



COMMISSION'S ORDER

ON

**ANNUAL REVENUE REPORT FOR BULK SUPPLY BUSINESS
FOR FY 2006-07, TRADING MARGIN & BULK SUPPLY TARIFF**

August 11, 2006

HARYANA ELECTRICITY REGULATORY COMMISSION

SCO 180, SECTOR - 5, PANCHKULA - 134 109, HARYANA

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HERC/PRO - 3 OF 2006

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SCO 180, SECTOR - 5, PANCHKULA - 134 109, HARYANA

CASE NO. HERC / PRO - 3 OF 2006

Date of Order: August 11, 2005

In the matter of application filed by Haryana Power Generation Company Limited (HPGCL) for approval of Annual Revenue Requirement for Bulk Supply Business for FY 2006-07 and determination of Bulk Supply Tariff (BST) and Trading Margin.

PRESENT: **Lt. Col. (Retd.) Raghbir Singh, Chairman**
 Er. T.R. Dhaka, Member
 Shri. T.S. Tewatia, Member

On behalf of HPGCL Smt. Jyoti Arora, M.D.
 Shri. J.C. Kinra, Director
 Shri. G.K. Arora, FA / Hq.

On behalf of HVPNL Shri. P.K. Das, MD.

On behalf of the D&RS V.B.S. Chauhan, Director 'Op' UHBVNL
Licensees D.C. Aggarwal FA/Hq. UHBVNL
 D.P. Sharma, SE/RA UHBVNL
 V.K. Johar CE/ DHBVNL
 V.K. Singla, SE / RA DHBVNL

On behalf of Staff of Shri. Surjeet Singh, Secretary
HERC Smt. Saroj Deswal, Director
 Shri. Sunil Kumar Madan, Director
 Shri. Sanjay Varma, Jt. Director
 Shri. Ashu Mathur, Jt. Director
 Smt. Surbhi Jain, Dy. Director

ORDER

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1 PROCEDURAL ASPECTS OF THE FILINGS

1.1 PROCEDURAL ASPECTS

Haryana Power Generation Corporation Ltd. (HPGCL), a deemed trading licensee under 5th proviso of Section 14 of the Electricity Act, 2003 (the Act) read with Haryana Government Transfer Notification No. 1/6/2005-1 Power dated 9th June 2005, submitted their application in respect of determination of trading margin for supply of power to Discoms during FY 2006-07 vide Memo No. HPGC / FIN / Reg-201 / 573 dated 24/04/2006. HPGCL has projected total power purchase, from different sources, of 26,041 million units at a cost of Rs.62,029.10 million. The net units available for sale, after accounting for 5% transmission losses, is projected at 24,738.95 million units, translating into bulk supply cost of Rs. 2.51 per unit. The total expenditure during FY 2006-07, other than power purchases i.e. salary & wages, general and administrative expenses and interest on working capital loan, is projected at Rs.1109.17 million. The net expenditure after deducting rebate amounting to Rs. 400 million and incentives of Rs.215 million is projected at Rs.494.17 million. To recover this expenditure HPGCL has proposed trading margin of 2 paisa / kWh. Resultantly, the net sale rate to the discoms works out to Rs.2.53 / kWh.

The initial scrutiny of the filing submitted by HPGCL for determination of bulk supply cost and trading margin based on revenue requirement for FY 2006-07 revealed a few data gaps, lack of detailed information and additional data requirements. The Commission issued a deficiency letter No 454/HERC/SV-Trading /def dated 8/06/2006, directing HPGCL to file the required additional / supplementary information by 22nd June 2006. HPGCL, vide Memo No. HPGC / FIN / Reg-201 / 811 dated 22nd June 2006, filed its reply along with supporting and additional data.

The Commission is not fully satisfied with the supplementary information & its accompanying data / documents. In spite of insufficient data furnished by HPGCL and the fact that HPGCL failed to comply with the statutory requirement of Section 64(2) of the Act i.e. “every applicant shall publish the application, in such abridged form and manner as may be specified by the appropriate Commission”, the Commission deemed it fit in public interest to carry forward the process and decided to issue public notice inviting objections / comments from the public on the filing submitted by HPGCL.

The Commission issued public notice on 10/06/2006 in two newspapers with wide circulation in the state of Haryana i.e. Hindustan Times (English-Chandigarh & Delhi editions), and Dainik Jagran (Hindi – Chandigarh, Panipat, Hissar & Faridabad editions). The public was informed through the aforesaid notice about the salient features of the filing, availability of the filing and related documents. The last date for filing of objections / comments by the public was 26th June 2006 and the public hearing was scheduled for 3rd July 2006.

The public hearing in respect of determination of bulk supply rate and trading margin was held as per schedule at 11:00 AM on 3rd July 2006 in the conference hall of the Commission.

1.2 INTERVENERS / OBJECTORS

In response to the public notice issued by the Commission, no objections / comments were received from Public, Institutions, Organisations, and Individuals. The distribution and retail supply licensees i.e. DHBVNL and UHBVNL filed their objections & suggestions on the application filed by HPGCL for consideration of the Commission.

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2 INTERVENERS' SUBMISSION & HPGCL's RESPONSE

Dakshin Haryana Bijli Vitran Nigam Ltd. (DHBVNL), the Distribution and Retail supply licensee in the southern circles of Haryana and Uttar Haryana Bijli Vitran Nigam Ltd. (UHBVNL) the Distribution and Retail Supply licensee in the Northern circles of Haryana, source their entire power purchase requirement from HPGCL as per the Bulk Supply Agreement. A summary of the objections raised by DHBVNL & UHBVNL as per their written submissions filed vide memo no. Ch.11/SE/RA – 235 dated 26/06/2006 and Ch-35/SE/RA/N/F-25/Vol – XI dated 29/06/2006 respectively and response of HPGCL filed vide its Memo No. HPGC/FIN/Reg – 201 / 942 dated 10/07/2006 are being presented in the paragraphs that follow.

2.1 INTEREST ON CURRENT POWER PURCHASE

DHBVNL & UHBVNL submitted that they are making payments to HPGCL against power purchase to the tune of Rs. 4 to 5 crores (approximately) on daily transfer basis and the amount is got credited in HPGCL's bank account at Panchkula through electronic transfer out of their revenue collection of and working capital loans availed from the commercial banks. In addition to this, RE Subsidy payable to DHBVNL & UHBVNL is released directly to HPGCL (on behalf of DHBVNL & UHBVNL) in cash by the State Government on weekly basis, which is adjusted by HPGCL against sale of power. DHBVNL & UHBVNL are making full payment in respect of current power purchases during the same month or the payment for power purchase is made to HPGCL rather in advance. Thus there is no justification of interest on current power purchases as HPGCL is to make payment to power supplier fortnightly on the basis of weekly bills raised by suppliers where up to 7 days are allowed for making payments as per terms of respective power purchase agreements. Payments over and above the billed amount for power sold to DHBVNL in the year FY 2005-06 were made by DHBVNL.

On the above objection, the applicant submitted that they agree with the above contention of DHBVNL & UHBVNL. However, after adjusting for all cash payments and subsidy there is a substantial gap between the payment received and amount recoverable for power supplied. As on 31/03/2006 receivables from DHBVNL & UHBVNL amounted to Rs. 416.31 Crore (73 days of sales) and Rs. 586.07 Crore (99 days of sales) respectively. Whereas HPGCL has claimed working capital for two months only. As per Clause No. 6.1 of the Bulk Supply Agreement, the due date of payment of power bills is no later than 30 days after the date of statement. The statement is raised after the completion of the month. Clause 6.2 provides that in the event that the total payment of any statement is not made within 90 days of the date of the statement, Discoms shall pay to HVPNL (now HPGCL) a delayed payment charge on the unpaid amount. In other words, more than 90 days are allowed to Discoms for making payments to HPGCL for sale of power without any levy of surcharge. HPGCL, in its reply, reiterated that the need for working capital and interest thereon arises on when the Discoms do not make the payment for sale of power in time. HPGCL is not trying to earn any profit on this; rather it is to cover a part of expenditure only. HPGCL is making payment to the CPSUs and also claiming rebate / incentives for timely payment, which have been factored in the total expenditure. Resultantly, HPGCL should be allowed working capital equivalent to two months of sales as proposed in the Trading Margin Application. Alternatively, Clause 6.2 of the PPA (BSA) may be amended in line with the working capital to be allowed by the Commission.

