

Before the
MAHARASHTRA ELECTRICITY REGULATORY COMMISSION
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CASE NO. 11 of 2004

**In the matter of
Approval of Energy Wheeling and Banking Agreement between VHPL, MSEB
and Inox Air Products Ltd. for self-use.**

Dr. Pramod Deo, Member

Shri. A. Velayutham, Member

ORDER

Dated: 6th December, 2004

Maharashtra State Electricity Board (MSEB) have submitted an Application on 2nd August, 2004 for approval of a tripartite draft Agreement between M/s. Vindhyachal Hydro Power Ltd (VHPL), MSEB, and M/s. Inox Air Products Ltd (Inox) for energy wheeling and banking in respect of the captive Chaskaman Hydro Power Plant of VHPL to their captive user, Inox.

2. In their Application, MSEB have stated that, after obtaining clearances and NOCs from MSEB and other authorities during the years 1999 and 2000 for setting up a 3 MW Hydro Power Plant at the foot of the Chaskaman Dam on the Bhima river, and based on these and various policies for such projects and for Captive Power Plants (CPPs), an Energy Wheeling and Banking Agreement in respect of supply of power by VHPL to their captive user, Inox is being submitted to the Commission for approval.. Under the draft agreement, VHPL have paid for the requirements to evacuate power on 33 KV feeder, and have to provide meters approved and tested by MSEB at their own cost.

3. With regard to the wheeling of energy to Inox at their two factory locations in Igatpuri Taluka (Nashik Dist.) and the Trans Thane Creek MIDC Area, MSEB have stipulated wheeling and transmission loss charges varying between 2% and 6% depending on the distance slab (distance slab charges for transmission loss being different for the period upto and after 28th November, 2002, when the Hydro Power Plant was framed by Govt. of Maharashtra-GoM). The demand charges and energy supply by MSEB when required would be paid as per the applicable tariff, and the facility of banking and wheeling can be withdrawn by MSEB in force majeure conditions. The energy generated can be banked with MSEB and carried forward on a month to month basis within the same Water Year. The credit accounting and banking would be done on ToD basis.



4. MSEB have stated that the draft agreement is based on GoM's G.R. dated 20th December, 1997 relating to CPPs and the MSEB policy at that time, and GoM's G.R. dated 28th November, 2002 regarding small hydro projects as well as the NOCs issued to the parties. Along with the draft agreement, MSEB have annexed a statement indicating 4 issues on which VHPL defers from the draft agreement. VHPL have separately submitted their Reply under affidavit dated 14th August, 2004 raising 7 issues on various clauses of the draft agreement

5. At the hearing held on 22nd September, 2004, drawing attention to Orders in the matters of purchase of power from bagasse based Co-gen projects, procurement of wind energy, and regarding fossil fuel based CPPs, the Commission observed that it has generally not been inclined to go into individual agreements in cases where benchmarks have already been laid down through other generic dispensations. The Commission noted that an exercise is currently underway to advise the GoM in the matter of formulating a new mini Hydro Power Policy considering the changes brought in by the Electricity Act, 2003, and also to determine the procurement process, purchase rates, etc. in response to a Petition filed by GoM. Through earlier Orders in the above cases, certain common benchmarks have been set, including in respect of infirm wind energy, for parameters such as reactive power, transmission and wheeling charges, banking, etc. The Commission, therefore, intended to vet the substantive clauses in the proposed Agreement and the unresolved issues and differences in that light.

6. Referring to and elaborating on the disputed issues annexed to VHPL's reply dated 14th August, 2004, Shri M.N. Ramachandra, Executive Director, VHPL submitted that the first point at issue relates to charges for reactive power drawn from MSEB (Clause 3.04). The Commission's Wind Energy Order had determined a charge of 25 paise per RkVAh. However there is a basic difference between wind energy and hydro power. In case of wind energy, induction generators are in place which always draw RkVAh from the system, whereas hydro power has synchronous generators which require no reactive power drawal from the system. Shri A.D. Palamwar, Technical Director (CP), MSEB responded that it is rational to ask for reactive compensation since the hydel plant draws substantial reactive power when the hydro machine is not generating. While agreeing broadly, the Commission observed that in the absence of sufficient data and support, a benchmark is needed to decide on the charges, if any. Shri Ramachandra clarified that, when it is not generating, the facility is like any other HT consumer who would be drawing reactive power. Normally, reactive power, power factor and KVA are correlated. Thus, once contract demand (kVA) is charged, there is a penalty for low power factor below the recommended level. Hence the hydro facility should be treated like any other HT consumer and the HT tariff applied, rather than treating it differently just because it is a captive generator and is not operating.

