

GOVERNMENT OF KERALA

GUIDELINES INCORPORATING AMENDMENTS vide GO(MS) NO5/2006/PD/17.03.2006 to GO (MS) No 2/03/PD/16.01.03

- 1 The Public Sector undertakings and the Power intensive industries within the State may be given preference in allotment of the small hydro projects for CPPs.
- 2 T&D loss in wheeling of energy from generating station to consumption point of Captive Power Producer shall be fixed by KSERC.
- 3 Wheeling charges shall be fixed by KSERC as per the provisions of EA 2003
- 4 Preparation of documents for inviting tender, power purchase agreements with IPPs, agreements with the allotter CPPs etc. may be got done by a Committee to be constituted by Government so that the work can be completed within the stipulated minimum time.
- 5 The allottee should be given only 15 months time to come out with a viable proposal
- 6 The DPRs prepared and data collected by the Board in respect of small hydel projects may be made available to the allottee companies at the cost to be decided by Government.
- 7 This Policy is applicable for small/ mini projects with installed capacity ranging from 0.5MW to 25 MW.

Guidelines for the development of Hydel Schemes by Private Sector

– Captive Power projects

There is a large gap between demand and availability of power in our State. Capacity addition is highly essential to bridge this gap. Thermal Power stations are economically and ecologically less viable. So far, the hydroelectric potential has been harnessed only to an extent of 40% in our State. Government and Public Sector do not have the huge resources necessary for large-scale investment in generation. In the Kerala Power Policy, 1998, it was stated that mini hydroelectric projects would be allotted to Private agencies, Public Sector undertaking and Local Self Governments. As early as in 1989, Government had, vide G.O. (MS)35/89/PD dt. 22.12.1989 decided in principle to encourage private participation in small/mini/micro hydel projects. As per G. O. (MS)23/90/PD dt. 7.12.1990, Government laid down terms and conditions for allotment of small hydel projects. Since the Government propose to invite more private participation in this sector, it has become necessary to prescribe revised guidelines for allotment. Power schemes utilizing controlled releases from the existing reservoirs and tailrace are reserved for KSE Board.

- 1 **Eligibility:-** Any person as defined in EA 2003 who intends to set up a captive power plant for its own consumption within the State of Kerala shall be eligible to apply under CPP category. However, preference for allotment shall be given to HT/EHT industrial consumer.
- 2 **Installed Capacity:** Installed Capacity will be fixed for each project by Government with a view to harness the optimum generation potential.
 - 2.1 **Capacity ceiling for allotment:** Single/all Hydro Electric Project allotted to a captive unit will be such that the total annual generation potential from the project(s) will not exceed the annual requirement of the company based on the past three years consumption plus the capacity addition expected to be added within the next five years from the date of allotment.
- 3 **Milestones for development of Project**
 - 3.1 The developer shall be responsible for all-statutory clearances and approvals from concerned agencies. KSEB/Government will provide possible assistance in this regard. Developer shall submit to Govt. for scrutiny and approval of Techno-Economic Feasibility Report (T.E.F.R.) within a period of 15 months from the date of allotment for carrying out the required confirmatory/ other surveys and investigation as per the regulation/norms.
 - 3.2 On getting the TEFRR approved, the developer shall submit to the concerned authorities all necessary and sufficient documents for all-statutory clearances and obtain the approval within a period of 12 month from the date of approval of TEFRR. Further 6 months will be given for achieving financial closure
 - 3.3 The project shall be made operational within 36 months from the date of financial closure.

- 3.4 The failure to reach any of the two milestones in 3.1 & 3.2 above will result in automatic cancellation of the allotment of site, and forfeiture of upfront premium amounts . No compensation would be payable to the CPPs in such instance.
- 3.5 Failure to reach the milestone as in 3.3 above would result in a liability to pay a penalty by the CPP to the Government of Kerala.
- 3.6 The CPP developer may surrender the allotment back to Government of Kerala if on completion of the TEFR within the timeframe the developer establishes to the satisfaction of the Government that the project is techno-economically unviable from developer's point of view. In such case the developer shall be relieved of his commitments. However the TEFR become the property of the Government. In such instances, the Government shall return 75% of upfront premium after retaining 25% of the same towards meeting miscellaneous expenses.
- 3.7 In case of surrender of allotment by CPP, no compensation shall be given by the Government in such instance, other than that eligible under 3.6 above.

