Appropriateness of creation of provision for scheduled maintenance and accounting treatmentof spares under an operation and maintenance agreement

The following is the brief version of an opinion given by the Expert Advisory Committee of the Institute in response to a query sent by a member. This is published for the information of readers.

A. Facts of the Case

1. A company is incorporated under the Companies Act, 1956, to provide operation and maintenance (O&M) services to the power generating plants in India. It has entered into an Operations and Maintenance (O&M) Agreement with a power generating company ('the generating company' or 'the owner') to operate and maintain the power plant owned by the generating company. This O&M Agreement is for a period of 15 years from March 2001.

2. The owner owns a 105MW liquid fuel-based power plant in Tamil Nadu. It has entered into a Power Purchase Agreement (PPA) with the Tamil Nadu State Electricity Board (TNEB) for sale of the electricity generated. This PPA is also valid for a period of 15 years. The owner commenced commercial production in March 2001. The operation and maintenance of the plant is undertaken by the company under the terms of the O&M Agreement.

3. The querist has summarised the key terms of the O&M Agreement as below:

(i) The company shall perform all day-to-day operation and maintenance services of the plant owned by the owner in a prudent and efficient manner and in accordance with the manufacturer's and systems designer's specifications and prudent utility practices. The owner shall supply the fuel required for the operations.

Expert Advisory Committee

(ii) The company shall procure all spare parts, overhaul parts, tools, equipments, consumables, water and supplies required to operate and maintain the plant in accordance with prudent utility practices and shall use internationally accepted maintenance and operation practices to ensure that the plant be kept at all times in a prudent operating condition.

(iii) The owner shall pay a fixed amount as fee to the company every year for the operation and maintenance services. The fee is fixed for the whole term of the O&M Agreement, i.e., 15 years.

(iv) The company shall deposit in cash in a 'Major Maintenance Reserve (MMR) account' to be maintained by the owner, a sum of Rs. 1.18 million every month until the aggregate amount of the MMR equals Rs. 63.75 million. The monthly deposit amount is subject to review every year by the owner. The purpose of the monthly deposit is to enable adequacy of cash availability for funding the major maintenance when it is incurred. The owner would refund the deposit in the year of incurrence of such major maintenance so that the company would have funds to pay for the expenditure. However, the amount of deposit may not have a relation with the cost associated with major maintenance (in fact, based on commercial understanding between the parties, the deposit amount is generally lower than the expenditure expected to be incurred). The key matter to be noted in this connection is that, should

the threshold level (72,000 running hours) not be reached within the 15 years contract period, the amount given as deposit would not be refunded to the company.

4. Major maintenance to be undertaken by the company:

(i) Based on the engine manufacturer's manual and prudent utility practices, the maintenance of the engines is required to be performed at various intervals of running hours of the plant like 100, 250, 500, 1000, 2000, 4000, 8000, 12000, 24000, 36000, 48000, 60000 and 72000 hours. The maintenance of the plant during the intervals from 100-8000 hours involves regular checks and cleaning of spare parts. For intervals commencing from 12,000 and upto 72,000 hours, spare parts are required to be replaced. Major spare parts are replaced during the interval of 60,000 and 72,000 running hours.

(ii) An illustration of the pattern of consumption of spare parts during the various running hours is given below:

	Running hours					
	12000	24000	36000	48000	60000	72000
Items of Spares	A	A	A	A	A	A
	B	B	B	B	B	B
	C	C	C	C	C	C
		D	F	D	L	D
		E	G	E	M	E
			H	I	N	F
				J		G
				K		H
						O
						P
						Q

(iii) The key points in this connection as stated by the querist are:

(a) During the contract period, the plant is expected to run for approximately 144,000 hours at certain standard levels of operation. During the period, maintenance after 72,000 hours is regarded as major maintenance. If the levels of operation are lower, the major maintenance schedule gets deferred as the pre-determined level of running hours would not have been achieved.

