

Exposure Draft
Guidance Note on Accounting for
Hydropower Industry

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Guidance Note on Accounting for Hydropower Industry

Research Committee of the Institute of Chartered Accountants of India invites comments on any aspect of this Exposure Draft of the 'Guidance Note on Accounting for Hydropower Industry'. Comments are most helpful if they indicate the specific paragraph or group of paragraphs to which they relate, contain a clear rationale and, where applicable, provide a suggestion for alternative wording.

Comments should be submitted in writing to the Secretary, Research Committee, The Institute of Chartered Accountants of India, ICAI Bhawan, Post Box No. 7100, Indraprastha Marg, New Delhi – 110 002, to be received not later than January 27, 2022. Comments can also be sent by e-mail at research@icai.in

EXPOSURE DRAFT

(The following is the text of the Guidance Note on Accounting for Hydropower Activities, issued by the Council of the Institute of Chartered Accountants of India for entities to which Ind AS are applicable.)

Introduction

1. Hydro power generating industry, which is a green source of power, involves activities relating to pre-construction, construction activities, operation & maintenance and renovation & modernisation thereof. These projects are highly capital intensive, are executed in remote areas and involve extensive underground works. The uncertainties faced by the industry include Extraordinary Geological Occurrences (EGOs), contractual challenges and contractor claims, long gestation period, stoppages of work due to local disturbances etc. Further, Hydropower generating assets are large and complex installations. They are expensive to construct, tend to be exposed to harsh operating conditions and require periodic replacement or repair which have their own accounting challenges. The peculiar nature of the industry requires establishment of industry-specific accounting principles in relation to expense recognition, measurement, presentation and disclosure.

Objective

2. The objective of this Guidance Note is to provide guidance on the accounting principles contained in Ind ASs in respect of accounting issues faced by the hydropower industry, some of which includes accounting for costs incurred on activities relating to pre-feasibility, pre-construction, construction, maintenance and renovation of hydropower plants, Decommissioning Costs, Borrowing Costs, Depreciation, Provisions & Contingent Liabilities, Impairment of Assets, Leases & Power purchase agreement in nature of a lease, Rate Regulated Activities, Business Acquisitions & Merger of a Subsidiary Company with Parent Company.

Scope

3. This Guidance Note applies to the accounting treatment and issues related to the cost incurred on pre-feasibility, pre-construction, construction, operation & maintenance and renovation & modernization activities of hydropower projects. It also deals with accounting aspects, such as accounting of Decommissioning Costs, Borrowing Costs, Depreciation, Provisions & Contingent Liabilities, Impairment of Assets, Leases & Power purchase agreement in nature of a lease, regulatory deferral account balances, Business Acquisitions & Merger of a Subsidiary Company with Parent Company that are peculiar to the entities constructing and generating hydropower.
4. This Guidance Note does not address accounting and reporting issues relating to the power distribution and transmission activities. It also does not address accounting and reporting issues relating to other conventional and/ or non-conventional forms of power generation, e.g., thermal, solar, wind, geo-thermal, etc.

Definitions

5. The glossary of certain terms commonly used in Hydropower Industry and relevant for the Guidance Note is given in Appendix 1.

Classification of Activities and Related Costs

Pre-Construction Activities and Costs

6. Pre-Feasibility/Feasibility Studies include activities like identification of prospective hydropower projects, including estimation of generating capacity, site selection etc. based on gauge-&-discharge data, topographical maps, geological survey reports, site visits, etc. Expenditure incurred at this stage includes expenditure on conveyance, salary of engaged personnel, cost of any survey & investigation activities, cost of any specialised tests carried out, etc.
7. Activities carried out by a hydropower developer after handing over of a potential hydro power project based on Pre-Feasibility/ Feasibility Studies carried out earlier, for development, by the Ministry of Power and signing of Implementation Agreement/ MoU with the concerned competent authority, covering all the activities conducted towards determination of feasibility of constructing a hydropower plant, preparation and approval of Detailed Project Report, obtaining of statutory clearances and other infrastructure development activities constitute pre-construction activities.
8. Pre-construction activities include-
 - i) Survey & Investigation (S&I) activities, which comprise of, but are not limited to, aerial, geological, geophysical, topographical and seismic surveys, analysis, studies and their interpretation, investigations relating to the subsurface geology including test drilling, hydrological data collection and analysis, construction material testing, ecological survey, Environment Impact Assessment & Environment Monitoring Plan (EIA & EMP) and all work necessarily connected therewith for the purpose of determination of the feasibility of constructing a hydropower plant and preparation and approval of Detailed Project Report by the competent authorities. It also includes initial infrastructure works like building of trace-cuts, roads, temporary buildings, etc. and expenditure on right of access to properties to conduct the studies.
 - ii) Once the design parameters and viability of a project has been established based on the S&I study, other infrastructure development activities are taken up. These include land acquisition including Relief & Rehabilitation (R&R) works, acquisition of forest land, building of roads & bridges, widening of existing roads, strengthening of existing bridges, compensatory afforestation, Catchment Area Treatment Plan, forest and wild-life clearances, other statutory clearances, etc.
9. Pre-construction costs cover all directly attributable expenditure incurred in respect of pre-construction activities. such as , operating costs of related support equipment and facilities, related insurance of project equipment and material, general and administrative costs, and other costs of survey & investigation and infrastructure development activities that are:
 - i) rights of access to properties to conduct S&I studies (e.g., costs incurred for environment clearance, other statutory clearances etc.), salaries and other expenses of engineering staff, engineering design including civil, hydro mechanical and electromechanical design, hydrology, finance, law personnel and other personnel associated with these activities;

- ii) costs of acquisition of land including R&R activities, and enhanced compensation to land oustees including interest on such compensation granted by Court (till date of award) carrying and retaining properties, such as rental, taxes on properties, legal costs for title defence, maintenance of land and lease records, licence fees, etc.