4 Basis of Allotment

- 4.1 The Applicant shall submit request for qualification (RFQ) and price bid documents (RFP) in prescribed formats along with other documents.
- 4.2 Pre-qualification evaluation shall be based on balance sheets, annual reports and other reports/ evidence of financial and technical capacity. The Weightage to be given to financial capacity, technical capability, past experience and other relevant attributes of the applicants, the sub categories of these attributes to be evaluated and their inter-se Weightage, the guidelines for evaluation and the passing score on attributes required for pre-qualification shall be specified in the bid document for pre-qualification. Based on the above criterion the Applicants shall be shortlisted and qualified.
- 4.3 Proposals and bids of the short-listed qualified Applicants shall only be considered for allotment. For each project, the bidders have to quote for a premium per MW payable upfront to the Government of Kerala. Minimum threshold premium shall be mentioned in the tender document. Projects will be allotted to the bidders making the highest bids. Bids received beneath the threshold premium will be rejected. Upfront premium will be the primary consideration for allotment.
- 5.0 **Purchase of Excess Power :** The Kerala State Electricity Board (KSEB) shall have the first right to purchase the energy generated in excess by the captive producer over the captive consumption. If KSEB is not intending to purchase the excess power from CPP, then CPP is permitted to sell the power in excess over their requirement to any third party. The developer shall be responsible for payment of surcharge and transmission & wheeling charges as decided by KSERC for the energy sold to third party consumer/ distribution licensees/ power trading company. The purchase of surplus power by KSEB shall be at a tariff subject to the approval of KSERC.. The purchase will be subject to the energy requirements of the State, grid frequency, other system constraints and financial viability of such purchase.

6 **Captive consumption**

- 6.1 CPP shall have right to open access for the purpose of carrying power from their captive generation plant to their destination of own use subject to availability of adequate transmission facility as determined by KSEB/State transmission utility(STU). Any case of dispute regarding availability of transmission facility shall be adjudicated upon by the KSERC.
- 6.2 In case the captive consumer after allotment of HEP undertakes capacity addition to his existing industry resulting in increased consumption, necessary additional energy allotment to the extent of the added requirement can be granted on the specific request of the developer.
- 6.3 Wheeling charge and Transmission losses will be decided by KSERC
- 6.4 Consumption of Energy by the captive developer at his point of consumption from the grid over and above his captive consumption shall be charged at the ruling rates in KSEB chargeable for his category of consumer.
- 7 **Transmission facility and grid interface:** Construction and maintenance of transmission facilities up to the nearest KSEB/STU grid as directed by the KSEB / STU shall be at the cost and responsibility of the developer. KSEB/STU reserves right to draw extra power through this transmission line. Any modification / upgradation of substation of KSEB/STU, which draws power from the project, shall be at the cost of developer. Cost for above said items shall be included/ considered in the project cost. Alignment of transmission line will be surveyed by the developer and got it approved by KSEB/ STU before commencement of transmission works. Proposal for transmission line including specification of lines and interfacing equipments, protective equipments etc. are to be prepared by the developer and submitted along with the TEFRR to the KSEB/STU for scrutiny and approval within a time frame of 15 months from the date of allotment. The developer shall install & maintain ToD meter and allied equipment as prescribed by KSEB/STU. KSEB/STU along with the developer shall jointly seal meters & metering devices.
- 8 The developer should develop the power station at full installed capacity as allotted to him. Development in stages will not be allowed. Station should be developed and operated at optimum capacity as approved by the Board/Government for achieving optimum utilization of natural resources.
- 9 **Maintenance:** The maintenance of the project components, equipment and transmission lines up to the interconnection point have to be carried out by the developer at his cost with close co-ordination and supervision of KSE Board. Routine inspection of project components shall be carried out. Government/Board/Statutory agencies to assess the upkeep and maintenance of the project.
- 9.1 Developer may construct & maintain dedicated transmission lines from generation plant to interconnection point.
- 9.2 The developer will have the right to access for existing transmission facilities in the State, if adequate transmission facility is available. Availability of transmission facility shall be

decided by KSEB/STU. And any dispute regarding the availability of transmission facility shall be adjudicated upon by KSERC. The developer shall enter into a Wheeling agreement with KSEB/STU for evacuation of power.