(b) Certain spares are required to be replaced after every 12,000 hours say A, B and C. Certain spares are required to be replaced after every 24,000 hours, say D and E. Certain spares are required to be replaced after every 36,000 hours, say F, G and H. In addition, specific spares are required to be replaced after 48,000 hours (I, J and K), 60,000 hours (L, M and N) and 72,000 hours (O, P and Q).

(c) The value of the spare parts to be procured for the scheduled maintenance after 60,000 hours and 72,000 running hours would be very high. The timing of the procurement of spares is a matter of techno-commercial evaluation but the process of procurement would need to be completed before achieving the respective threshold of running hours.

(d) As on December 31, 2004, the plant has run for about 24,000 hours and the required overhauls as per the manual have been undertaken and the spares consumed have been charged off to the profit and loss account as and when consumed. In addition to the above, the company has been creating a provision for major maintenance expenditure.

(e) The company makes an estimation on a scientific basis of the amount of provision towards major maintenance, which will be undertaken after the plant has run for about 72,000 hours. The exercise broadly covers the estimation of the cost of the spares which will be required for the major maintenance, taking into account the prevailing conditions of the engines and best possible cost estimates based on the manufacturer's recommended practices. Using the actual running hours of the engines at the end of every year as the basis vis-à-vis the scheduled hours

of maintenance, i.e., 72,000 hours, the company estimates the provision to be charged to the profit and loss account.

5. Accounting for major maintenance expenditure:

(i) According to the querist, the arguments in favour of a provision being created as indicated in paragraph 4 above are as below:

(a) Paragraph 14 of Accounting Standard (AS) 29, 'Provisions, Contingent Liabilities and Contingent Assets', issued by the Institute of Chartered Accountants of India, provides as below:

"14. A provision should be recognised when:

(a) an enterprise has a present obligation as a result of a past event;

(b) it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation; and

(c) a reliable estimate can be made of the amount of the obligation.

If these conditions are not met, no provision should be recognised."

The company believes that the aforesaid conditions have been met. Every hour the plant runs, a past event occurs which creates an obligation under the O&M Agreement. In other words, the existence of a contractual obligation to perform major maintenance and the running of the plant are sufficient parameters to establish that there is a present obligation as a result of a past event. In addition, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation as the spares will have to be procured for the maintenance after the prescribed thresholds being achieved. Also, since the costs are estimatable based on the number of hours, an estimate can be made of the amount of the obligation.

(b) The company gets a fixed income every year for 15 years starting from March 2001. During the early years of this contract, the company may have higher profits since the consumption of spare parts is normal and routine. In the later years, the company may not be able to maintain the same profitability due to expenses to be incurred on major maintenance. Therefore, the company believes that the above treatment of creating a provision for major maintenance (as calculated above) is appropriate to present a true and fair view of the profits and the financial position across the period of the contract. This is based on the matching principle of accounting.

(c) Similar practices exist in the upstream oil and gas industry wherein the operator of an offshore oilfield is required to remove the oil rig at the end of production and restore the seabed under its licensing agreement. As per Example 3 of Appendix C to AS 29, the construction of the oil rig creates an obligation under the terms of the licence to remove the rig and restore the seabed and is thus, an obligating event and hence, a provision is to be recognised.

(d) The amount deposited with the owner is repayable only if the major maintenance activity is undertaken. The amount would be forfeited if the company does not undertake the major maintenance for any reason. Hence, the deposit shown in the financial statements may not be recovered at the end of the contract period.

(ii) As per the querist, the arguments that are against a provision being created as indicated in paragraph 4 above are as below:

(a) A provision should be recognised only when there is a present obligation arising out of a past event. In the instant case, major maintenance does not arise out of a past event. It is required to be carried out to make the plant run at the same or acceptable levels of operational efficiency in future. There is no

obligation as on the balance sheet date unless the threshold limit has been reached.

(b) The matching principle as set out in paragraph 5(i)(b) above cannot be applied to the current situation. The creation of the provision would need to be determined under the requirements of AS 29. The alternative treatment of deferring revenues to achieve matching is not practicable under this contract as the fixed price under the contract cannot be segregated into separate elements of cost and profit thereon.