Construction Activities and Costs

10. Construction stage covers the activities conducted after firming up the design parameters and commercial viability of the project, approval of DPR, obtaining all statutory clearances, acquisition of land and completion of infrastructure facilities required for the generation of electricity. These activities include construction of the major components of the project necessary to generate electricity and transmit the same to the grid. Further, infrastructure development works like colony, school, project dispensary, stores, roads and bridges, internal electrification lines are also constructed at this stage.
11. Construction costs cover all the directly attributable expenditure incurred in respect of the construction activities including costs incurred for:
 - i) Gaining access to and preparing construction sites, clearing ground, dewatering, river diversion, excavation of site, road building and relocating public roads to the extent necessary in constructing the hydropower project;
 - ii) Construction of the various components of the project, including Dam/ Barrage, Head Race Tunnel, Penstocks, Power House Civil and Electromechanical works, Hydro mechanical works, Tail Race Tunnel, Switchyard, Transmission Lines (up to Pooling Station);
 - iii) Project management and monitoring activities including the use of specialized software, insurance of assets under construction, transit insurance and insurance of equipment engaged in the construction activities, obtaining the services of consultants;
 - iv) Royalty for construction material, obtaining and renewal of licenses, construction power;
 - v) Borrowing costs and Foreign Exchange Rate Variation
12. Construction costs also include depreciation and applicable operating cost of related support equipment and facilities in connection with construction activities.
13. Construction Cost also includes general and administrative costs only to the extent that can be directly attributable to the related project incurred in respect of construction activities.

Operation & Maintenance Activities and Costs

14. Operation & Maintenance (O&M) activities consist of direct and indirect activities to operate and maintain the Power Station's equipment and facilities for generation of hydropower, including periodic maintenance, trash clearing, running & maintenance of dam, powerhouse, depreciation and applicable operating costs of support equipment and facilities after declaration of Commercial Operation of the Project.

15. During O&M stage, certain other expenditures are also incurred. These includes:

- i) Environmental works/ expenditures include Compensatory afforestation, Greenbelt development around the perimeters of the project, Catchment area treatment, Installation of plant and machinery to reduce water pollution, Public Health Delivery System, landscaping and restoration of construction areas, Fisheries development, etc. commitment for which forms a part of the a pre-condition for the approvals granted by the various authorities like the MoEF & CC, State Pollution Control Boards, Land Revenue Authorities, District Administration, etc.
- ii) Expenditure related to acquisition of land including amounts payable to the Project Affected Persons (PAPs) under resettlement and rehabilitation (R&R) schemes & ex-gratia, compensatory afforestation, development of infrastructural facilities for PAPs.
- iii) Some works originally included in the scope of DPR/ Revised Cost Estimate (RCE) which are executed after COD of the project. Examples include construction of residential buildings, works related to creation of facilities, internal roads, finishing works remaining unexecuted till COD but forming part of the project cost, etc.
- iv) bought-out items of assets like compressors, pumps, vehicles, trash rack cleaning machines, insurance spares, roads, bridges, culverts, etc.

Renovation & Modernisation Activities and Costs

16. On completion of the pre-defined useful life of a Hydropower Station, the generator/ developer may approach the concerned authority for renovation & modernisation of the plant to increase its useful life. This involves substantial capital outlay including replacement of electromechanical and hydro mechanical equipment, extensive repair of civil structures, etc. The DPR of the Renovation & Modernisation Unit (RMU) is prepared and projected tariff is approved by concerned authority.

Accounting for Pre-Construction and Construction costs

17. Expenditure incurred in a hydropower project at the pre-feasibility/ feasibility study stage should be accounted for in accordance with the general principles laid down in the framework for preparation and presentation of financial statements and other applicable accounting pronouncements.
18. Pre-construction expenditure incurred on cost of surveys and investigation activities, obtaining environment & other clearances, other licenses and permits to carry out S&I activities, salaries and other expenses of engineering staff and other personnel engaged in conducting those studies and preliminary infrastructure costs should be capitalised forming part of Capital-Work-In-Progress (CWIP).
19. Pre-Construction Expenditure incurred on infrastructure development activities like land acquisition, building of roads & bridges, etc. should be capitalised as respective assets.
20. Pre-Construction Expenditure incurred on catchment area development, relief & rehabilitation, etc. and enhanced compensation to land oustees including interest on

such compensation granted by Court (till date of award) should be capitalised as part of cost of land.