2.1.1 WORKING CAPITAL & INTEREST

DHBVNL & UHBVNL further submitted that the DISCOMS are already carrying large working capital loans to meet with its current payment obligations. Heavy interest payouts are increasing the losses of the Distribution Companies. Further interest burden, if any, passed on to DISCOMs will aggravate the situation. Moreover, the interest claim of

HPGCL equivalent to PLR (Prime Lending Rate) of SBI (State Bank of India) i.e. 10.5% is also on higher side as the power utilities are raising short term loans from Commercial Banks for working capital at much lower rates i.e. up to 2% to 2.5% below BPLR of respective Bank.

In view of the above interest claimed by HPGCL amounting to Rs. 1094.17 million on working capital @ 10.5% and proposal for the passing the same to DISCOMs is unjustified. In view of the above reasoning the trading margin of Rs.0.02 / unit should be lowered to a reasonable rate.

On the above-mentioned issues, HPGCL replied that as far as interest on working capital is concerned, HPGCL has followed the CERC Regulation that the interest on working capital should be the prevailing SBI PLR rate.

2.1.2 POWER PURCHASE

On the issue of cost of power purchase proposed by HPGCL for FY 2006-07, DHBVNL & UHBVNL submitted that the steep hike in the cost of power purchase from generating stations and power traders proposed by HPGCL is not justified. The HERC approved the ARR for transmission and bulk supply business for FY 2005-06 filed by HVPNL, wherein the cost of power purchase from NAPP was approved @ Rs. 2.21 per unit whereas the same has been assessed as Rs.2.65 per unit. In addition, 1807 MUs proposed to be procured through short term bilateral agreement is costing Rs. 4.75 per unit, which is on a higher side. Similarly, the power proposed to be procured from new power projects likely to be commissioned in near future namely TALA Hydro power project, TEHRI Hydro project and Tripura Gas project have been assessed to cost HPGCL @ Rs. 3.30 per unit. Like wise there is steep cost escalation in most of the power supplier's purchase rate. In addition to the above 1000 MUs is to be procured through UI drawls at an average rate of Rs.4.10 per unit whereas in the light of the direction of HERC that in future it might not allow any power purchase in the absence of a valid

PPA (Power Purchase Agreements). However, it has been envisaged that such huge quantum of energy needs to be procured through economical and reasonable PPA so that the electricity consumers may not be burdened with exorbitant tariffs. It is pertinent to mention here that in FY 2005-06 the average rate of power purchase was approved as Rs. 1.89 per unit by the HERC for transmission and bulk supply business whereas in FY 2006-07 the same has been assessed as Rs.2.38 per unit which is 25.93% (approx.) more than the previous year approved rate.

To the above objection, HPGCL submitted that while assessing the cost of power purchase during FY 2006-07 an increase of 2% in fixed cost and 3% in variable cost of NTPC stations has been considered while in the case of NHPC (Hydel Power) a hike of 2% has been estimated. Power purchase from IP Stations has been projected at Rs. 2.79 / kWh on the basis of bills of O&M charges received during FY 2005-06 plus an increase of 2%.

The rate of NAPP approved by HERC was Rs.2.21 / Unit whereas the actual rate for FY 2005-06 was Rs.2.54 / Unit so the rate projected by HPGCL for NAPP power is justified.

HPGCL has proposed to procure 1807 MUs through short – term bilateral agreement at a cost of Rs. 4.75 per unit based on the agreements / MOUs signed with the traders. Agreements / MOUs for 870 MUs has already been submitted to HERC along with the trading margin application. Since these agreements are for short – term period and are likely to be renewed. The agreements for short - term power is made on first come first served and has it or leave it basis. Further, short-term power purchases are made with the approval of Power Augmentation Committee headed by the Chairman Power Utilities. Managing Directors of UHBVNL and DHBVNL are also members of this committee. Since Haryana is a power deficit state, the volume and rate of short-term power purchase, as proposed in the application, be allowed.

The power proposed to be procured from new projects likely to be commissioned in near future namely TALA hydropower project, TEHRI hydro project and Tripura gas project may also be allowed as proposed in the application @ Rs.3.30 / Unit subject to FSA.

During FY 2005-06, 1377.25 MUs were purchased @ Rs. 3.93/Unit by HPGCL through UI (Unscheduled Interchange). For FY 2006-07, HPGCL has assessed only 1000 MUs @ Rs.4.10 / Unit, which is quite reasonable and may be approved.

2.1.3 TRANSMISSION LOSSES

On the issue of Transmission Losses, DHBVNL & UHBVNL submitted that the transmission losses approved by HERC was 4.5% whereas in the projection made by HPGCL the same is depicted as 5% which is not reasonable. It may be pegged down to 4.5% as there should be improvement in system parameters compared to previous year. Moreover, inter-state loss has been shown as 2% and intra-state transmission loss has been proposed as 3% and the cumulative transmission loss has been shown as 5%. The trading margin has been worked out incorporating the above percentage loss levels whereas the cumulative percentage should not be evaluated by simply summing up the percentage inter and intra – state transmission losses since the entire energy purchased is not being wheeled through inter – state transmission network.

On the issue of Transmission Losses HPGCL replied that the power is to be purchased from Tripura, Meghalaya, West Bengal, Kerala & Karnataka and will have to bear losses of intervening regions. Due to congestion in the transmission corridors power may have to be routed through alternative routes to meet the demand, thereby increasing the transmission loss. As such, the transmission losses @ 5% for FY 2006-07 are justified and may be allowed. Thus, credit for both intra and inter regional transmission losses

have to be given. HVPNL has control on the former; on later it does not have any control as the distance determine the amount of losses.

2.1.4 FUEL SURCHARGE ADJUSTMENT (FSA) CLAIMS

DHBVNL & UHBVNL pointed out that if HPGCL is approved to increase the rate to Rs. 2.53 per unit in respect of power purchased by them against the rate of Rs.2.05 & Rs. 2.10 per unit shown to be incurred by DHBVNL & UHBVNL respectively on account of power purchases as per their ARR for FY 2006-07, the DHBVNL & UHBVNL will have to increase the cost of service on the part of different category of consumers incurred by the Nigam. Consequently, the revised ARR as well as revised tariff structure will have to be filed before the HERC. Since the tariff rate for AP as well as Domestic is subsidized and Nigam is compensated to the extent commensurate to the subsidy. The consent of State Government is to be taken for hike in tariff for such aforesaid category of consumers, if not given, the same has to be pursued with the Government for suitable compensation for increased subsidised volume. Moreover the case for increasing the tariff on account of pending FSA claim made by HPGCL is under consideration of the Commission, if the same is approved by the Commission then the tariff will increase and in concatenation to the above scenario if the rate per unit of power sold by HPGCL is hiked then the consumers will have to bear additional burden leaving apart the tariff to be increased in the offering on account of FSA claim made by HPGCL, if the case of FSA claim is approved by the Commission.

In light of the above, the interveners submitted the proposed trading margin of Rs. 0.02 / unit, which is on the higher side, needs to be reviewed. Similarly, the cost of power purchase from different sources of power supplier, which is also an inflated figure, needs to be reviewed.

On this issue, HPGCL submitted that for FY 2005-06, HERC had approved the bulk supply rate as Rs.1.89 / Unit, which is subject to FSA (Fuel Surcharge Adjustment). HPGCL has filed FSA up to FY 2005-06 amounting to Rs.1070.24 Crore with the Commission for approval. Taking this in to consideration the power purchase rate for FY 2005-06 works out to Rs. 2.24 / kWh as compared to Rs.1.89 / kWh approved by the HERC.

2.1.5 EMPLOYEES' COST

In addition to the above, UHBVNL also submitted that HPGCL has claimed employees cost of Rs.10 million without providing any detailed methodology for calculations. They submitted that the employees' cost might be allowed based on calculations after taking into consideration the number of employees, basic salaries, DA rate and other allowances to be paid to the employees.

On the issue of employees' cost HPGCL provided the details of staff sanctioned for trading function as approved by the Board of Directors of HPGCL. The number of posts sanctioned has been pegged at 57 at an annual expenditure of Rs. 10.24 million.

2.2 OTHER ISSUES RAISED BY THE STAFF

The staff of the Commission raised the issue of the reported (by HPGCL) implementation of free governor mode operation w.e.f 1st November 2003 for generators having capacity of 200 MW and above in the region thereby reducing the probability of getting zero cost energy (above 50.5 Hz) considerably.