7. The second point of disagreement was that MSEB wants the captive user to pay the State Load Dispatch Centre (SLDC) charges (Clause 6.19). Shri Ramachandra drew attention to Clause 3.02, which clearly states:

"3.02 VHPL shall be allowed to operate Project as a base load generating station. Board shall not impose any restrictions on the above manner of operation except for reasons of safe operation of the grid"

Since VHPL does not have any control over water flow, the above clause had been agreed upon and, as a consequence, it does not really come within the purview of the SLDC. The Commission observed that generally all the players in the system might have to bear a portion of the cost for SLDC, an independent identity under the new Act. The SLDC is working for all the players and requires sufficient funds to operate and maintain the system in an integrated and independent manner. The question of the proportion in which these are to be shared will possibly depend upon the quantum of energy being handled on behalf of each constituent. In principle, VHPL also have to share



a portion of it, but this is likely to be nominal and the exact quantum could be worked out at the relevant time or separately.

8. Shri Ramachandra referred to the third point (Clause 6.20) to the effect that MSEB's policy on CPPs, based on GoM/ Commission guidelines/Orders as revised from time to time, would be binding on VHPL and Inox. VHPL instead contend that only the GoM / Commission's instructions should be binding. There may be interpretive differences which could be resolved, if necessary by approaching the Commission since no other arbitration clause was available.

9. Coming to the fourth point (Clause 8.01), Shri Ramchandra stated that the validity of the wheeling and banking agreement should be co-terminus with the period of 30 years for which the site concession to develop and operate is given by GoM, and not limited to 6 years as sought by MSEB. TD (CP), MSEB clarified that the policies laid down by GoM or the Commission from time to time would be applicable to this also. The Commission observed that, in any case, this issue may be taken up in the ongoing exercise on the new Hydro Policy.

10. MSEB raised the issue of such Hydro Power Projects being located at remote places, and the consequent burden of evacuation costs. The Commission observed that this issue would also be flagged for consideration while dealing with the Hydro Policy, in terms of cost sharing, etc.

11. Shri Ramachandra's fifth point related to the installation of check meter and main meter (Clause 4.01). Both check meter and main meter as approved by MSEB have been installed. The main meter is of the 0.2 class, and the check meter is of the 0.5 class. This scheme was earlier approved by MSEB, but now MSEB insist that even the check meter would have to be of 0.2 class. He drew attention to the check meter readings to show that the deviation is within limits, and queried as to why VHPL should be asked to install one more check meter in parallel with the existing main meter in these circumstances. The MSEB representative agreed not to insist on this requirement.

12. Shri Ramachandra's sixth point was regarding the levy of transmission loss and wheeling charges (Clause 5.01). He pointed out that the Commission in other analogous Orders such as those relating to wind energy, bagasse and other non-fossil fuel based Co-generation projects, and fossil fuel based CPPs, had determined these charges at 5% and 2% respectively, pending more detailed study. Therefore, the same level of charges should be applied in this case. The MSEB representative submitted that the Commission's Order in this matter would take effect prospectively and, therefore, at least upto 18th September, 2003 (the date of the operative Wind Energy Order) MSEB will be charging as per the NOC condition, and thereafter as per the interim directives of the Commission. Shri Ramachandra pointed out that the earlier Hydro Policy announced by GoM came into effect from 28th November, 2002 in which both the wheeling and transmission loss charges were prescribed as 2%, 4% and 6% based on distance from hydel plant to user point. However, VHPL contend that, had they approached the Commission earlier, the Commission's decision would have been similar to that in the Bagasse Co-generation or Wind Energy cases, i.e. 2% and 5%. Because of delay by MSEB in framing the agreement, VHPL had not been able to come to the Commission. Therefore, wheeling charges and transmission loss charges of 2% and 5% respectively should be applied from the date of commissioning of the plant till a revised decision is taken by the Commission. In any case, there is no need to refer now to the old policy because it is on its way out. Further, this matter is to be governed by the Commission, being a tariff-related issue, and not by the GoM. The Commission has directed 2% and 5% for other cases, and it should be the same in the case till the Commission looks at it in more detail.



13. On the seventh point, Shri Ramachandra of VHPL submitted that the proposed agreement contains two conditions stating that (i) the user company (Inox) will not be permitted to reduce its contract demand (Clause 6.08) and (ii) VHPL, i.e., the generating plant, would have to pay double the normal demand charge during planned shutdown, and triple the demand charge for unplanned shutdown for the excess over the contract demand (Clause 6.11). He argued that, in case of hydel plants, this is not relevant because generation and use are not at the same location. Nowhere does the demand of generation affect the user. The user is directly drawing power from MSEB as a consumer, and his demand is based on his business. Based on his business, he may increase the contract demand or decrease it. There is no need or justification to put a restriction that he cannot reduce the demand. This had been brought in through the old fossil fuel based CPP policy, when DG sets were mainly used. In the case of hydro, the generation is based purely on the water availability, and hence the clause of penal demand charges is not really applicable or justified. The Commission observed that it had dealt with both reduction in contract demand and the consequences for exceeding such demand in its other Orders. The MSEB representative agreed that the restriction on contract demand could be withdrawn, but the penalties should apply.