(c) The example of the offshore oil rig is not comparable to the current situation because under such a situation, the construction of the rig creates an obligation to remove the rig and hence, the rig having been constructed at the balance sheet date, there is a present obligation arising out of a past event. The same cannot be said about the instant case. Major maintenance does not arise out of a past event. It is required to be carried out to make the plant worthy for future operations. Also, similar situations have been explained in Examples 9A and 9B of Appendix C to AS 29 wherein it has been clarified that a provision cannot be created.

(d) The incurrence of the major maintenance is contingent upon the event that the plant has reached certain predetermined levels of running hours of the engine, i.e., 60,000 and 72,000 hours. The running hours of the plant is related to off-take of power by TNEB. If the off-take is low, then such levels may never be reached, in which case, an obligation for carrying out the major maintenance would never arise.

(e) The deposit amount is only a funding mechanism and does not have any co-relation with the major maintenance expenditure. Non-receipt of deposit money based on future events, for example, not reaching predetermined levels of running hours, could not be linked with the provisioning for the maintenance expenditure. If the amount is not recoverable due to the fact that the threshold level is not reached, it would simply imply the irrecoverability of a deposit in the year in which it is so established.

6. The querist has stated that the company believes that as it is in the business of providing O&M services and the plant belongs to another company, the distinction of spares between capital and revenue would not be relevant. Further, according to the querist, even if a provision is not created, such expenses when incurred cannot also be deferred and amortised in view of the provisions of Accounting Standard (AS) 26, 'Intangible Assets', issued by the Institute of Chartered Accountants of India. Hence, the cost of all the spares would need to be taken to inventories, when procured and charged to the profit and loss account on consumption thereof.

7. According to the querist, the financial statements under consideration are for the period from January 1, 2004 to December 31, 2004. The company recognises that AS 29 is not mandatorily applicable to it currently as the financial statements are not for an accounting period commencing on or after April 1, 2004. However, the principles for creation of provision have not been any different earlier. Further, the provision would need to be evaluated from the perspective of AS 29 in the following year. Given that the query has long term implications, the company seeks the view of the Expert Advisory Committee under the provisions of AS 29 and other relevant standards as may be applicable.

B. Query

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

(i) Whether the company can create a provision in respect of major maintenance expenditure under the requirements of AS 29. If the answer is 'yes', please clarify the position of

the Expert Advisory Committee on each of the arguments set out in paragraph 5(ii) above. If the answer is 'No', please clarify the position of the Expert Advisory Committee on each of the arguments set out in paragraph 5(i) above.

(ii) Please confirm whether the accounting treatment of spares procured and consumed, as discussed in paragraph 6 above is appropriate.

C. Points considered by the Committee

9. The Committee notes the definitions of the terms 'provision' and 'liability' as per AS 29 as below:

"A provision is a liability which can be measured only by using a substantial degree of estimation."

"A liability is a present obligation of the enterprise arising from past events, the settlement of which is expected to result in an outflow from the enterprise of resources embodying economic benefits."

10. The Committee further notes paragraph 14 of AS 29 as reproduced in paragraph 5(i) above and paragraphs 17 and 18 of the said Standard, which state as follows:

"17. Financial statements deal with the financial position of an enterprise at the end of its reporting period and not its possible position in the future. Therefore, no provision is recognised for costs that need to be incurred to operate in the future. The only liabilities recognised in an enterprise's balance sheet are those that exist at the balance sheet date.

18. It is only those obligations arising from past events existing independently of an enterprise's future actions (i.e. the future conduct of its business) that are recognised as provisions. Examples of such obligations are penalties or clean-up costs for unlawful environmental damage, both of which would lead to an outflow of resources embodying economic benefits in settlement regardless of the future actions of the enterprise. Similarly, an enterprise recognises a provision for the decommissioning costs of an oil installation to the extent that the enterprise is obliged to rectify damage already caused. In contrast, because of commercial pressures or legal requirements, an enterprise may intend or need to carry out expenditure to operate in a particular way in the future (for example, by fitting smoke filters in a certain type of factory). Because the enterprise can avoid the future expenditure by its future actions, for example by changing its method of operation, it has no present obligation for that future expenditure and no provision is recognised."