HPGCL, in its reply, intimated that most of the Generating Units of NTPC and HPGCL, which are above 200 MW capacities, are on free governor mode.

The issue of Power Purchase Agreements (PPA) with TEHRI, TALA, Tripura projects, Dhauliganga and PTC (Malana) was also raised by the HERC staff. HPGCL, along with the written reply, submitted the PPA with TEHRI, Tripura projects, Dhauliganga and PTC –Malana (duly signed by PTC) and intimated that draft PPA for TALA has not yet been received.

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3 ANALYSIS OF THE ARR FILINGS AND COMMISSION'S ORDER

In this chapter, various elements of the HPGCL's filing namely power purchase volume, power purchase cost, other expenditures like salary and wages, administrative and general expenses, interest on working capital loan and transmission losses are analysed and Commission's order on each item is presented.

The Commission has considered the views expressed by the interveners namely UHBVNL, DHBVNL, HERC staff and HPGCLs responses thereto.

In this chapter, HPGCLs proposal refers to the filing dated 24/04/2006 supplementary /additional information provided refers to the written response of HPGCL submitted vide its office Memo No. HPGC/FIN/Reg – 201/811 dated 22nd June 2006 to the deficiency letter issued by the Commission or otherwise and replies to the objections of UHBVNL, DHBVNL and HERC staff filed vide Memo No. HPGC / FIN / Reg – 201 / 942 dated 10/7/2006; oral submissions made by the interveners at the time of public hearing held on 03/07/2006 and HPGCL's response thereto.

3.1 EXPENDITURE

3.1.1 POWER PURCHASE COST

Power purchase cost is determined by two elements viz. volume of energy and the rate per unit of energy inclusive of capacity and other charges, wherever applicable. Each of these elements is discussed separately in the following paragraphs: -

3.1.1.1 Volume of power purchase

Haryana is an energy deficit state and will continue to be so during FY 2006-07. Thus, HPGCL's power procurement program is not demand - driven but based on forecast of power availability from various sources. Resultantly, HPGCL will be able to sell whatever energy is available and it is able to procure. The Commission, however, expresses its reservations in view of the expensive short term purchases resorted to by the licensee. Under ABT, wherein generators operating with speed governor in free mode may not be generating above rated frequency and capacity and hence extra power over and above the scheduled generation may not be available for HPGCL to draw. The over draws under low grid frequency, besides being prohibitively expensive, should not be resorted to, to help maintain the grid discipline.

Ideally, demand should have been forecasted based on load growth, consumption pattern and demand elasticity of the end - consumers and envisaged T&D losses in the Haryana System for the year under consideration. However, keeping in view the energy deficit scenario in the State, the Commission believes that the generators are the most competent authority to project power availability from their respective stations. The issue of forecasting power availability becomes complex in cases where HVPNL shares power from a generating station with other states. Availability of power in such instances does not solely depend on HVPNL's own share but also on over or under drawl of power compared to its share, i.e. 1) the distribution of unallocated power to member states; 2) utilisation of other member's unused share and 3) non-utilisation of its own share.

The entitled volume of power according to allocation of allocated and unallocated power from CPSUs for FY 2006-07 can be projected on the basis of overall generation schedule drawn up by the Central Electricity Authority (CEA) in consultation with the generators. The generation targets are arrived at by the CEA after discussing with State's generation programme given by

them and considering the performance of the generating stations, planned maintenance requirement and average forced outage during the last few years. Consequently, in the absence of any other time tested statistical or econometric model for projecting power availability, CEA generation schedule for FY 2006-07 is the best available alternative.

The Commission has, on more than one occasion expressed its concern about the overdrawal of energy by the licensee during low grid frequency. This not only violates grid discipline but in the light of the revised UI charges, such draws have become prohibitively expensive.

The Commission approves the volume of power purchase during FY 2006-07 on the following basis:

1. For stations such as NTPC, NHPC, NPC and Shared projects, the Commission accepts CEA's (Central Electricity Authority) gross generation targets for the financial year 2006-07. The Commission has reduced the CEA's gross generation targets by respective auxiliary consumption as per norms and reduced the total availability from NHPC stations to the extent of 12% to account for free power commitment to the respective home state. Haryana's allocated and unallocated shares in the Central projects have been pegged at the allocations of allocated and unallocated power from the Central Sector Power Stations: Revision No. 5 // 2006-07 vide Northern Region Power Committee communiqué No. NRPC / SE (O) Allocations / 2006-07 dated 15/05/2006. The volume of energy has been estimated from the net generation so arrived.
2. In the case of availability from sources such as Ch. Devi Lal Sugar Mill and PTC (Malana), Tripura Gas the Commission has adopted the licensee's proposal; in the case of short – term bilateral sources the Commission has restricted the volume to 1819.30 MUs for which HPGCL submitted PPA/MOU or written consent.

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3. As the Commission has determined HPGCLs Generation Tariff for FY 2006-07 including ex-bus generation target(s), the same has been adopted as the volume of power available from HPGCL (generation) sources.

The volume of power purchase from each source approved by the Commission for FY 2006-07 is discussed in the next few paragraphs.

A. Availability of power from HPGCL

The Commission has considered power availability at the bus bar from HPGCL sources as per its order dated May 23, 2006 in Case No. HERC/PRO-14 of 2005 in the matter of HPGCL's Petition on determination of HPGCL's Generation Tariffs for FY 2006-07. The details are presented in table 3.1.

Table 3.1 - Power purchase volume from HPGCL (MUs)

Particulars	Power Purchase in FY 2005-06 (Provisional)	HPGCL revised Proposal for FY 2006 - 07	HERC Approval for FY 2006-07
HPGCL (thermal)	8047.66	8538.04	8538.04
HPGCL (hydel)	256.57	308.00	308.00
Total	8304.23	8846.04	8846.04

B. Availability from NTPC Faridabad gas power station

The 430 MW Faridabad gas based power station of NTPC (F'bad CCGT) is a dedicated station to Haryana.

The volume from this source has been considered based on the generation target determined by the CEA for FY 2006-07 less the auxiliary consumption to the extent of 3.0%. The Commission's approved volume is as per table 3.2.

**Table 3.2 - Power purchase volume from Faridabad gas - based plant
(MUs)**

Particulars	Actual power purchase in FY 2005-06 (upto 31/03/2006)	HPGCL proposal for FY 2005 - 06	HERC Approval for FY 2005-06
Faridabad Gas	2854.53	3000	2813

C. Availability of power from shared utility (BBMB & IPGCL)

HPGCL, to the extent of shares owned by HVPNL in the shared projects, has capacity entitlement to the extent of share of 39.5% in Bhakra, 32% in Dehar, 16.6% in Pong (all BBMB stations) and 33.33% in IP Station (units 2,3&4). 3272.19 MUs were available to HPGCL from BBMB sources during FY 2005-06 (Upto 31/03/2006). HPGCL has proposed to procure 3200 MUs from this source during FY 2006-07. The Commission approves 3343.51 MUs from this source for FY 2006-07 as against 3364.80 MUs approved during FY 2005-06. The approved volume is based on CEA generation target for FY 2006-07 net of auxiliary consumption and in proportion to the share owned by HVPNL in Bhakra & Upratings, Dehar and Pong.

The quantum of power available to HVPNL during FY 2005-06 (Upto 31/03/2006) from IP Station was of the order of 229.19 MUs. HPGCL has proposed 180 MUs to be available from this source during FY 2006-07. Based on the CEA's generation target from this station for FY 2006-07 and taking into account the fact that HVPNL owns 33.33% share in units 2,3 and 4 only of the IP station, the Commission approves 183 MUs to be available to HPGCL from this source during FY 2006-07.

Consequently, the total volume of power projected to be available to HVPNL from shared utilities during FY 2006-07 is 3526.51 MUs. The break-up of the volume approved is presented in table 3.3.