14. Shri Ramachandra finally submitted that the plants have been running for the last two years, and there are large arrears receivable from MSEB once this is agreed upon. He asked the Commission to direct MSEB to make the payment within 30 to 45 days of the Order and in one go, instead of adjusting it through future bills and over one or more years as would be their usual practice. The Commission observed that, considering the circumstances and interests of both parties, it would be fair to allow such payment over a reasonable period of, say, 1 to 3 months, which Shri Ramachandra agreed would be acceptable. However, the MSEB representative submitted that since the draft agreement is only for banking and wheeling, the question of payment by MSEB would not arise. MSEB can give the credit in agreed installments. Shri Ramachandra clarified that the arrears have accumulated because of delay on the part of MSEB coming to the Commission. It should have been done 2-1/2 years ago, before commissioning of the plant. Inox, for instance, had already paid and required to be refunded. Clarifying further, he submitted that after reducing the wheeling and transmission related charges, the resultant units should go to Inox on a ToD basis, as agreed by MSEB, who were earlier adjusting in ascending order at that time. The moment it is on ToD basis, part of the deliverable units will get adjusted during peak hours and the benefit that they would get will be more than what was adjusted earlier. On carrying out adjustment, there would be some amounts due. Citing precedence, Shri Ramchandra stated that VHPL commissioned the plant in March, but the system was such that the credit was given only in September. The process of giving credit started in September. Inox have paid the full bill from March to September. VHPL had calculated in April itself the amount if the bill was adjusted in March. The money was calculated and paid back to VHPL. A similar exercise will have to be carried out with MSEB for a longer period on finalisation of the Order.

15. After considering the written and oral submissions and the deliberations at the hearing, and also the various analogous directions of the Commission in other related matters, the Commission directs that the tripartite agreement may proceed subject to the modifications and other modalities set out below-

- (a) With regard to charges for reactive power, the Commission notes that synchronous generators are also used in the bagasse based Co-generation projects, and agreed with MSEB that it is appropriate to levy charges for the reactive power drawn from the grid. Therefore, as in the case of bagasse based Co-generation projects, in the present case also the agreement should provide that VHPL would supply reactive power (RkVAh) equivalent to at least 36% of the active power (kWh) supplied to the grid on a monthly



basis. In case of failure to do so, the shortfall should be charged by MSEB at 25 paise per RkVAh.

- (b) The SLDC charges as may become applicable in future shall be shared by MSEB and VHPL.
- (c) With regard to the applicability of MSEB's CPP and other policies as and when they are revised, the agreement should make it clear that such policies of MSEB would become applicable only to the extent that they are not inconsistent with either the statutory provisions under the Electricity Act and Regulations, the Orders and directions of the Commission and, where relevant, the policies of GoM. Obviously, in the absence of an arbitration clause in the agreement, any dispute arising is justiciable before the Commission or other competent forum by operation of law.
- (d) As regards the initial period of the agreement (6 years renewable as proposed by MSEB), the concession period of 30 years allowed by GoM cannot be the only basis for determining this period as sought by VHPL. The Commission may address this issue while dealing with the separate Petition of GoM with regard to the power procurement process, etc. in respect of small hydro projects. In the meantime, the initial period of agreement may be co-terminus with the present loan repayment period in the case of this project.
- (e) With regard to the provision for installation of 2nd check meter with the same accuracy as the main meter, in view of the deliberations at the hearing this requirement may be withdrawn.
- (f) Considering the dispensation consistently adopted by the Commission in this regard in its Orders related to bagasse based Co-generation projects, wind energy projects and fossil fuel based CPPs pending more detailed study, wheeling and transmission loss charges may be levied at 2% and 5% respectively with effect from 2nd August, 2004 when MSEB submitted their present Application. While the Commission appreciates that this dispensation is likely to have been applied by the Commission earlier had MSEB approached it in good time, it is not possible to apply these rates retrospectively even prior to that date since they had been levied by the MSEB on the basis of the prevailing GoM dispensation, and in the absence of any Orders to the contrary by the Commission or any approach to it by VHPL or other affected parties with reference to this specific case.
- (g) As regards reduction in contract demand and the levy of penalty for exceeding contract demand, the dispensation in the Commission's Order dated 8th September, 2004 relating to fossil fuel based CPPs and the applicable provisions of the tariff Orders, respectively, would apply.
- (h) In view of the time already elapsed, the Commission expects that the agreement would be executed expeditiously, and in any event within 1 month from this Order.
- (i) The reconciliation and refund/ adjustment that may arise should be paid by MSEB fully within a period of 3 months thereafter, in installments if necessary.

Sd/-
(A. Velayutham)
Member

Sd/-
(Dr Pramod Deo)
Member

(A.M. Khan)
Secretary, MERC