- 9.3 When transmission lines of KSEB/STU are used, the transmission charges and transmission losses shall be decided by KSERC from time to time. Transmission losses will be adjusted in the delivered energy while the transmission charges as decided by KSERC shall be paid to KSEB/ STU as per the provisions of EA2003. The wheeling transactions shall be settled on monthly basis.
- 10 **Project Cost:** The project cost shall cover all cost including civil, electrical and mechanical works, cost of transmission lines for evacuation of power upto KSEB grid including all metering and protective equipments, upgradation /modification of KSEB substation (if required). The project developer has to arrange all financial requirements in accordance with the guidelines in force.
- 11 **Project Report:**
 - 11.1 The developer should prepare the TEFRR and submit it to Government for evaluation and approval. The construction of the project shall be under the close monitoring of KSEB/Independent agency appointed by Government.
 - 11.2 In the case of projects for which KSEB have prepared DPR or have completed detailed investigation, the developer shall procure DPR or field data from KSEB on payment as assessed by KSEB
- 12 **Project Information:** KSEB/any other agency authorised by Government will provide available information about the project such as project site, hydrological details, transmission access etc. to the prospective bidders at a cost specified in the bid document
- 13 **Metering:** Necessary Main and Check meters having import-export registering facility and allied equipments as prescribed by KSE Board shall be installed at the interconnection point at the cost of the Developer. All the meters will be under the custody of KSE Board. Cost of installing and maintaining meters, CT, PT protective equipments etc. including their replacements/repair whenever necessary will be borne by the Developer
- 14 In case generation at a hydroelectric generating station developed by a captive developer is stopped due to various reasons for a period, energy consumed will be charged at the usual rates applicable to this particular category of consumer he belongs to.
- 15 **Accounting;** Accounting of the energy fed into the grid and supplied to the company by the Board will be settled on annual basis. Accounting year will be from June 1st to May 31st
- 16 **Generation Restrictions:** In case the state grid is not able to absorb the energy generated from the scheme for any reason, the generation from the scheme will have to be temporarily stopped as directed by the State Load Despatch Centre (SLDC). The captive producer will not be compensated for the loss in generation due to the intervention by SLDC. In extraordinary circumstances arising out of threat to security of the state, public

order or a natural calamity or such circumstances arising out of public interest, the developer shall have to operate & maintain generating station in accordance with the directives of state government. In case of shut down, no claim on account of loss of generation shall be entertained.

- 17 **Consumption restrictions:** Captive user/ third party consumer/Licensee(authorized consumer) shall abide by grid discipline & will not be entitled for any compensation in the event of grid failure, shut down, interruption in power supply etc, resulting in non-consumption of generated energy.
- 18 Deleted
- 19 **BOOT Period:** Hydro Electric Projects allotted will be on Build, Own, Operate and Transfer (BOOT) basis for a period of 30 years from the scheduled date of allotment of the project at the end of which they shall revert to the government of Kerala/ KSEB as directed by Government or extended further on mutually agreed terms
- 20 Deleted
- 21 **Grid discipline:** The CPP has to operate as per the instruction from the State Load Despatch Centre or KSEB/ STU till the formation of SLDC.The SLDC may levy and collect fee and charges from the generating companies and licensees engaged in intra-state transmission of electricity as may be specified by the State Commission.
- 22 **General conditions:**
 - a The developer shall pay taxes, duties and other levies to the Central or State Government as per statutes and rules in force.
 - b All the energy transaction and bills are to be settled on annual basis.
 - c Once the project is allotted, no transfer of projects other than take over by Govt. is allowed. If desired, Government shall auction /bid again the same project. Allotment shall be done for highest quoted rate for taking over the project with existing liabilities and payment obligation.
 - d The developer shall take prompt action to commence the works when the projects are finally allotted. In case the developer does not commence the work within the stipulated period, Government reserves the right to cancel the allotment and take over the project. Compensation of any nature to the developer on this account will not be allowed
 - e On being allotted, the developer has to submit Techno-Economic Feasibility Report, lay out of the project, detailed design of the project with design details, specifications and construction drawings to KSEB/Govt. for approval.
 - f Construction of the project shall be strictly in accordance with the TEFr and the design specifications approved by KSEB subject to quality assessment and progress monitoring by GoK or any agency authorized by GoK.