11. From the above, the Committee is of the view that in accordance with the provisions of AS 29, a provision is required to be created in case of a liability, incurred as on the balance sheet date which can be measured only by using a substantial degree of estimation. Thus, where certain costs are to be incurred in future, e.g., for replacement of certain spares as per the maintenance schedule, provision therefor cannot be created on the balance sheet date as incurrence of such costs relates to the future operations of a business. The Committee is of the view that the aforesaid position holds even in the facts and circumstances of this query.

12. The Committee broadly agrees with the arguments given against creating a provision, as stated in paragraph 5(ii) above except the part relating to deferring revenues in paragraph 5(ii)(b), which is dealt with in paragraph 13 below.

13. The Committee notes from the facts of the case that it receives a fixed sum from the owner every year towards O&M services it renders to the owner and that the major expenditure for rendering the services is incurred in the later years of the contract. The Committee is of the view that it would be appropriate in the present case to follow the proportionate completion method of recognition of revenue since this method relates the revenue to the work accomplished as required in paragraph 12 of AS 9, according to which, ***"in a transaction involving the rendering of services, performance should be measured either under the completed service contract method or under the proportionate completion method, whichever relates the revenue to***

the work accomplished*. Such performance should be regarded as being achieved when no significant uncertainty exists regarding the amount of the consideration that will be derived from rendering the service." (Emphasis supplied by the Committee). The Committee also notes paragraph 7.1(i) of AS 9, which further explains the proportionate completion method as below:

" (i) *Proportionate completion method*— Performance consists of the execution of more than one act. Revenue is recognised proportionately by reference to the performance of each act. The revenue recognised under this method would be determined on the basis of contract value, associated costs, number of acts or other suitable basis. For practical purposes, when services are provided by an indeterminate number of acts over a specific period of time, revenue is recognised on a straight line basis over the specific period unless there is evidence that some other method better represents the pattern of performance."

14. For the purpose of applying the proportionate completion method under AS 9 on the basis of 'associated costs', the company may consider using the following formula:

Cost incurred to date divided by the estimated total cost of the contract, multiplied by the total contract revenue.

15. With regard to the accounting treatment of spares procured and consumed, the Committee notes the definition of the term 'inventories' as per Accounting Standard (AS) 2, 'Valuation of Inventories', issued by the Institute of Chartered Accountants of India, which is reproduced below:

" Inventories are assets:

(a) held for sale in the ordinary course of business;

(b) in the process of production for such sale; or

(c) in the form of materials or supplies to be consumed in the production process or in the rendering of services."

From the above, the Committee notes that the maintenance spares held by the company are in the nature of supplies to be consumed in the rendering of services. Hence, these should be considered as 'inventories'.

16. The Committee agrees with the querist that since the company in question is rendering services and does not itself own the machineries in respect of which the spares will be used, it is not required that the spares be classified as capital spares.

D. Opinion

17. On the basis of the above, the Committee is of the following opinion on the issues raised in paragraph 8 above:

(i) The company cannot create a provision in respect of expected maintenance expenditure under the requirements of AS 29. The position of the Expert Advisory Committee on the arguments stated in paragraph 5(i) has been explained in paragraph 12 above.

(ii) The accounting treatment of spares procured and consumed being followed by the company is appropriate. ❐

Notes:

1. The Opinion is only that of the Expert Advisory Committee and does not necessarily represent the Opinion of the Council of the Institute.
2. The Compendium of Opinions containing the Opinions of Expert Advisory Committee has been published in twenty four volumes which are available for sale at the Institute's office at New Delhi and its regional council offices at Mumbai, Chennai, Kolkata and Kanpur.