21. Salary, other expenses and depreciation should be capitalised to the extent directly attributable to the project during pre-construction stage. General and administrative costs incurred during pre-construction stage should be capitalised only to the extent that can be directly attributable to the related activities.
22. Depreciation charged on assets during construction period of the project should be netted off from the gross block of the respective assets and net block so arrived at on COD of the project should be carried forward as gross block thereafter so as to avoid double capitalisation of depreciation charged on such assets during construction period.
23. Where the developer borrows funds for financing activities falling in the pre-construction stage, such as, for acquisition of land, such borrowing costs should be capitalised as per Ind AS-23.
24. Expenditure related to Pre-Construction Activities as mentioned in para 18, 19, 20 & 21 above can be capitalised on establishment of technical feasibility and commercial viability of the project and recognition criteria as per Ind-AS 16 is met.
25. Other pre-construction costs that cannot be attributed directly to the project, for example, general and administrative costs such as directors' fees, secretarial and share registry expenses, salaries and other expenses of general management, etc., should be charged to the statement of Profit and Loss Account when incurred.
26. Subsequent costs should be capitalised when incurred, if the recognition criteria is met as per Ind AS -16.
27. Long gestation period is characteristic of hydropower projects, mainly due to land acquisition including compliance of Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, obtaining environmental and other statutory clearances, etc. Long gestation, however, should not be construed to mean that the cost incurred do not qualify for capitalisation, since significant activities for grant of clearances, land acquisition and survey & investigation are carried out during this period also. Accordingly, capitalisation of survey & investigation costs, employee benefit expenses, depreciation, etc. to the extent directly attributable should be continued till such time impairment indicators are observed.
28. Components of Project capitalised during pre-construction stage should be assessed for impairment at each reporting date, when facts and circumstances suggest that the carrying amount of the project may exceed its recoverable amount. Accordingly, it should be provided in financial statements.
29. Expenditure incurred during construction stage are capitalised as CWIP under the respective asset heads, including the major components e.g., Dam, Tunnels, Power House, Switchyard, etc. Employee Benefit expenses, Interest During Construction (IDC) if recognition criteria is met as per Ind-AS 23, Insurance expenses, expenditure incurred for creation of facilities and other expenses to the extent directly attributable to the project should be carried forward forming part of CWIP and subsequently allocated on a systematic basis over major assets. General and administrative costs such as directors' fees, secretarial and share registry expenses, salaries and other

expenses of general management, etc., should be charged to the statement of Profit and loss account when incurred.

30. Expenditure related to acquisition of land including amounts payable to the Project Affected Persons (PAPs) under resettlement and rehabilitation (R&R) schemes, compensatory afforestation, development of infrastructural facilities for PAPs should be capitalized as part of cost of land.
31. In addition to the above, items of cost should be tested on the principle of avoidance as given in Para 10 of Ind AS 23 to assess whether an item of expenditure qualifies for capitalization or is to be charged off to the Statement of Profit & Loss.
32. In case of Forest land diverted for project construction, no formal lease agreement is entered into by the Forest Department. However, the right to direct the use of such land is vested with the developer and accordingly, such land, should be recognised as a Right-Of-Use Asset as per Ind AS 116.
33. On declaration of commercial operation of the project, the capitalised costs should be reclassified from capital work-in-progress to the gross block of assets. S&I expenses should be allocated among the major components of the project on systematic basis.
34. When a Power Station is declared commercially operative for a part of its intended capacity, those units/ components/ parts of the project which are ready for their intended use and can be operated independently of the remaining units/ components/ parts, should be considered to be ready for commencement of commercial production/ intended use. Commercial production would mean production in commercially feasible quantities and in a commercially practicable manner. Thus, if an asset is operational and is able to produce the commercially feasible quantum of power, then the costs incurred on that part of asset which are actually being put to use should be capitalised even if it is not achieving the targeted or full production.
35. Revenue on account of Energy generated by a project during test run / trial run should be deducted from the Capital-Work-In-Progress as infirm power.

Accounting for Operation & Maintenance Costs

36. Operation & Maintenance (O&M) costs consist of direct and indirect costs incurred to operate and maintain the Power Station's equipment and facilities, including depreciation and applicable operating costs of support equipment and facilities for generation of electricity after declaration of Commercial Operation of the Project. These costs should be charged off to the Statement of Profit & Loss at the time of incurrence. Examples of O&M costs are:
 - i) Employee benefit expenses,
 - ii) Interest Cost,
 - iii) Repairs and maintenance,
 - iv) Spares,
 - v) Power,
 - vi) Property taxes,
 - vii) Insurance, etc.
37. O&M cost includes the costs of performing major maintenance/overhaul of a property, plant and equipment. Parts of some items of property plant and equipment

may require replacement at regular interval. Such costs are capitalised as a component of the plant, if and only if this provides future economic benefits and the recognition principle of paragraph 7 of Ind AS 16 is met.

38. In certain circumstances, the developer may also acquire certain assets, e.g., land for safety or environmental reasons. These assets are assets that are necessary to obtain the future economic benefits from its other assets, e.g., the Power Station. These costs should be capitalised, if recognition criteria is met as per Ind-AS 16.
39. Cost of execution of works originally included in the scope of DPR/ RCE executed after COD of the project, including execution of balance works and additional capitalization including bought-out assets should be capitalised, if recognition criteria is met as per Ind AS 16.
40. Expenditure on environmental works, Catchment Area Treatment, etc. commitment for which forms a pre-condition for the approvals granted by the various authorities, should be included in the carrying amounts of the major items of Property, Plant & Equipment (PPE), unless they can be identified with any particular asset, in which case the expenditure is capitalized with that asset.
41. Expenditure may be incurred on repair and maintenance of major assets including roads, bridges, buildings, reservoir rim treatment, catchment area treatment, etc. which are incurred on regular basis and the purpose of incurring which is to ensure proper functioning of an existing asset or to restore such asset to its full working capacity. Expenditure on an existing asset that enhances neither the quantum of future economic benefits, nor the period over which such benefits are expected to be received, should be charged off to the Statement of Profit & Loss.
42. Turnaround/ overhaul costs that do not relate to the replacement of components or the installation of new assets should be expensed when incurred. Turnaround/ overhaul costs should not be accrued over the period between the turnarounds/overhauls because there is no legal or constructive obligation to perform the turnaround/ overhaul. Ind AS 37 requires a developer to recognise a provision only to the extent it is obliged to incur expenditure. Since the developer can avoid the future expenditure by its future actions, for example, by changing its method of operation, it does not have a present obligation for that future expenditure and no provision is recognised.