Table 3.3 - Power purchase volume from Shared Utilities (MUs)

Particulars	Actual power purchase in FY 200-06 (upto 31/3/2006)	HPGCL proposal for FY 2006-07	HERC Approval for FY 2006-07
BBMB	3272.19	3200	3343.51
IPS	229.19	180	183.00
Total	3501.38	3380	3526.51

D. Availability of power from NTPC power stations

HVPNL continues to draw more than its entitlement (including share out of the unallocated power) of power from NTPC stations. The overdrawals are largely because of the under mentioned reasons:

- **NTPC stations generating over and above the CEA Schedule as established by the past trend.**
- **Increase in share out of 15% unallocated central quota during the last few years.**
- **Drawing unrequisioned shares of other constituents of the northern grid.**

The Commission has based its projections on the CEA's generation targets finalised for FY 2006-07. Availability has been adjusted for Haryana's share based on the allocation of allocated and unallocated power from Central Sector Power Stations as per Northern Regional Power Committee notification No. NRPC/SE (O) Allocations/2006-07 dated 15/05/2006 i.e. revision no – 5//2006-07. The NREP, in its revised allocations, has provided hourly (time blocks) station wise share, unallocated shares and total entitlement of Haryana from NTPC, NHPC and NPC sources. The Commission has considered the average entitlement including unallocated share while allowing volume of power purchase from CPSU sources during FY 2006-07.

The Commission's approved volume of power purchase in all cases except Unchahr II, Rihand II, Anta & Auraiya CCGT are lower as compared to the projections made by HPGCL for FY 2006-07. This is primarily due to disallowance of projected overdrawals including UI drawls and volume projected from NVVN etc., where HPGCL neither specified the source of power or timing of drawls nor have they provided copies of agreement / MoU etc.

The details of actual availability during FY 2005-06 (Upto 31/3/2006), HPGCL proposal for FY 2006-07 and HERC approval of power purchase volume from NTPC sources are presented in Table 3.4.

Table 3.4 - Power purchase volume from NTPC sources (MUs)

Particulars	Actual power purchase in FY 2005-06 (31/3/2006)	HPGCL proposal for FY 2006-07	HERC Approval for FY 2006-07.
Singrauli	1792.44	2000	1774.76
Rihand I	600.76	780	658.66
Rihand II	225.17	550	605.31
Unchahar I	109.52	200	113.94
Unchahar II	252.27	200	271.64
Anta Gas	204.51	220	238.87
Auraiya Gas	275.71	320	336.39
Dadri Gas	257.44	340	333.53
Total	3717.82	4610	4333.10

E. Availability of power from NHPC sources.

HPGCL has stated that in the case of hydel stations such as NHPC, SJVNL and BBMB, this year the inflow is likely to be better due to normal monsoon and hence power availability would be on the higher side. All the six units of 250 MW each Nathpa Jhakri (SJVNL) Power Corporation has been commissioned, availability from the projects such as Dulhasti, Tehri, Tala Hydel has been considered. Thus, the availability of power from hydel sources during FY 2006-07 is expected to increase when compared to the previous years.

Considering the fact that the CEA's generation targets for hydel stations take into account the weather factor too, the Commission approves availability from NHPC stations for FY 2006-07 based on the CEA's generation targets for FY 2006-07. The gross generation target has been adjusted for auxiliary consumption and 12% free power to home state and thereafter-allocated share to HPGCL has been estimated. As there is no central unallocated quota in NHPC stations except Chamera II, Nathpa Jhakri and Dhauliganga, no additional availability has been considered from NHPC sources. The volume of power purchase approved by the Commission is presented in table 3.5.

Table 3.5- Power purchase volume from NHPC sources (MUs)

Particulars	Actual Power Purchase in FY 2005 –06 (upto 31/3/2006)	HPGCL proposal for FY 2006-07	HERC Approval for FY 2006-07
Bairasiul	235.44	220	222.94
Salal	517.99	500	405.33
Tanakpur	25.18	28	25.33
Chamera I	363.29	330	364.07
Chamera II	129.17	130	127.01
Uri	145.01	140	122.77
Total	1416.08	1348.00	1267.45

F. Availability from NPC sources

HPGCL, in its ARR filing, has based its proposal on the allocated share in NAPP and further allocation of 10.91% of power from RAPP III & IV as on date

The Commission's approval of power purchase from NAPP and RAPP sources are again based on Haryana's share of the generation target (net of auxiliary consumption) determined by CEA for FY 2006-07. The Commission has taken into consideration the allocation to Haryana from RAPP III & IV (from 44 MW to 48 MW) as well as allocation of 22 MW from unallocated share of 66 MW. Consequently, the Commission approves availability of 648.22 MUs from this source during FY 2006-07 as against 600 MUs proposed by HPGCL.

However, these being expensive sources, the Commission would like to stress that HPGCL should minimise procurement from such sources and should not overdraw from such sources. Power from expensive sources may be available because one or more states may have surrendered their share or under drawn their share due to availability of cheaper alternative. The Commission's approved volume from NPC source is presented in table 3.6.

Table 3.6 - Power purchase volume from NPC (MUs)

Particulars	Actual power purchase in FY 2005-06 (upto 31/3/2006)	HPGCL proposal for FY 2006-07	HERC approval for FY 2006-07
NAPP	166.38	200	211.72
RAPP (III & IV)	339.99	400	436.50
Total	506.37	600	648.22

G. Availability of power from IPPs (Magnum).

Magnum (liquid fuel based plant) provided 5.751 MUs (upto 31/3/2006) to HPGCL in FY 2005-06. HPGCL has not proposed any drawl from this source in FY 2006-07. The Commission, while disallowing drawls from this source in its previous orders had reiterated that the licensee, as submitted during public hearing, shall renegotiate the existing PPA and submit it for approval of the Commission. However, no information was submitted to the Commission regarding the status of PPA with Magnum. The Commission vide its Memo No. 2485 / HERC / SV – Magnum dated 22/12/2005, as a special case, allowed scheduling of power during the peak load hours only from M/s Magnum to the extent of existing stock of liquid fuel i.e. 893.6 MT lying with M/s Magnum, equivalent to 3 million units of generation. However, HPGCL has overdrawn from this source. **HPGCL is directed to explain the energy drawl, along with details, from this source to the extent of 5.751 MUs during FY 2006-07 at a rate of Rs. 4.8673 / kWh within two months from the date of this order.**

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Table 3.7 - Power purchase volume from IPPs (MUs)

Particulars	Actual power purchase in FY 2005-06 (upto 31/3/2006)	HPGCL proposal for FY 2006-07	HERC Approval for FY 2006-07
Magnum	5.751	0	0

H. Power purchase through PTC, NVVN & Other Traders (Short term bi-lateral)

HPGCL has proposed to purchase power from a few other sources, which includes PTC and NVVN. The Commission allows 1819.30 million units for which MOU / PPAs have been submitted

The Commission, in principle, does not discourage purchase of surplus power from time to time at a rate not exceeding the average approved power purchase cost. The Commission, however, believes that such surpluses may not be available on a sustainable basis to the extent it is available now. The Commission recognises the fact that trading in the system is already taking place under the provisions of 'Open Access' and 'Trading Licence' granted by the CERC. The Commission can allow purchases from trading company only if there exists a firm commitment (including volume, rate and drawl schedule) i.e. PPA, MOU or a written consent. Thus, the Commission disallows energy drawl proposed from sources such as Tala Hydro and NVVN (ASEB & KPCL power as and when required).

The quantum of power (Annexure D of the filing dated 10/07/2006) projected by HPGCL to be sourced from Tata Power Trading Co. Ltd (MPSEB) at Serial No. 6&8 has discrepancies in terms of number of days and hence corresponding volume of energy vis - a - vis the Power Purchase Agreement attached with the above mentioned filing. Resultantly, the Commission has reduced 107.92 MUs projected in excess over the quantum agreed upon in the PPA. The approved power purchase volume from PTC, NVVN and other sources are presented in table 3.8.

Table 3.8 - Power purchase volume from PTC, NVVN & Others (MUs)

Particulars	Actual power purchase in FY 2005-06 (upto 31/3/2006)	HPGCL proposal for FY 2006-07	HERC Approval for FY 2006-07
Reliance Energy Trading (WBSEB Power)	0	13.8	13.8
Reliance Energy Trading (CPP Andhra Pradesh)	31.28	61.824	61.824
Reliance Energy Trading (ER)	5.10	58.56	58.56
NVVN (Tripura)	0	13.65	13.65
NVVN (KSEB)	76.43	27.0	27.00
NVVN (KSEB)	0	54.9	54.90
NVVN (Tripura)	0	4.65	4.65
NVVN (KSEB)	0	55.8	55.80
NVVN (Tripura)	0	9.15	9.15
NVVN (KSEB)	0	27.9	27.90
NVVN (KSEB)	0	27.0	27.00
NVVN (ASEB)	0	27.9	0.00
NVVN (KPCL)	0	219.6	0.00
WBSEB (WBSEB)	0	163.8	163.80
PTC (Gridco)	12.38	164.7	164.70
PTC (HP Share)	0	370.4064	370.4064
PTC (JSWEL)	0	132.48	132.48
PTC (Malana)	274.40	270	270
Tata Power Trading Company Ltd. (WBSEB))	12.59	28.8	28.80
Tata Power Trading Company Ltd. (MPSEB)	0	442.80	334.88
MUL	1.521	0	0
UI	1348.36	1000	0
Total		3174.7204	1819.30

Note: Actual Power Purchase in FY 2005-06 includes only those sources from where HPGCL has proposed to procure in FY 2006-07 also.