- g In case, the developer opt to utilize the consultancy services of KSEB in respect of further field investigations, preparation of TEFR (where DPR is yet to be prepared by KSEB), preparation of design specifications, preparation of detailed estimate, preparation of tender documents for both civil and electrical works, including site consultation etc., he can avail the same at mutually agreed rates and conditions.
- h In case the developer leaves any project incomplete or closes the industry or abandons the project or violates any condition of allotment, the Government reserves the right to take over the project without any compensation and free from encumbrances. Developer shall not pledge, hypothecate or mortgage Government/ KSEB land without the consent of the Government. On completion of BOOT period the entire project components including transmission system shall be transferred by the developer to the Government in proper working condition free of cost and free of all encumbrances. The Government will not have any liability to take over the employees engaged in the project by the developer. In case the Government do not extend the BOOT period and the developer do not transfer his project components as specified above, the Government/Board on being authorized by Govt. will have the right to recover the property with all the project components. In case there is any subsisting liability the agency shall be personally liable for the same.
- I Any remedial /compensatory measures directed by competent agencies to protect environment or any other activity found necessary by concerned Government Departments /Local Bodies, will also have to be carried out by the developer at his cost
- j The developer has to abide by the rules and regulations framed by the Government of Kerala from time to time in the matter of electricity generation and other activities by private agencies.
- k The final authority of allotment vests with the Government of Kerala. As a policy tail race schemes, dam toe and other regulated flows are open only to KSEB or its successor entities.
- l All the directions/controls/rectifications issued by CERC/ CEA/ Central Bodies/ Southern Electricity Board Authorities/ SERC from time to time as adopted by Government/ KSEB shall be binding on the developer
- m Development of the projects being allotted shall be strictly in accordance with the approved TEFR. Any violation to this, which restricts the present function of the existing hydel station, either upstream or downstream of this project, will lead to cancellation of allotment of projects.
- n In the event of a dispute, the interpretation of these guidelines made by the Government of Kerala shall be final. In all such matters, to the extent practicable, an opportunity shall be given to affected stakeholders to be heard, before any such decision is taken by the Government.

Guidelines for the development of Hydel Schemes to Private Sector
– on BOOT basis by IPPs

There is a large gap between demand and availability of power in our State. Capacity addition is highly essential to bridge this gap. Thermal Power stations are economically and ecologically less viable. So far, the hydroelectric potential has been harnessed only to an extent of 40% in our State. Government and Public Sector do not have the huge resources necessary for large-scale investment in generation. In the Kerala Power Policy, 1998, it was stated that mini hydroelectric projects would be allotted to Private agencies, Public Sector undertaking and Local Self Governments. As early as in 1989, Government had, vide G.O. (MS)35/89/PD dt. 22.12.1989 decided in principle to encourage private participation in small/mini/micro hydel projects. As per G. O. (MS)23/90/PD dt. 7.12.1990, terms and conditions for allotment of small hydel projects were laid down by Government. Since the Government propose to invite more private participation in this sector, it has become necessary to prescribe revised guidelines for allotment of project through competitive bidding route to IPPs(Independent Power Producers)