Accounting for Renovation & Modernisation Costs

43. In the Renovation & Modernisation stage, the equipment/ machinery which are replaced should be derecognised. Where an asset item has not been replaced, but major repair/ renovation work has been carried out, cost of such repairs should be capitalised with the asset as cost of addition/ improvement if the recognition principle of paragraph 7 of Ind AS 16 is satisfied.
44. The expenditure incurred on acquisition/ construction of new items/ assets including its purchase price, duties, non- refundable taxes, insurance and any cost 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 capitalised. Such costs include borrowing cost on the funds used for renovation & modernisation,

insurance of works, depreciation on assets used in renovation & modernisation activities, administration and other overheads to the extent directly attributable to the project.

Decommissioning costs

45. Hydropower projects are generally constructed on land acquired from private landowners on freehold basis and/ or on forest land diverted for the project, in these cases there is neither fixed time period nor any obligation to restore such land or hand it over to the forest department at the end of project.
46. However, where the developer has any contractual obligations to restore the land/ properties before handing over to the original owners where the power station has been set up for a fixed period of time, developer should capitalise as part of property, plant and equipment, the amount of provision required to be created for decommissioning the plant as per the principles given hereunder:
- i) The provision for estimated decommissioning costs should be made at current prices considering the environment and social obligations, industry practice, etc. Provisions for decommissioning and restoration are recognised even if the decommissioning is not expected to be performed for a long time, for example 80 to 100 years. The effect of the time to expected decommissioning is reflected in the discounting of the provision. Where the effect of the time value of money is material, the amount of the provision should be the present value of the expenditures expected to be required to settle the obligation. The discount rate (or rates) should be a pre-tax rate (or rates) that reflect current market assessments of the time value of money and the risks specific to the liability. The discount rate should not reflect risks for which future cash flow estimates have been adjusted. Different decommissioning obligations have different inherent risks, for example different uncertainties associated with the methods, the costs and the timing of decommissioning. The risks specific to the liability can be reflected in the pre-tax cash flow forecasts prepared or in the discount rate used.
 - ii) Changes in the measurement of existing decommissioning costs that result from changes in the estimated timing or amount of the outflow of resources embodying economic benefits required to settle the obligation or a change in the discount rate should be added to, or deducted from the property, plant & equipment in the current period and would be considered for depreciation prospectively. However, the change in the estimated provision due to the periodic unwinding of the discount should be recognized in Statement of Profit and Loss as it occurs. Since decommissioning costs do not reflect borrowed funds, the unwinding cost would not be a borrowing cost eligible for capitalization.
 - iii) The local legal regulations should be taken into account when determining the existence and extent of the obligation. Obligations to decommission or remove an asset are created at the time the asset is placed in service. Entities recognise decommissioning provisions at the present value of the expected future cash flows that will be required to perform the decommissioning. The

cost of the provision is recognised as part of the cost of the asset when it is placed in service and depreciated over the asset's useful life. The total cost of the fixed asset, including the cost of decommissioning, is depreciated as per principles already discussed in this Guidance Note.

Capitalisation of Borrowing Costs

47. Capitalisation of borrowing costs should be in accordance with Ind AS 23, Borrowing Costs.
48. In case active development of Hydropower Project has been temporarily suspended, the suspension of capitalisation of borrowing cost shall be in accordance with Ind AS 23, Borrowing Costs. Since Hydropower projects are long gestation projects, , project construction activities may be stalled from time to time due to various factors like labour unrest, geological surprises, strikes, natural calamities, force majeure events etc. In case active development of Hydro Power Project has been temporary suspended, the suspension of capitalisation of borrowing cost should be determined based on the factors whether:
- i) active development of the qualifying asset has been suspended
 - ii) the period of suspension is an extended one when compared to the originally estimated completion period of the project, and
 - iii) technical and administrative work was also suspended during the period of suspension of active construction activities.

Depreciation

49. In case tariff of the Power Station is determined as per the Tariff Regulations of the Central Electricity Regulatory Commission (CERC) or the respective State Electricity Regulatory Commission (SERCs), depreciation should be charged as per the rates and methodology given in the respective CERC / SERC Tariff Regulations in line with the provisions of Para 4 of Part B of Schedule II of the Companies Act, 2013.
50. In case tariff of the power station is not regulated as per the Tariff Regulations of the CERC or the respective SERC, depreciation should be recognised on the cost of assets (other than freehold land and properties under construction) less their residual values over their estimated useful lives as prescribed in Schedule II to the Companies Act, 2013. Ind AS has a specific requirement for "component" depreciation, as described in Ind AS 16. Ind AS 16 requires separate depreciation of each significant part of an item of property, plant and equipment. Significant parts of an asset that have similar useful lives and patterns of consumption can be grouped together. Some components can be identified by considering the routine shutdown or overhaul schedules for power plants and the associated replacement and maintenance routines. Consideration should also be given to those components that are prone to technological obsolescence, corrosion or wear and tear more severe than that of the other portions of the larger asset.
51. The estimated useful lives, residual values and depreciation method are to be reviewed at the end of each reporting period.