The Commission reiterates that it is inappropriate for HPGCL to project any volume under Unscheduled Interchanges (UI) as the same cannot be projected with any degree of certainty. UI draws (drawing more than its scheduled share) under low grid frequency add to the grid indiscipline besides being very expensive. Consequently, the Commission disallows the same.

I. Power Purchase from New Sources

Power Procurement from new sources proposed by HPGCL includes SJVNL (Nathpa Jhakri 1-6), Dulhasti HEP, Dhauliganga HEP, Ch.Devi Lal Sugar Mill, Tala HEP (displacement), Tehri HEP and Tripura Gas. The Commission allows availability from SJVNL, Dhauliganga, Dhulhasti & Tehri (THDC) as per the CEA generation schedule for FY 2006-07 less auxiliary consumption and share of home state.

HPGCL has proposed to source 200 MUs from Tala Hydro / displacement. HPGCL vide its Memo No. HPGC/FIN/Reg-201/942 dated 10/07/2006 in response to the observation of HERC during the public hearing regarding absence of PPA of TEHRI, TALA & Tripura Projects, intimated that “draft PPA for TALA has not yet been received”. The CEA generation target for this central sector project is also not available for FY 2006-07. Resultantly, the Commission disallows the same.

As per Ministry of Power, Government of India communiqué dated 7/7/2006 the 100 MW (9.8%) share of Haryana in Tala Project would be affected progressively linked to the commissioning of various units of Tala Project. Haryana would receive an equal quantum of energy from Kahalgaon (Unit 1-4) and Farakka subject to entering into suitable power purchase agreement(s). **The Commission directs HPGCL to speed up the finalisation of PPAs and submit the draft for consideration of the Commission.**

As PPA for 100 MW with NEEPCO (Central Government Project) has been signed by HPGCL for sourcing power from Tripura Gas Based Power Project (280 MW), the Commission, in the absence of CEA generation targets for FY 2006-07, allows 30 MUs as proposed by HPGCL.

The Commission is committed to encourage cogeneration and non-conventional fuel based generation in the State. Hence, it allows the proposed volume i.e. 2 MUs from Ch. Devi Lal Sugar Mill which has a PPA (approved by HERC) with HVPNL (now HPGCL). The approved power purchase volume from new sources are presented in the table 3.9:

Table 3.9 - Approved Power Purchase from New Sources (MUs)

Particulars	Actual power purchase in FY 2005-06 (upto 31/3/2006)	HPGCL proposal for FY 2006 - 07	HERC Approval for FY 2006 - 07
N/Jhakri (SJVNL) HEP	305.51	300	264.50
Dhauli Ganga HEP	25.95	120	87.91
Dhulhasti HEP	0	125	125.11
Ch.Devi Lal Sugar Mill	1.79	2	2
Tala HEP (displacement)	0	200	0
Tehri (THDC)	0	100	100.10
Tripura Gas (NEEPCO)	0	30	30
Total		877	609.62

J. Total approved power purchase volume.

Based on the foregoing approved source wise projections, the Commission approves total power purchase of 23,863.2 million units during FY 2006-07 as against 25,738.04 million units proposed by HPGCL. Table 3.10 provides the comparison of HPGCL's projected volume & Commission's approval thereto.

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Table 3.10 - Power Purchase volume for FY 2006- 07 (MUs)

Source of Power	HPGCL Proposal (Revised)	HERC Approval
NTPC		
Singrauli	2000	1774.76
Rihand I	780	658.66
Rihand II	550	605.31
Unchahar I	200	113.94
Unchahar II	200	271.64
Anta gas	220	238.87
Auriya gas	320	336.39
Dadri gas	340	333.53
Faridabad gas	3000	2813.00
NHPC		
Bairasiul	220	222.94
Salal	500	405.33
Tanakpur	28	25.30
Chamera I	330	364.07
Chamera II	130	127.01
Uri	140	122.77
NPC		
Narora Atomic PS	200	211.72
RAPP (III & IV)	400	436.50
HPGCL		
Thermal	8537.04	8538.04
Hydel	308	308.00
SHARED PROJECTS		
BBMB	3200	3343.51
IP Station	180	183.00
Others		
NVVN	372	220.05
PTC (inc. Malana)	937.5864	937.5864
Tata PTC	471.6	363.68
Reliance Energy	134.18	134.184
WBSEB	163.8	163.80
Magnum	0	0
N/Jhakri (SJVNL)	300	264.5
DhuliGanga	120	87.91
Dhulhasti	125	125.11
Ch. Devi Lal Sugar Mill	2	2
TALA	200	0
TEHRI HEP	100	100.1
Tripura Gas (NEEPCO)	30	30
UI	1000	0
Total Power Purchase Volume	25,738.04	23863.2

3.1.1.2 POWER PURCHASE COSTS

The cost of purchase of power is largely a known parameter. The amount payable by HPGCL is based on power purchase agreements with the various generators that clearly establish the price determination procedure. In case of central power sector units (CPSU's) or other generators supplying power to

more than one state, the Central Electricity Regulatory Commission (CERC) determines tariff. Most of the elements constituting the total charges i.e. capacity charges, base energy related charges, adjustment to base energy charges for cost of fuel and other factors, taxes, duties, incentive payments etc. are known or can be estimated with a reasonable degree of accuracy.

HPGCL has projected cost of power purchase based generally on the rates prevailing during FY 2004 except with about 2% increase in the Fixed Charges and about 3% variable rates of thermal and gas based stations. In the case of Gas Stations, impact of MOPA has also been taken into account. In the case of central generating stations, the fixed cost is based on CERC notifications, while the variable charges in case of NTPC stations (primary energy charges in the case of NHPC stations) have been marginally increased by 2%. In the absence of final tariff order of CERC in respect of SJVNL, the adhoc rate of Rs.2.35 / kWh, as decided by CERC has been considered. In view of the adhoc rate, the rates for FY 2006-07 have been taken by HPGCL as Rs.2.65 / kWh after taking into account the impact of FERB, Income Tax and Incentives. The tariff for power from NAPP is estimated at Rs.2.65 / kWh i.e. 2% higher than the previous year. While RAPP – III & IV power is priced at Rs.2.96 / kWh, keeping in view depreciation allowed by NPC, which is 2% higher than the previous year.

In the case of IPGCL the FY 2005-06 billed rate of Rs.2.7023 / kWh has been enhanced by 3% towards anticipated escalation in O&M charges. Similarly, the tariff of power from BBMB for FY 2006-07 has been anticipated by HPGCL @ 12 Paise / kWh towards net O&M after 5% escalation in net O&M expenses and taking common pool credit into account.

The tariff for power from PTC (Malana) is as per the agreement (weighted average of Rs. 2.81 / kWh for 3 months and Rs. 2.875 / kWh for the remaining months of FY 2006-07) signed by PTC i.e. Rs. 2.8588 / kWh.

The tariff for HPGCL power for FY 2006-07 is as per the HPGCL Generation Tariff Order tariff order for FY 2006-07 dated May 23, 2006.

The tariff for power from short – term sources is based on the respective PPA / MOUs.

For projecting the cost of purchased power, the Commission had prescribed the following approach in its previous orders: -

- **"Where a PPA / MOUs exists, costs should be determined accordingly".**
- **"In case of CPSU or other generators who are supplying power to more than one state, where payments are governed by CERC rulings or by Ministry of Power Notifications, tariffs should be forecast following the methodology adopted there".**
- **"Where neither PPA nor rulings and Notifications are available for any reason whatsoever, projections can be made based on the latest available rates from invoices".**
- **"Estimation should be made for various components separately and should use a reasonable level of escalation in costs for those elements that are expected to undergo change".**

The Commission observes that the licensee has largely complied with the general principles of projecting power purchase costs set in its previous orders on ARR.