- 1 **Eligibility:** Any Company or body corporate or association or body of individuals, whether incorporated or not, or artificial judicial person shall be eligible to apply under IPP category
- 2 **Installed Capacity:** Installed Capacity will be fixed for each project by Government with a view to harnessing the optimum generation potential.
- 3 **Capacity ceiling for allotment:** Installed Capacity of single Hydro Electric Project allotted will be limited to 25 MW.
- 4 **Milestones of Development of Project.**
 - 4.1 The developer shall be responsible for all-statutory clearances and approvals from concerned agencies. KSEB/Government will provide possible assistance in this regard. Developer shall submit to Govt. for scrutiny and approval of Techno-Economic Feasibility Report (T.E.F.R.) within a period of 15 months after carrying out the required confirmatory/ other surveys and investigation as per the regulation/norms.
 - 4.2 On getting the TEFr approved, the developer shall submit to the concerned authorities all necessary and sufficient documents for all-statutory clearances and obtain the approval within a period of 12 month from the date of approval of TEFr. Further 6 months will be given for obtaining financial closure
 - 4.3 The project shall be made operational within 36 months from the date of financial closure
 - 4.4 The failure to reach any of the two milestones in 4.1 & 4.2 above will result in automatic cancellation of the allotment of project, and forfeiture of Implementation Guarantee deposit. No compensation would be payable to the IPPs in such instance

- 4.5 Failure to reach the milestone as in 4.3 above would result in liquidated damages for delay in commercial operation of project, which has to be paid by IPP to the Government of Kerala as stated in the implementation agreement
- 4.6 The IPP may surrender the allotment back to Government of Kerala ,if on completion of the TEFR within the timeframe, the developer establishes to the satisfaction of the Government that the project is techno-economically unviable from developer's point of view. In such case, the developer will be relieved of his obligations. However the TEFR become the property of the Government. In such instance, the Government shall return 75% of implementation guarantee after retaining 25% of the same towards meeting miscellaneous expenses. The Government shall not compensate for any other expenditure incurred by the developer for the preparation of TEFR.
- 5 **BOOT Period:** Hydro Electric Projects allotted will be on Build, Own, Operate and Transfer (BOOT) basis for a period of 30 years from the scheduled date of allotment of the project.
- 6 **Procedure for Selection and Allotment**
- 6.1 Government will invite tender notice for submitting application for qualification Allotment of Projects will be based on two-stage bidding process. In the first stage,the applicants has to submit request for qualification (RFQ).All bidders shall be subject to pre-qualification as provided in the following paragraph
- 6.2 Pre-qualification evaluation shall be based on balance sheets, annual reports and other reports/ evidence of financial and technical capacity. The weightage to be given to financial capacity, technical capability, past experience and other relevant attributes of the applicants, the sub categories of these attributes to be evaluated and their inter-se weightage, the guidelines for evaluation and the passing score on attributes required for pre-qualification shall be specified in the bid document for pre-qualification. Based on the above criterion the Applicants shall be shortlisted.
- 6.3 In the second stage, proposals are invited from qualified bidders. Proposals and bids of the short-listed qualified applicants shall only be considered for allotment.All pre-qualified bidders will be provided with DPR/DIR.
- 6.4 Criterion for selection of IPP bidder will be the lowest levelised tariff rate quoted for the sale of electricity for the entire BOOT period.
- 7 **Acceptance of Offer:** Government shall have power to accept or reject the offer considering the financial viability of the rate.
- 8 **Purchase of generated power:** KSEB will have the first right to purchase the power generated by the IPP at the bid rates subject to the approval of KSERC.The purchase will be subject to financial viability of such purchase and other system requirements. If KSEB is not intending to purchase the power from IPP, then the commission shall permit non-discriminate open access as per the provisions of EA 2003
- 9 **Transmission facility and grid interface:** Construction and maintenance of transmission facilities up to the nearest KSE Board grid as directed by the Board shall be the cost and

responsibility of the developer. KSEB reserves the right to draw extra power through this transmission line. Any modification/ upgradation of substation of KSEB for drawing power from the project shall be at the cost of the developer. Cost for above said items shall be included /considered in the project cost. Alignment of transmission line will be surveyed by developer and got it approved by KSEB/STU. Proposal for transmission line including specification of lines and interfacing equipments, protective equipments etc. are to be prepared by the developer and submitted along with the TEFR to the KSEB for scrutiny and approval within a time frame of 15 months from the date of allotment.