Provisions & Contingent Liabilities

A. Committed Capital Expenditure

52. For setting up a hydropower project, commitments for incurring certain expenditures are made by the developer by way of inclusion of the same in the Feasibility Report (FR) or Detailed Project Report (DPR). Commitment for such expenditures thus become a pre-condition for the setting up the project and forms a part of the approvals granted by the various authorities like the MoEF & CC, State Pollution Control Boards, Land Revenue Authorities, District Administration, etc.
53. Expenditure for committed capital expenditure can be broadly segregated into two parts- viz. Expenditure related to environment and Expenditure related to acquisition of land.
54. Expenditure related to environment: To minimise the environmental impact of constructing a hydro power project, certain expenditures are committed to be incurred as a pre-condition for obtaining environment clearance from the Ministry of Environment and Forest & Climate Change (MoEF & CC) of the Government of India/ concerned State and the State Pollution Control Board. These include:
- i) Compensatory afforestation;
 - ii) Greenbelt development around the perimeters of the project;
 - iii) Catchment area treatment;
 - iv) Installation of plant and machinery to reduce noise and water pollution.
 - v) Public Health Delivery System
 - vi) Landscaping and Restoration of construction areas
 - vii) Fisheries development, etc.
 - viii) Installation of plant and machinery to reduce noise and water pollution:
 - a) Effluent treatment plant;
 - b) Fire protection and explosion hazards;
 - c) Water treatment systems;
 - d) Sewerage collection, treatment and disposal systems;
 - e) Environmental lab equipment, etc.
55. Expenditure related to acquisition of land: Land is acquired both from Government and Private Parties. The land acquired from the State Governments is usually on long term lease/ right-to-use basis while the land acquired from the private land owners is on freehold basis. The amounts payable towards acquisition of land include the estimated amounts payable to the Project Affected Persons (PAPs) under resettlement and rehabilitation (R&R) schemes. In certain cases, additional amounts are released to the PAPs by way of ex-gratia payments payable one-time or by way of monthly instalments, usually linked to some index or at the minimum labour rates notified by the concerned government. Committed capital expenditure linked to acquisition of land includes:
- i) Resettlement & Rehabilitation Plan
 - ii) Financial Assistance to Retrenched Land Owners
 - iii) Compensatory afforestation

- iv) Compensation for forest land
- v) NPV of forest land
- vi) Economic Rehabilitation Plan
- vii) Compensation for houses & structures
- viii) Development of infrastructural facilities for PAPs

56. Obligation to execute the activities relating to environment and acquisition of land arise due to pre-conditions attached with the clearances granted by Central/ State Government authorities as forming part of FR/DPR.

57. In respect of contractually committed capital expenditure such as acquisition of land from private parties i.e. Project Affected Persons (PAPs) or government, compensation of forest land, compensatory afforestation, greenbelt development, catchment area treatment etc., obligating event should arise keeping in view the legal/constructive obligations as per relevant law/terms of contract rather than inclusion of these items in Feasibility report or Detailed Project Report.

B. Contractor Claims

58. Due to extensive underground civil works and other socio-economic factors, claims by contractors executing the project may arise. These are generally related to time and cost overruns due to Extraordinary Geological Occurrences (EGOs), natural calamities like floods, cloudbursts, interruption of works due to local disturbances, etc. The various types of claims include, but are not limited to the following:

- i) Additional costs incurred due to extension of time including insurance, PBG, etc.
- ii) Additional costs incurred due to Extraordinary Geological Occurrences (EGOs).
- iii) Idling claims for delay in availability of land and statutory clearances, non-availability of working face due to delay by other contractors.
- iv) Idling claims on account of disruption/ stoppage of works.
- v) Claims for unrecovered amount of cost and profits due to reduction in scope of work due to site conditions.
- vi) Additional cost incurred due to change in design/ scope of work.
- vii) Disputes over rate analysis of extra/ deviated items.
- viii) Reimbursement of additional expenditure due to increase in minimum wages.
- ix) Price escalation
- x) Changes in rates & taxes

59. Where the tariff of the Power Station is determined by the CERC/ SERC on the basis of Capital Cost allowed after prudence check, allowability of contractor claims as per Tariff Regulations should be considered as one of the factors to determine whether the expenditure on such claims qualify for capitalisation.

60. Claim filed by a contractor should be assessed regarding recognition of provision or disclosure of contingent liabilities. A provision should be recognised in respect of claims where outflow of economic resources is probable. Claims where outflow of economic resources is possible, but not probable, should be disclosed as Contingent Liabilities while any balance amount of claim where outflow of economic resources is neither probable nor possible should be ignored. These claims are to be assessed at each reporting date based on the developments of the proceedings of the Arbitration

Tribunal or on the decision of the Court. At each reporting date, assessment regarding estimation of outcome and financial effect for recognition of provision or disclosure of contingent liability should be made based on judgement of the management of the developer, supplemented by the opinion of independent experts, wherever felt necessary.