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A. Tariff for power from CPSUs

The tariff for power sourced from NTPC & NHPC stations are based on fixed cost, as determined by the CERC, payable by HPGCL in proportion to the share allocation (including share out of un-allocated quota), except in the case of Rihand II which is as per the fixed cost share (worked out on the basis of CERC approved Fixed Cost) reported by HPGCL in their presentation dated 3/07/2006. While the variable component of the tariff is based on the latest available invoices from the respective stations.

The tariff for Nuclear Power Corporation stations viz. Narora APS (1&2) and Rajasthan APS (2,3 & 4) has been considered by the Commission as per the latest available tariff notified for sale of power for various atomic power stations of NPCIL.

B. Price for HPGCL power

The Commission under sub - section 1(a) of Section 86 and sub section 1(a) of Section 62 of the Electricity Act 2003 has determined HPGCLs generation tariffs for FY 2006-07 vide its order dated May 23, 2006 (Case No HERC/PRO – 14 of 2005). The approved station wise rates in the above-mentioned orders of the Commission have been considered for determining the cost of power from HPGCL sources.

C. Price of Shared utility power.

HVPNL, as per the transfer scheme notified by the Government of Haryana, has ownership interest to the extent of equity shares in IPGCL and BBMB projects while the corresponding share in capacities have been allocated to HPGCL. HVPNL has to bear its share of net O&M charges from BBMB, i.e.

net of O&M charges billed less credit for HVPNL share of revenue for sale of power to common pool consumers.

While calculating the cost of power purchased from BBMB, the Commission has taken into consideration the expenditure expected to be incurred by BBMB on O&M for FY 2006-07 and reduced it by the expected credit from common pool sales. HPGCL, in the supplementary information filed vide Memo No. HPGC/FIN/Reg-201/811 dated 22nd June 2006 has indicated Rs. 794.76 million as actual O&M shared by Haryana in FY 2005-06 and a net expense of Rs. 243.86 million, after considering Haryana's share in the common pool revenue.

The Commission, based on additional information submitted by the licensee has considered the actual O&M expenses, net of common pool credit, borne by HVPNL during FY 2005-06 and escalated the same by 5% to account for inflationary increases. The volume of energy considered for working out the unit rate is as approved by the Commission. Resultantly, the Commission, approves 0.08 Paisa / kWh as cost of power from BBMB sources.

The cost of power from IPGCL of the one-third share of generation in respect of Unit Nos 2,3 & 4 of IP Station is considered on the basis of the invoiced rate during the month of March 2006 (the latest available rate) i.e. Rs.2.7023 / kWh. The unit rate has been escalated by 3%, as proposed by HPGCL, to account for the anticipated escalation in O&M during FY 2006-07.

D. Price of Power Purchased from New Sources.

The power purchase rate for SJVNL power has been considered by the Commission as Rs. 2.35 / kWh i.e. the provisional rate approved by CERC. In the absence of CERC determined tariff / provisional tariff or invoices raised by the generators in respect of Dhauliganga, Dhulhasti and Tehri HEP and

Tripura Gas (NEEPCO) the Commission approves the tariff proposed by HPGCL. However, these are subject to final tariff to be approved by the CERC. **HPGCL is directed to intimate the Commission as and when tariff from these sources are determined by the CERC.**

E. Price of Power purchase from Traders

HPGCL has provided PPA / MOUs with electricity traders such as NVVN, PTC (excluding Malana), Tata PTC, Reliance Energy and WBSEB. The tariff as per the PPA / MOU in the case of NVVN ranges between Rs. 3.64 to Rs.5.26 / kWh, in the case of PTC the rates vary between Rs.4.44 to Rs. 4.62 / kWh, in the case of Tata PTC it varies between Rs.5.25 to Rs. 5.31 / kWh and in the case of Reliance Energy the rates vary between Rs.2.66 to Rs.4.75 / kWh, in the case of WBSEB the tariff proposed by HPGCL is Rs.3.96 / kWh, depending on period of contract, peak/off peak or round the clock power.

HPGCL, for estimating cost of the above mentioned short-term power has assumed average cost of supply of Rs. 4.34 / kWh (as per the original filing), Rs. 4.75 / kWh (as per the presentation dated 3/07/2006) and Rs.4.71 as per annexure D of their replies to the objections of UHBVNL, DHBVNL & HERC Staff. The Commission provisionally approves weighted average rate of Rs.4.57 / kWh for power purchase through short term bilateral / banking. **HPGCL is directed to file a quarterly report incorporating source wise actual volume / rate and cost of power purchased from the above-mentioned electricity traders.**

The Commission approves PTC (Malana) tariff based on the Power Purchase Agreement – 2 signed by PTC India Limited i.e. Rs 2.8588 / kWh for FY 2006-07.

The Commission has not considered any escalation in the unit rate except in the case of IPGCL & BBMB power because the actual invoiced rates are available right up to March 2006. Hence, the variable rates (fuel cost) are a fair approximation for FY 2006-07.

The Commission notes that the volume of short – term purchase of power (1819.30 MUs as per table 3.8) is very high i.e. around 7.6% of the total volume of power approved for FY 2006-07. Further, the weighted average rate is also very high i.e. Rs.4.57 / kWh about twice the bulk supply rate & the highest being Rs.5.31 / kWh. It shows that the licensee has failed in taking action to procure long term power at comparatively lower cost to take care of the power shortage. **The Commission therefore directs the licensee to plan for long-term power procurement and submit an action taken report within three months. Keeping in view the grim power scenario in the state, the Commission allows short-term power purchase for FY 2006-07 with a direction that the licensee should file FSA quarterly i.e. within one month of the completion of the quarter for which FSA is being claimed. The Commission will view the default on account of non – timely submission of FSA petition very seriously. If no FSA petition is filed by the licensee particularly for the quarter when it is positive, leading to overpayment by the Discoms the latter would be compensated by HPGCL for the overpayment.**

The rates approved by the Commission are exclusive of wheeling charges and Open Access charges that have been separately provided for.

The approved rates for purchase of power from various sources are presented in table 3.10.

Table 3.11 - HERC approved rates for purchase of power (FY 2006-07).

Source of Power	HPGCL Revised Power Purchase (Rs./Unit)	HERC approved rates (Rs./Unit)
NTPC		
Singrauli	1.27	1.19
Rihand I	1.85	1.74
Rihand II	1.85	1.07
Unchahar I	2.04	1.94
Unchahar II	2.00	1.95
Anta gas	2.16	1.92
Auriya gas	2.58	2.04
Dadri gas	2.22	2.22
Faridabad gas	2.42	2.24
NHPC		
Bairasiul	0.80	0.81
Salal	0.78	0.73
Tanakpur	1.26	1.28
Chamera I	1.46	1.45
Chamera II	2.49	2.41
Uri	2.80	2.59
NPC		
NAPP	2.65	2.53
RAPP (3&4)	2.96	2.80
HPGCL		
TDL TPS (1-4)	2.95	2.95
TDL TPS (5)	2.22	2.22
TDL TPS (6)	2.97	2.97
TDL TPS (7)	2.65	2.65
TDL TPS (8)	2.65	2.65
FTPS (1-3)	3.70	3.70
West Yamuna Canal & Kakroi	0.92	0.92
SHARED PROJECTS		
BBMB	0.12	0.08
IP Station	2.79	2.78
OTHERS		
Magnum #	0	0
NVVN	4.75	4.57
PTC	4.75	4.57
Tata PTC	4.75	4.57
Reliance Energy	4.75	4.57
WBSEB	4.75	4.57
PTC/Malana	2.86	2.8588
UI	4.10	0
Ch. Devi Lal Sugar Mill	2.50	2.44
SJVNL (N/Jhakri)	2.65	2.35
Dhaulti Ganga HEP	3.17	3.17
Dhulhasti HEP	3.00	3.00
Tehri HEP	3.30	3.30
Tripura Gas (NEEPCO)	3.30	3.30

HPGCL has claimed Rs. 160 million as fixed charges for deemed generation.

The Commission, in its previous order(s), directed HPGCL to re-negotiate the PPA with Magnum, however, this was not to be. The Commission is of the view that as the issue is under arbitration, hence until this is resolved, the

question of fixed charges as well as the amount payable (or not) to Magnum will remain indeterminate. Resultantly, the Commission, for the purpose of estimating power purchase cost for FY 2006-07 disallows Rs. 160 million proposed by HPGCL.

