produced while bringing the asset to that location and condition (such as samples produced when testing equipment), is an example of directly attributable costs.

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<sup>2</sup> This sub-paragraph has been subsequently revised through the Companies (Indian Accounting Standards) Amendment Rules, 2022, notified vide Notification No. G.S.R 255(E) dated 23<sup>rd</sup> March, 2022 which came into force with effect from April 1, 2022.

The Committee notes that in the extant case, it appears from the Facts of the Case that the expenses incurred during the commissioning and testing phase (viz. checking air and firing systems, interlocks, individual equipment running, removal of foreign material from main steam, checking settings of safety valves, test for continuous operations, etc.) are in the nature of *costs of testing the functioning of the asset* (viz., GTG-HRSG plant) and therefore, are costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management. Therefore, these expenses/costs should be capitalised as the cost of GTG-HRSG plant.

Further, the Committee notes that paragraph 17(e) requires that while capitalising the costs of testing whether the asset is functioning properly, any *net proceeds from selling* any items produced while bringing the asset to that location and condition (such as samples produced when testing equipment) should be deducted.

The Committee notes from the Facts of the Case that the value of power and steam generated during the testing phase of the said plants and internally consumed has been derived considering the cost of purchased power and steam, which the Company *would have incurred* and the same has been charged off to the Statement of Profit and Loss with a corresponding credit to Capital Work in Progress.

The Committee, considering the requirements of paragraph 17(e), is of the view that internal transfer cannot be considered as sale as there is no transfer of ‘control’ over the items produced during the testing phase/stage and also there is no sale proceeds from the point of view of the entity as a whole. The Committee is of the view that crediting the CWIP with the derived value of sale proceeds when there is no sale, but only an internal consumption will lead to booking of internally generated income by the entity, which is prohibited under the Indian Accounting Standards framework.

13. The Committee further notes that paragraph 4.69 of the ‘Conceptual Framework for Financial Reporting under Indian Accounting Standards (Ind AS)’, issued by the Institute of Chartered Accountants of India (ICAI), inter alia, states that expenses are either decreases in assets, or increases in liabilities, that result in decreases in equity. However, internal transfers do not result into any increase in liabilities or decrease in assets, for example, in terms of cash/bank balances or another asset (as no transfer of resources outside the entity is involved) and therefore, should not be recognised as an expense in the Statement of Profit and Loss.

The Committee is further of the view that the Statement of Profit and Loss of an entity is prepared to reflect its final operating results pertaining to the relevant accounting period. In view of this, the internal divisional transactions should not be reflected in the Statement of Profit and Loss of the entity. The internal transfers may be recorded by keeping divisional accounts or in internal/ management reporting.

14. Since, in the extant case, treatment accorded by the Company is not in line with the accounting treatment discussed above, the Committee is of the view that the same is a ‘prior period error’ as per the following requirements of Ind AS 8, ‘Accounting Policies, Changes in Accounting Estimates and Errors’:

**“The term “Material”, used in this Standard shall have the same meaning as assigned to it in paragraph 7 of Ind AS 1.”**

***“Prior period errors are omissions from, and misstatements in, the entity’s financial statements for one or more prior periods arising from a failure to use, or misuse of, reliable information that:***

- (a) was available when financial statements for those periods were approved for issue; and**
- (b) could reasonably be expected to have been obtained and taken into account in the preparation and presentation of those financial statements.**

**Such errors include the effects of mathematical mistakes, mistakes in applying accounting policies, oversights or misinterpretations of facts, and fraud.”**

***“Retrospective restatement is correcting the recognition, measurement and disclosure of amounts of elements of financial statements as if a prior period error had never occurred.”***

#### **“Errors**

- 41 Errors can arise in respect of the recognition, measurement, presentation or disclosure of elements of financial statements. Financial statements do not comply with Ind ASs if they contain either material errors or immaterial errors made intentionally to achieve a particular presentation of an entity’s financial position, financial performance or cash flows. Potential current period errors discovered in that period are corrected before the financial statements are approved for issue. However, material errors are sometimes not discovered until a subsequent period, and these prior period errors are corrected in the comparative information presented in the financial statements for that subsequent period (see paragraphs 42–47).
- 42 **Subject to paragraph 43, an entity shall correct material prior period errors retrospectively in the first set of financial statements approved for issue after their discovery by:**
- (a) restating the comparative amounts for the prior period(s) presented in which the error occurred; or**
  - (b) if the error occurred before the earliest prior period presented, restating the opening balances of assets, liabilities and equity for the earliest prior period presented.**

#### **Limitations on retrospective restatement**

- 43 **A prior period error shall be corrected by retrospective restatement except to the extent that it is impracticable to determine either the period-specific effects or the cumulative effect of the error.**
- 44 **When it is impracticable to determine the period-specific effects of an error on comparative information for one or more prior periods presented, the entity shall restate the opening balances of assets, liabilities and equity for the earliest period for which retrospective restatement is practicable (which may be the current period).**

- 45 **When it is impracticable to determine the cumulative effect, at the beginning of the current period, of an error on all prior periods, the entity shall restate the comparative information to correct the error prospectively from the earliest date practicable.**
- 46 The correction of a prior period error is excluded from profit or loss for the period in which the error is discovered. Any information presented about prior periods, including any historical summaries of financial data, is restated as far back as is practicable.”

**“Disclosure of prior period errors**

- 49 **In applying paragraph 42, an entity shall disclose the following:**
- (a) **the nature of the prior period error;**
  - (b) **for each prior period presented, to the extent practicable, the amount of the correction:**
    - (i) **for each financial statement line item affected; and**
    - (ii) **if Ind AS 33 applies to the entity, for basic and diluted earnings per share;**
  - (c) **the amount of the correction at the beginning of the earliest prior period presented; and**
  - (d) **if retrospective restatement is impracticable for a particular prior period, the circumstances that led to the existence of that condition and a description of how and from when the error has been corrected.**

**Financial statements of subsequent periods need not repeat these disclosures.”**

From the above, the Committee notes that the financial statements do not comply with Ind ASs if they contain either material error or immaterial error made intentionally to achieve a particular presentation of an entity’s financial position, financial performance or cash flows. Thus, once such error(s) is (are) discovered by the Company, the same should be rectified in the reporting period in which this (these) are discovered by retrospective restatement as per paragraphs 42 to 49 of Ind AS 8. However, whether the prior period errors are material or not should be determined by the Company considering the requirements of Ind AS 1, ‘Presentation of Financial Statements’ in its specific facts and circumstances.

**D. Opinion**

15. On the basis of the above, the Committee is of the following opinion on the issues raised in paragraph 10 above:

- (a) No, the Company is not correct in crediting CWIP with the value of utilities internally generated during trial run phase and consumed in ongoing commercial production and charging off the said amount to the Statement of Profit and Loss, as discussed in paragraphs 12 and 13 above.
- (b) In view of (a) above, answer to this question does not arise.

- (c) The financial statements do not comply with Ind ASs if they contain either material error or immaterial error made intentionally to achieve a particular presentation of an entity's financial position, financial performance or cash flows. Thus, once such error(s) is(are) discovered, the Company should rectify the same by retrospective restatement as per paragraphs 42 to 49 of Ind AS 8, as discussed in paragraph 14 above.
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