61. Expenditure incurred/ provision created on account of claims arising due to change in scope of work, execution of extra and deviated items, increase in minimum wages of labour, additional costs incurred due to extraordinary geological occurrences, claims for idling of machinery & labour due to disruption/ stoppage of works beyond the control of the developer etc. are directly attributable to the construction of the Project and should be capitalized.
62. When a claim reaches finality, the principal amount and interest up to the Commercial Operation Date (COD) qualifying for capitalisation as per principles given above less any amount capitalised earlier by way of provision should be capitalised. Interest beyond the COD is to be charged to the Statement of Profit & Loss. Counter-claims award, received from the contractor should be de-provisioned as per Ind-AS 37.
63. Provisions expected to be settled within one year of Balance Sheet date may not be discounted since time value of money is not material. Provisions recognised in respect of expenditures payable on demand by the authorities should be treated as current and should not be discounted since no reliable estimate can be made of the period within which such claims are to be settled. Provisions in respect of which management estimate can be made regarding the timing of cash flows and where the expenditure is to be spread over a period of more than one year, should be discounted using a pre-tax rate that reflects current market assessments of the time value of money and the risks specific to the liability. The discount rate should not reflect risks for which future cash flow estimates have been adjusted.

Impairment of Assets

Projects under construction and operating Power Stations

64. If impairment indicators as per the general principles of Ind AS 36 or if any specific indicators exist in the case of projects under construction or operating Power Stations, its recoverable amount should be determined for the purpose of impairment analysis. Impairments are recognised if the carrying amount of a CGU exceeds its recoverable amount. Recoverable amount is the higher of fair value less costs to sell (FVLCTS) and value in use (VIU). Fair value less costs to sell is the amount that a market participant would pay for the asset or CGU, less the costs of selling the asset. The use of discounted cash flows to determine FVLCTS is permitted where there is no readily available market price for the asset or where there are no recent market transactions for the fair value to be determined through a comparison between the asset being tested for impairment and a recent market transaction. However, where discounted cash flows are used, the inputs must be based on external, market-based data.

65. When the carrying amount of an asset or CGU exceeds its recoverable amount, the asset is considered impaired and is written down to its recoverable amount. The resulting impairment loss is recognised in the Statement of Profit and Loss.
66. For the purposes of estimating projected cash flows for determining value in use as per the requirements of Ind AS 36, hydropower developing entities should consider full estimate of expected cost of completion of the project while applying the impairment test. In accordance with the requirements of Ind AS 36, in measuring value in use, a developer should base cash flow projections on reasonable and supportable assumptions that represent management's best estimate of the range of economic conditions that will exist over the remaining useful life of the asset. Accordingly, management's estimates of future cash flows usually take a long-term view of the range of economic conditions over the remaining useful life of the asset and are not based on the relatively short-term changes in the economic conditions.

Leases and Power Purchase Agreement in nature of a lease

A. Leases

67. Contracts for lease arrangements (either as a lessee or as a lessor) should be accounted for in terms of Ind AS 116- *Leases*. A hydropower developer should assess whether a contract is or contains a lease at the inception of a contract. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. To assess whether a contract conveys the right to control the use of an identified asset, the developer should assess whether:
- i) the contract involves use of an identified asset – this may be specified explicitly or implicitly and should be physically distinct or represents substantially all of the capacity of a physically distinct asset. If the supplier has a substantive substitution right, then the asset is not identified;
 - ii) the developer has the right to obtain substantially all of the economic benefits from use of the asset throughout the period of use; and
 - iii) the developer has the right to direct the use of the asset. The developer has this right when it has the decision-making rights that are most relevant to changing how and for what purpose the asset is used. Where the decision about how and for what purpose the asset is used is predetermined, the developer has the right to direct the use of the asset if either:
 - a) the developer has the right to operate the asset; or
 - b) the developer has designed the asset in a way that predetermines how and for what purpose it will be used.

B. Power Purchase Agreements in the nature of a lease

68. A hydropower generating Company may enter into Power Purchase Agreements (PPA) with beneficiaries for a specified Power Plant with no substantive substitution rights. PPA with a single beneficiary shall be classified as a lease when all the economic benefits from use of the identified asset vest with beneficiary and the beneficiary has the right to direct the use of the identified asset.
69. PPA classified as lease should be further assessed for identification of the arrangement as a finance lease or an operating lease as per the criteria mentioned in Ind-AS 116.
70. For leases in the nature of a Finance Lease, the net investment in the plant should be recognised as a Lease Receivable. The consideration received from the beneficiary should be allocated between lease and non-lease components. Each lease receipt should be allocated between the lease receivable and finance lease income to achieve a constant rate of return on the net investment in lease. Non-lease components should be recognised on accrual basis as and when they are earned.
71. In the case of operating leases, the consideration for lease should be recognised in revenue over the lease term to reflect the pattern of use benefit derived from the specified lease asset. The respective operating lease assets shall be disclosed in the financial statements based on their nature.

Rate regulated activities

72. Generation & sale of electricity falls under the ambit of cost-of-service regulations when the tariff to be charged by the developer for electricity sold to its customers is determined by the CERC / SERC under the applicable Tariff Regulations and such tariff is based on the allowable costs like interest, depreciation, operation & maintenance cost plus a stipulated return and such tariff is binding on both the developer/ generator and the beneficiaries.
73. Where an item of expenditure incurred during the period of construction of a project is recognised as an expense in the Statement of Profit and Loss i.e., not allowed to be capitalized as part of the cost of relevant PPE in accordance with Ind AS, but is nevertheless permitted by CERC to be recovered from the beneficiaries in future through tariff, the right to recover such costs should be recognized as Regulatory Deferral Account (RDA) balances.
74. Expense/ income recognised in the Statement of Profit and Loss to the extent recoverable from or payable to the beneficiaries in subsequent periods as per the applicable Tariff Regulations should be recognised as RDA balances.
75. Recognition, measurement, impairment testing and de-recognition of Regulatory Deferral Account balances should be done in accordance with Ind AS 114- *Regulatory Deferral Accounts* and the *Guidance Note on Rate Regulated Activities* issued by the Institute of Chartered Accountants of India.