3.1.1.3 WHEELING CHARGES

HPGCL pays wheeling charges to the Power Grid Corporation of India (PGCIL) for wheeling power from the generating stations of NTPC, NHPC, NPC & other sources to its boundary. In addition to this, additional wheeling charges are paid to the State Grids through which power from sources like Salal, Bairasiul and ER power is wheeled. With the grant of 'Open Access' and 'Trading License' by the CERC and the fact that HPGCL is buying short-term power from the licensed traders, open access charges have become a reality. These are legitimate cost of bulk supply business and are therefore admitted.

For the purpose of the ARR under consideration, the Commission allows cost of wheeling as under: -

The cost of wheeling through PGCIL system during FY 2005-06 is projected based on the amount as per the supplementary information provided for FY 2005-06 i.e. Rs. 1077.6 million. This includes transmission charges paid to PGCIL and Wheeling charges paid to the SEBs of intervening states such as Himachal Pradesh, Punjab and Uttar Pradesh. This has been escalated by 4% on the basis of annual average WPI to account for inflationary increase during the current financial year i.e. FY 2006-07. Resultantly, the Commission allows Rs. 1120.71 million as transmission & wheeling charges for FY 2006-07.

In the absence of the detailed information on open access charges as claimed by HPGCL it is difficult for the Commission to determine these

charges with reasonable accuracy. However, for the purpose of the ARR for FY 2006-07, the Commission, considering the fact that as per provisional statement of power purchase cost HPGCL incurred an expenditure of Rs. 198.13 million on account of open access in FY 2005-06 (upto 31/03/2006), approves Rs.200 million as proposed by HPGCL. The under / over payment, if any, on this account will be subsequently adjusted on the basis of final figures as per the audited accounts in the next ARR. HPGCL should also disclose the amount received back on account of sharing of the Open Access charges. The same shall be subject to adjustment in the next ARR. **HPGCL is directed to submit the actual detailed information on this account by 30th June every year and also along with the filing for the next ARR.**

HPGCL has proposed Rs. 54.6 million as ULDC charges (Central) during FY 2006-07 as against Rs. 49.12 million actually incurred in the previous year. The Commission approves the same as this has been taken into account “as per tariff orders notified by CERC”.

In addition to the above, HPGCL has proposed to incur Rs. 8 million as LC (Letter of Credit) charges as against Rs. 7.65 incurred during the previous year. As this is a legitimate cost for power procurement from different power companies / traders, the Commission allows the same.

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Table 3.122 HERC approved cost for power purchase (FY 2006 – 07)

Source of power	HPGCL proposal		HERC approval	
	Volume (MUs)	Cost (Rs. mln)	Volume (MUs)	Cost (Rs. mln)
NTPC				
Singrauli	2000	2540	1774.76	2111.9644
Rihand I	780	1443	658.66	1146.0684
Rihand II	550	1017.5	605.61	647.6817
Unchahar I	200	408	113.94	221.0436
Unchahar II	200	400	271.64	529.6980
Anta gas	220	475.2	238.87	458.6304
Auriya gas	320	825.6	336.39	686.2356
Dadri gas	340	754.8	333.53	740.4366
Faridabad gas	3000	7260	2813.00	6301.12
NHPC				
Bairasiul	220	176	222.94	180.5814
Salal	500	390	405.53	296.0369
Tanakpur	28	35.3	25.33	32.4224
Chamera I	330	481.8	364.07	527.9015
Chamera II	130	323.7	127.01	306.0941
Uri	140	392	122.77	317.9743
NPC				
NAPP	200	530	211.72	535.6516
RAPP (III & IV)	400	1184	436.5	1222.2
HPGCL	8846.04	24181.2	8846.04	24181.21
BBMB	3200	384	3343.51	267.4808
IP Station (2,3&4)	180	502.2	183	508.74
OTHERS				
Tala (hydel)	200	660	0	0
Magnum	0	160	0	0
PTC (Malana)	270	772.2	270	771.876
UI	1000	4100	0	0
Ch. Devi Lal Sugar Mill	2	5	2	4.88
SJVNL (N/Jhakri)	300	795	264.5	621.575
DhaultiGanga	120	380.4	87.91	278.6747
Dhulhasti	125	375	125.11	375.33
Tehri	100	330	100.1	330.33
Tripura Gas (NEEPCO)	30	99	30	99
Short Term Bilateral / banking (excluding Malana)	1807	8583.3	1549.3	7080.3
Wheeling / Open Access				
PGCIL		1100		1099.904
HPSEB		5		5
PSEB		10		10
UPSEB		5		5
LC Charges		8		8
ULDC Charges (Central)		54.6		54.6
Open Access Charges		200		200
G.TOTAL		61346.8		52,163.6
Cost (Rs./kWh)		2.38		2.19

3.1.2 TRANSMISSION LOSSES

The Commission vide its order on Annual Revenue Report for Transmission Business & SLDC for FY 2006-07 & Transmission Tariff and SLDC charges (Case No. HERC / PRO – 1 of 2006) dated 26th July 2006 has pegged total transmission losses at 4.4% in FY 2006-07. Resultantly, the net units

available for sale to the Discoms works out to 22,813.22 million units. The computational details are provided in table 3.12.

Table 3.133 Energy available for sale to distribution business.

Sn.	Description	HERC approval FY 2006-07 (million units)
1	Gross Energy Purchase by HPGCL	23,863.20
2	Transmission Losses (1*4.4/100)	1049.98
3	Energy Available for Sale to Discoms (1-2)	22813.22

3.1.3 BULK SUPPLY TARIFF

The bulk supply tariff for sale of power to the Discoms is determined at Rs.2.29 / kWh as against Rs.2.51/kWh proposed by HPGCL. The computational details are provided in table 3.13

Table 3.144 Energy available for sale to distribution business.

Sn.	Description	HERC approval FY 2006-07
1	Power Purchase Cost (Rs. million)	52,163.6
2	Gross Energy Purchase by HPGCL	23,863.20
3	Transmission Losses (@ 4.4%)	1049.98
4	Energy Available for Sale to Discoms (2-3)	22813.22
5	Bulk Supply Tariff (Rs / kWh) (1/4)	2.29

3.1.4 SALARY & WAGES

HPGCL, for its trading business has estimated salary and wages expenditure based on employees' presently working for the trading function amounting to Rs. 10 million. The amount was revised by HPGCL to Rs.20 million in their presentation dated 3rd July 2006 on the plea that the trading function is in infancy stage and in future the expenditure is likely to increase.

The Commission is of the view that HPGCL, for its bulk supply / trading function should provide the details of employees' cost in terms of Basic pay, DP, DA, Allowances, Terminal Benefits (computed on cash basis) etc. of the employees working for trading / bulk supply function and the anticipated

increase in any of the components of salary and wages during the year. The Commission observes that as per its order on Transmission & Bulk Supply ARR and Tariff for FY 2005-06 dated May 10, 2005 the employees' cost allocated to Bulk Supply business was Rs.9.12 million based on the allocators derived from the disaggregated accounts for Transmission & Bulk Supply business filed by HVPNL. Considering the fact that in the case of HPGCL trading / bulk supply is in an infancy stage, the Commission allows salary and wages expenditure of Rs.10.24 million (as approved by the Board of Directors of HPGCL) details of which were provided by HPGCL at Annexure – A of the HPGCL's supplementary information filed vide Memo NO. HPGC/FIN/Reg – 201 / 942 dated 10/07/2006 in response to the objections of UHBVNL, DHBVNL and HERC staff on the trading margin application under consideration.

The Commission, given the dynamism of trading and likely emergence of an institutionalised power trading market as envisaged in the Electricity Act 2003, appreciates the contention of HPGCL that trading function is in an infancy stage in HPGCL and in future expenditure on Salary & Wages are likely to increase. **Thus, the Commission directs HPGCL to prepare a comprehensive, function wise, human resource plan and file the same for consideration of the Commission before the next filing.**

3.1.5 ADMINISTRATIVE&GENERAL EXPENSES (A&G EXPENSES)

HPGCL has projected Rs. 5 millions as A&G Expenses for the purpose of administration, stationary, telephone etc. The Commission considers the amount projected by HPGCL is reasonable for carrying out the trading / bulk supply function and approves the same.

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3.1.6 WORKING CAPITAL & INTEREST THERETO

HPGCL has projected working capital requirement of Rs. 10,420.65 million based on two months of receivables for sale of power. The interest on working capital calculated on the basis of SBI PLR (State Bank of India Prime Lending Rate) i.e 10.5% has been estimated at Rs.1094.17 million for FY 2006-07.