- 10 **Maintenance:** The maintenance of the project components, equipment and transmission lines up to the interconnection point have to be carried out by the Developer at his cost with close co-ordination and supervision of KSE Board.
- 11 **Project Report:**
 - 11.1 The Company shall prepare the TEFR (Techno Economic Feasibility Report) and submit it to the KSEB/any other agency authorized by Government for evaluation and approval
 - 11.2 The DPRs prepared and data available in respect of small hydel projects will be made available to all bidders at the cost specified in the bid document
- 12 **Metering:** Necessary Main and Check meters having import-export registering facility and allied equipments as prescribed by KSE Board shall be installed at the interconnection point at the cost of the Developer. All the meters will be under the custody of KSE Board. Cost of installing and maintaining meters, CT, PT protective equipments etc. including their replacements/repair whenever necessary will be borne by the Developer.
- 13 **Accounting:** Accounting of the energy fed into the grid of supplied to the company by the Board will be settled on monthly basis.
- 14 **Generation restrictions:** In case the generation has to be regulated due to constraints in the power system, the generation from the scheme will have to be regulated /stopped as directed by the Load Despatch Centre. The Generating Company will not be compensated for the short fall in revenue due to the intervention by SLDC. In extraordinary circumstances arising out of threat to security of the state, public order or a natural calamity or such circumstances arising out of public interest, the developer shall have to operate & maintain generating station in accordance with the directives of state government. In case of shut down, no claim on account of loss of generation shall be entertained
- 15 **Water Cess:** Water Cess not required since, it will reflect on tariff and hence not investor friendly.
- 16 **Grid discipline:** The IPP has to operate as per the instruction from the State Load Despatch Centre or KSEB/STU till the formation of SLDC.

17 **General conditions:**

- a Once the project is allotted, the Company has to submit Techno-Economic Feasibility Report, lay out of the project, detailed design of the project with design details, specifications and construction drawings to KSEB/ Government for approval.
- b Construction of the project will be strictly in accordance with the TEFRR and the design specification approved by the KSEB/ any other agency authorised by the Government, subject to quality assessment and progress monitoring by KSEB / any other agency authorised by the Government.
- c During implementation transfer of ownership would be permitted if transferee satisfies pre-qualification requirements, subject to approval of Government of Kerala. Free transfer of shares will be permitted in the companies allotted project as per the procedure laid down in bid documents/ PPA after project implementation.
- d The Developer shall commence and complete all works relating to the project as per the schedule prescribed by the authority concerned.
- e The developer shall develop the power station at full installed capacity as allotted to him. Stations should be developed and operated at optimum capacity for achieving optimum utilization of natural resources.
- f Any remedial /compensatory measures directed by competent agencies to protect environment or any other activity found necessary by concerned Government Departments /Local Bodies, will also have to be carried out by the developer at their cost and this cost shall be added to the project cost.
- g The Developer has to abide by the rules and regulations framed by the Government of Kerala from time to time in the matter of electricity generation and other activities by private agencies.
- h All the directions issued by Government/Statutory authorities from time to time shall be binding on the Company.
- I In case the developer leaves any project incomplete or closes the industry or abandons the project or violates any condition of allotment, the Government reserves the right to take over the project without any compensation and free from encumbrances. Developer shall not pledge, hypothecate or mortgage Government/ KSEB land without the consent of the Government. On completion of BOOT period the entire project components including transmission system shall be transferred by the developer to the Government in proper working condition free of cost and free of all encumbrances. The Government will not have any liability to take over the employees engaged in the project by the developer. In case the Government do not extend the BOOT period and the developer do not transfer his project components as specified above, the Government/Board on being authorized by Govt. will have the right to recover the property with all the project components. In case there is any subsisting liability the agency shall be personally liable for the same
- j The Developer shall pay taxes, duties and other levies to the Central or State Government as per statutes and rules in force.

- k All the energy transaction and bills are to be settled on monthly basis.
- l Development of the projects being allotted shall be strictly in accordance with the approved TEFRR. Any violation to this, which restricts the present function of the existing hydel station, either upstream or downstream of this project, will lead to cancellation of allotment of projects
- m In the event of a dispute, the interpretation of these guidelines made by the Government of Kerala shall be final. In all such matters, to the extent practicable, an opportunity shall be given to affected stakeholders to be heard, before any such decision is taken by the Government.
- n As a policy tail race schemes, dam toe and other regulated flows are reserved for the development by KSEB or its successor entities and not opened for allocation to IPPs
- o Prior sanction of Government is to be obtained for sale of surplus power outside the state.