Business Acquisitions

76. Hydropower developers/generator sometime acquires stressed projects under the Insolvency & Bankruptcy Code. In the consolidated books of the developer,

acquisition of businesses should be accounted for using the acquisition accounting method as per Ind AS 103- *Business Combinations* as at the date of the acquisition, which is the date at which control is transferred. The consideration transferred in each business combination is measured at the aggregate of the acquisition date fair values of assets given, liabilities incurred by the Company to the former owners of the acquiree, and equity interests issued by the Company in exchange for control of the acquiree, if any. The identifiable assets acquired and liabilities assumed are recognized at fair values on their acquisition date and the non-controlling interest is initially recognized at the non-controlling interest's proportionate share of the acquiree's net identifiable assets or at fair value. After acquisition, the acquiree is run as a subsidiary.

77. Acquisition related costs are recognized in the Statement of profit and loss.
78. The acquirer shall recognise goodwill as of the acquisition date measured as the excess of (i) over (ii) below:
- i) the aggregate of -
 - a) the consideration transferred measured in accordance with Ind-AS 103 which generally requires acquisition-date fair value;
 - b) the amount of any non-controlling interest in the acquiree measured in accordance with Ind-AS 103; and
 - c) in a business combination achieved in stages, the acquisition-date fair value of the acquirer's previously held equity interest in the acquiree.
 - ii) the net of the acquisition-date amounts of the identifiable assets acquired and the liabilities assumed measured in accordance with Ind AS 103.
79. In extremely rare circumstances, an acquirer will make a bargain purchase in a business combination in which the amount in point (b) above exceeds the aggregate of the amounts specified in point (a). If that excess remains, the acquirer shall recognise the resulting gain in other comprehensive income on the acquisition date and accumulate the same in equity as capital reserve. The gain shall be attributed to the acquirer.
80. Before recognising a gain on a bargain purchase, the acquirer shall determine whether there exists clear evidence of the underlying reasons for classifying the business combination as a bargain purchase. If such evidence exists, the acquirer shall reassess whether it has correctly identified all of the assets acquired and all of the liabilities assumed and shall recognise any additional assets or liabilities that are identified in that review. The acquirer shall then review the procedures used to measure the amounts to be recognised at the acquisition date for all of the following:
- i) the identifiable assets acquired and liabilities assumed;
 - ii) the non-controlling interest in the acquiree, if any;
 - iii) for a business combination achieved in stages, the acquirer's previously held equity interest in the acquiree; and
 - iv) the consideration transferred.
81. If there does not exist clear evidence of the underlying reasons for classifying the business combination as a bargain purchase, the acquirer shall apply the requirements of reassessment and review as per Ind AS 103. The excess, if any, as

determined after applying the said requirements shall be recognised directly in equity as capital reserve.

Merger of a subsidiary company with its parent company

82. A scheme of merger of a subsidiary with its parent company (or any other form of business combination under common control) should be accounted for as a 'Common control business combination' as defined in Appendix C of Ind AS 103 for business combinations prescribed under Section 133 of the Companies Act, 2013. The difference between any consideration transferred and the aggregate historical carrying values of assets and liabilities of the acquired entity are recognized in shareholder's equity. At this stage, no further fair valuation of the assets and liabilities of the subsidiary is done. Accordingly, with effect from the Appointed Date:

- i) All assets, liabilities and reserves of the transferor which were appearing in the consolidated financial statements of the Group immediately before the merger shall become a part of the separate financial statements of the transferee.
- ii) All the assets and liabilities recorded in the books of the Transferor Company shall be recorded by the Transferee Company at the respective carrying values as reflected in the books of the Transferor Company as on the Appointed Date.
- iii) Inter-company balances such as investments in the equity shares of the Transferor Company or loan and advances held inter-se, in their respective books of accounts, if any, will stand cancelled.
- iv) The identity of the reserves shall be preserved and shall appear in the financial statements of the transferee in the same form in which they appeared in the financial statements of the transferor. Accordingly, all the reserves of the Transferor Company under different heads appearing in the consolidated financial statements immediately before the merger shall become the corresponding reserves of the Transferee Company.
- v) No adjustments shall be made to reflect fair values, or recognise any new assets or liabilities. The only adjustments shall be to harmonise accounting policies of the Transferor Company with that of the Transferee Company.

Changes in Accounting Policies

83. The developer may change its accounting policies if the change makes the financial statements more relevant to the economic decision-making needs of users and no less reliable, or more reliable and no less relevant to those needs. Developer should judge relevance and reliability using the criteria in Ind AS-8 *Accounting Policies, Changes in Accounting Estimates and Errors*.

Disclosures

84. Besides the disclosures required by applicable Ind ASs and statutes, a hydropower developer should also disclose the following in its financial statements:

- i) The accounting policies followed for recognition of pre-construction assets.
- ii) Cumulative amount of survey & investigation expenditure carried forward as Capital-Work-In-Progress.
- iii) Pre-Construction cost provided for and written-off during the period.
- iv) Brief description of the status of pre-construction projects provided for.
- v) Basis of determination of cash generating unit used for impairment assessment purposes.