The Commission, after considering the contention of objectioners viz. UHBVNL & DHBVNL (ref. Chapter 2, Para 2.1 & 2.1.1) and the fact submitted by HPGCL (ref. HPGC/FIN/Reg-201/942 dated 10/07/2006) that as on 31/03/2006 the receivables for sale of power to the Discoms stands at 86 days of sales, is of the view that the need for working capital arises because there exists a gap between incurring expenditure and realising book – debt hence it is the time gap in terms of number of days of sales between the receivables and payables as per the respective PPAs / MOUs that needs to be financed. The inefficiencies in realising the ‘dues’ leading to larger working capital requirement cannot be passed on to the consumers.

In light of the above and the fact that the Commission in all its previous orders in respect of Transmission & Bulk Supply business has consistently allowed one month’s ARR as working capital till the licensee(s) are able to rein in working capital requirement by managing the leads (payables) and lags (receivables), allows working capital equivalent to one month’s receivable for sale of power to the Discom.

The interest on the approved working capital borrowings amounting to Rs. 4346.97 million @ 9% works out to Rs. 391.23 million, which is allowed by the Commission for FY 2006-07. The Commission observes that HPGCL is able to raise short – term resources at sub – PLR rates i.e. about 200 basis point below SBI PLR. However, as the sub – PLR rates are likely to be revised upwards due to tightening of the overall liquidity in the Economy, the

Commission, for working out interest cost considers interest rate @ 9% which marginally above an average rate of 8.85% at which HPGCL has raised working capital loans from the commercial banks during the previous three months.

The Commission is concerned about the mounting receivables at HPGCL (trading) end because of sluggish payments for purchase of power by the Discoms and directs HPGCL to take – up the relevant clause of Bulk Supply Agreement (BSA) entered into with the Discoms (which was earlier approved by the Commission) and submit an amended BSA, for consideration of the Commission.

3.1.7 REBATES & INCENTIVES

The total amount of rebates and incentives of Rs.615.00 million estimated by HPGCL on account of rebates for timely payment of power purchase bills (2% per month maximum) amounting to Rs. 400 million and incentive of Rs.215 million from NTPC on account of CPSU bonds of Rs.10750 million issued under the one time settlement scheme, is approved by the Commission. The Commission recognises the fact that in the absence of timely payments by the Dicoms, HPGCL is forced to borrow short – term in order to claim ‘rebates’ for timely payments for the power purchased by it from the Generating companies / traders and the fact that the Commission has considered only one month’s sale of power for allowing working capital as against two months sale proposed by HPGCL, the Commission, for the purpose of working out trading margin, has considered only the incentive from the CPSUs amounting to Rs. 215 million.

INCOME TAX

HPGCL has not projected any income Tax as no income / profit is to be derived from the trading business.

3.1.8 COMPUTERIZATION & IT EXPENSES

HPGCL, has proposed Rs. 10 million expenditure for providing computers system & IT initiatives. The Commission recognises the importance of modern data management and communication system especially when real – time decision and cost computation to strike a trade - off in respect of short term purchases are involved, thus the Commission approves Rs. 10 million as one time expenditure for computerisation and IT initiatives. **The Commission directs HPGCL to complete modernisation of its power purchase and management function within FY 2006-07 and keep the Commission posted about the efforts made.**

3.1.9 OTHER EXPENDITURE

The total expenditure, other than power purchase cost approved by the Commission with respect to the bulk supply business for the financial year 2006-07 is Rs. 416.47 million as against Rs. 1109.17 (revised to Rs.1142.89 million) proposed by HPGCL. Table 3.23 provide the details of the other expenditure approved for FY 2006 - 07.

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Table 3.155 - Approved expenditure for FY 2006-07(Rs. million)

Description	HPGCL revised Proposal	HERC Approval
Expenditure		
Salary & Wages	20.00	10.24
A&G Expenses	5.00	5.00
Interest on Working Capital	1107.89	391.23
Computerization & IT	10.00	10
Total Expenditure	1142.89	416.47

3.1.10 TRADING MARGIN

HPGCL has proposed a trading margin of 2 paisa per unit. The Commission, based on the allowed costs (other than power purchase), approves a trading margin of 0.8831 paisa (rounded off to 1 Paisa) per unit for FY 2006-07. The computational details are presented in table 3.15.

Table 3.166 – Trading Margin for FY 2006-07(Rs. million)

Description	HPGCL revised Proposal	HERC Approval
Expenditure		
Salary & Wages	20.00	10.24
A&G Expenses	5.00	5.00
Interest on Working Capital	1107.89	391.23
Computerization & IT	10.00	10
Total Expenditure	1142.89	416.47
(-) Rebates & Incentive	(615)	(215)
Net Expenditure	572.89	201.47
Energy Available for sale to Discoms (kWh)	24738.95	22813.22
Trading Margin (Paisa / kWh)	2.31	0.8831

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CONCLUSION

The Commission, under Section 62 read with Section 64 (3) (a) & Section 64 (6) and 86 (j) of the Electricity Act 2003, issues this tariff order with modification of the calculation of expected revenue, bulk supply tariff and trading margin proposal of HPGCL and hereby determines the same as following:

1. Gross Purchase of 23,863.2 million units of energy during FY 2006-07.
2. Transmission losses pegged at 4.4% of the Gross purchase in FY 2006-07.
3. Sale of 22,813.22 million units of energy to Distribution and Retail Supply business during FY 2006-07.
4. Power Purchase Cost for FY 2006-07 is determined at Rs.52,163.6 million.
5. Other Expenditures for FY 2006-07 (net of incentives amounting to Rs.215 million) is determined at Rs. 201.47 million.
6. Trading Margin for FY 2006-07 pegged at 1 Paisa / kWh.

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1. The Commission directs that the bulk supply tariff & trading margin approved by it for FY 2006-07 be implemented from 15th August 2006.
 2. This order is signed, dated and issued by the Haryana Electricity Regulatory Commission on 11th August 2006.

Date: 11th August 2006:

Place: Panchkula

T.S. Tewatia
(Member)

T.R. Dhaka
(Member)

Lt. Col. (Retd.) Raghbir Singh
(Chairman)

ANNEXURE 1

LIST OF COMMISSION DIRECTIONS GIVEN IN THIS ORDER

1. HPGCL is directed to explain the energy drawl, along with details, from this source to the extent of 5.751 MUs during FY 2006-07 at a rate of Rs. 4.8673 / kWh within two months from the date of this order (Ch. 3, Para 3(G)).

2. The Commission directs HPGCL to speed up the finalisation of PPAs and submit the draft for consideration of the Commission (Ch.3 Para 3(I)).

3. HPGCL is directed to intimate the Commission as and when tariff from these sources are determined by the CERC (Ch.3, Para 3.1.1.2(D)).

4. HPGCL is directed to file a quarterly report incorporating source wise actual volume / rate and cost of power purchased from the above-mentioned electricity traders (Ch.3, Para 3.1.1.2 (E)).

5. The Commission therefore directs the licensee to plan for long-term power procurement and submit an action taken report within three months. Keeping in view the grim power scenario in the state, the Commission allows short-term power purchase for FY 2006-07 with a direction that the licensee should file FSA quarterly i.e. within one month of the completion of the quarter for which FSA is being claimed. The Commission will view the default on account of non – timely submission of FSA petition very seriously. If no FSA petition is filed by the licensee particularly for the quarter when it is positive leading to overpayment by the Discoms the latter would be compensated by HPGCL for the overpayment (Ch.3, Para 3.1.1.2 (E)).

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6. HPGCL is directed to submit the actual detailed information on this account (Open Access) by 30th June every year and also along with the filing for the next ARR (Ch.3, Para 3.1.1.3).
 7. Thus, the Commission directs HPGCL to prepare a comprehensive, function wise, human resource plan and file the same for consideration of the Commission before the next filing (Ch.3, Para 3.1.4).
 8. The Commission is concerned about the mounting receivables at HPGCL (trading) end because of sluggish payments for purchase of power by the Discoms and directs HPGCL to take – up the relevant clause of Bulk Supply Agreement (BSA) entered into with the Discoms (which was earlier approved by the Commission) and submit an amended BSA, for consideration of the Commission (Ch.3, Para 3.1.6).
 9. The Commission directs HPGCL to complete modernisation of its power purchase and management function within FY 2006-07 and keep the Commission posted about the efforts made (Ch.3, Para 3.1.9).