Effective Date & Transitional Provisions

85. This Guidance Note comes into effect in respect of accounting periods commencing on or after XXXXXX; its earlier application is encouraged. The following are the transitional provisions:

- i) In respect of companies which apply Ind ASs and this Guidance Note in their first Ind AS financial statements (including the companies which early adopt this Guidance Note), any change in the accounting policies, as compared to their previous GAAP, should be accounted for in accordance with the requirements of Ind AS 101, First-time Adoption of Indian Accounting Standards.
- ii) In respect of other Ind AS companies, any change in accounting policies, as compared to those adopted in their first Ind AS financial statements, arising due to application of this Guidance Note should be accounted for in accordance with Ind AS 8. In respect of such companies, changes in accounting policies in their first Ind AS financial statements as compared to their previous GAAP would continue to be governed by the requirements of Ind AS 101.

Appendix 1

Glossary

- i) Additional Capital expenditure means the capital expenditure incurred, or projected to be incurred after the date of commercial operation of the project by the generating company in accordance with the provisions of CERC Tariff Regulations;
- ii) Beneficiary in relation to a generating station covered under clauses (a) or (b) of sub-section 1 of section 79 of the Electricity Act, 2003, means a distribution licensee who is purchasing electricity generated at such generating station by entering into a Power Purchase Agreement either directly or through a trading licensee on payment of capacity charges and energy charges;

- iii) Date of commercial operation (COD) in relation to a generating unit of hydro generating station including pumped storage hydro generating station shall mean the date declared by the generating company after demonstrating peaking capability corresponding to the installed capacity of the generating station through a successful trial run, and after getting clearance from the respective RLDC or SLDC, as the case may be, and in relation to the generating station as a whole, the date of commercial operation of the last generating unit of the generating station.
- iv) Depreciation is the systematic allocation of the depreciable amount of an asset over its useful life. Depreciation includes amortisation of assets whose useful life is predetermined.
- v) Operation and Maintenance Expenses means the expenditure incurred for operation and maintenance of the project, or part thereof, and includes the expenditure on manpower, maintenance, repairs and maintenance spares, consumables, insurance and overheads and fuel other than used for generation of electricity.
- vi) Survey & Investigation Stage means Hydro Power Projects which are in pre-construction stage.
- vii) Detailed Project Report means a detailed report of hydro power projects formulated by Generating Company/ Project Developer as per the guidelines laid down by the Electricity Authority required to be submitted to the Authority for concurrence in compliance with the requirement of Section 8 of the Electricity Act, 2003.
- viii) Feasibility Report in respect of Hydro Power Plants means a detailed study that examines the profitability, feasibility, and effectiveness of a proposed plant.
- ix) Force Majeure means the events or circumstances or combination of events or circumstances including those stated below which partly or fully prevents the generating company to complete the project within the time specified in the Investment Approval, and only if such events or circumstances are not within the control of the generating company and could not have been avoided, had the generating company taken reasonable care or complied with prudent utility practices:
 - a. Act of God including lightning, drought, fire and explosion, earthquake, volcanic eruption, landslide, flood, cyclone, typhoon, tornado, geological surprises, or exceptionally adverse weather conditions which are in excess of the statistical measures for the last hundred years; or
 - b. Any act of war, invasion, armed conflict or act of foreign enemy, blockade, embargo, revolution, riot, insurrection, terrorist or military action; or
 - c. Industry wide strikes and labour disturbances having a nationwide impact in India; or
 - d. Delay in obtaining statutory approval for the project except where the delay is attributable to project developer;
- x) Central Electricity Regulatory Commission (CERC) is a statutory body functioning under section 76 of the Electricity Act 2003 with the mandate to promote competition, efficiency and economy in bulk power markets, improve the quality of supply, promote investments and advise government on the removal of institutional barriers to bridge the demand supply gap and thus foster the interests of consumers by, inter alia, formulating an efficient tariff setting mechanism, improving the operations and management of the regional transmission systems and promoting development of the power market.

- xi) Rate Regulated Activities have the meaning as defined under Ind AS 114.
- xii) Power Station means Hydropower generating stations.
- xiii) Project in case of hydropower generating station means all components of the hydro generating station and includes dam, intake water conductor system, power generating station, as apportioned to power generation.
- xiv) Plant Availability Factor or PAF in relation to a generating station for any period means the average of the daily declared capacities for all the days during the period expressed as a percentage of the installed capacity in MW less the normative auxiliary energy consumption.
- xv) Construction Project means Hydro Power Projects under construction Stage.
- xvi) Run-of-River Generating Station means a hydro generating station which does not have upstream pondage.
- xvii) Run-of-River Generating Station with Pondage' means a hydro generating station with sufficient pondage for meeting the diurnal variation of power demand;
- xviii) Infirm Power means electricity injected into the grid prior to the date of commercial operation of a unit of the generating station in accordance with Central Electricity Regulatory Commission (Grant of Connectivity, Long-term Access and Medium-term Open Access in inter-State Transmission and related matters) Regulations, 2009
- xix) Developer/generator means the entity engaged in the construction of Hydro Power Plants or in the generation of power/electricity from Hydro Power Stations.
- xx) Cost estimate of a hydropower project provides the basis for authorisation of the project for construction and for the appropriation of construction funds. These estimates provide, inter alia, the quantity, unit cost and total costs of various works and supply items including survey & investigation expenses, interest during construction and administrative expenses forming part of project cost.