8. SETTLEMENT & BILLING

8.1 RECEPTION OF GENERATION INVOICES

- 8.1.1 Generation Companies shall submit invoices for the Energy and Capacity sold or for any other item provided under their respective power purchase contracts, according to the provisions of their corresponding power purchase contracts including, at least, the information mentioned in Chapter 12.
- 8.1.2 The periodicity, submission and due dates of the invoices submitted pursuant to clause 8.1.1 above shall be determined in accordance with the provisions of the corresponding power purchase contracts. The invoices shall be uploaded by the Generation Companies into the CPPA-G ERP Portal and shall also be as well as submitted in hard form to the designated offices of CPPA-G.
- 8.1.3 The invoices received on or before fifth (5th) working day of a month and corresponding to the market transactions carried out during the previous month shall be used for settlement purposes. Any invoices received after the fifth (5th) working day shall be considered for settlement purpose in the subsequent month.

8.2 GENERATION INVOICES VERIFICATION

- 8.2.1 CPPA-G shall verify the submitted invoices for their completeness and adequacy. This verification process shall, *inter alia*, include the following checks:
 - a) Capacity and Capacity Purchase Price
 - i. Available Capacity shall be based on the Annual Capacity Tests, conducted by CPPA-G according to the provisions of the corresponding power purchase contracts.
 - ii. Declared Available Capacity (MW) for the corresponding month, or any other period relevant for the invoice, shall be in accordance with the procedures stated in the Grid Code or the relevant power purchase contracts, as applicable.
 - iii. The applicable capacity tariffs shall be those determined by NEPRA or calculated in accordance with the provisions of the relevant power purchase contracts.
 - iv. Any Correction Factor and/or Indexation Factor that needs to be applied shall be calculated and applied in accordance with the corresponding determination of the Authority or the provisions of the corresponding power purchase contracts, as applicable.
 - b) Energy and Energy Purchased Price

- i. The Energy effectively delivered shall be consistent with the monthly or other periodic meter reading submitted by NTDC to the Market Operator. Until the moment NTDC has a Commercial Metering System, capable of retrieving hourly values from all meters installed at the CDP and electronically submit these values to the Market Operator, a physical meter reading shall be taken by the Metering Committees.
- ii. Energy Tariffs shall be those determined by the Authority or calculated in accordance with the provisions of the relevant power purchase contracts, as applicable.
- iii. Any Correction Factor and/or Indexation Factor, if required to be applied, shall be calculated and applied in accordance with the Authority's determination or the provisions of the corresponding power purchase contracts, as applicable. In case the power purchase contract provides adjustments or corrections linked to meteorological conditions, the CPPA-G shall ensure that the appropriate methodologies are applied for the measurement and recording of the plant site temperature, atmospheric pressure, wind speed, solar irradiation, hydrology data or other meteorological conditions required for the verification of the invoices.
- c) Supplemental Charges (Pass-Through Items)
 - i. Where the invoice issued by the Generation Company, as per the corresponding power purchase contract, contains any supplemental charges (e.g. pass-through items), such invoice shall only be processed after the submission of the original cash payment receipts justifying the incurrence of such cost.
 - ii. As a general rule, any additional (e.g. pass-through) charge, as per the corresponding power purchase contract, shall only be processed after the incurrence of such cost by the Generation Company. The incurrence of such cost shall be proved by the submission of original payment receipts along with the invoice therefor.
 - iii. In exceptional circumstances supplemental charges (e.g. pass-through) can be processed before the Generation Company incurs such costs, if such costs are allowed and determined by NEPRA. The Generation Company shall provide a complete detail of the costs incurred, including original cash receipts within five (5) days of such disbursement. The CPPA-G shall submit a statement to NEPRA showing all such verifications, disbursements and adjustments on a monthly basis.
 - iv. Wherever practically possible, the payment for a pass-through item shall be made on the basis of the tariff/ amount determined by the Authority.
 - v. In case of a difference or dispute between CPPA-G and Generation Companies regarding the admissibility of any pass-through invoice the matter shall be referred to the Authority for resolution.

8.3 DISPUTED AND UNDISPUTED AMOUNTS

- 8.3.1 In case the verification procedure determines the adequacy of the invoice received from the Generation Companies, the corresponding values included in the invoice shall be labelled as "undisputed amounts" and shall be relied upon as such in the invoice settlement process.
- 8.3.2 In case CPPA-G considers that, as a result of the verification procedure, the invoice received is incorrect or inadequate in some way, CPPA-G shall:
 - a) Inform the corresponding Generation Company about the deficiencies detected, with the required explanations if it proceeds, requiring the Generation Company to submit the required document(s) or issue a revised / corrected invoice;
 - b) Re-calculate the invoice amount or amounts in accordance with CPPA-G's interpretation of the provisions of the corresponding power purchase contract, labelling these amounts as "undisputed amounts";
 - c) Label the differences between the original invoice amounts and the undisputed amounts as "disputed amounts".
- 8.3.3 In case the Generation Company considers that the observations and/or corrections made by the CPPA-G are appropriate, it shall submit a revised and corrected invoice within five (5) working days after the reception of the CPPA-G observations.
- 8.3.4 In the case the Generation Company does not agree with the observation and/or corrections made by CPPA-G, it shall: notify CPPA-G about such disagreement, reaffirming the amounts included in the original invoice and attaching all explanations, evidences and/or interpretations of its power purchase contract as it considers appropriate, in accordance with the provisions of its power purchase contract.
- 8.3.5 In case Generation Company only partially agrees with the observations made by CPPA-G, it shall notify CPPA-G to the extent of disagreed amount about such disagreement, reaffirming the amounts included in the original invoice and attaching all explanations, evidences and/or interpretations of the power purchase contract relating to the disagreed amount as it considers appropriate, in accordance with the provisions of its power purchase contract.
- 8.3.6 CPPA-G shall review the submissions made by the Generation Company relating to an amount in disagreement and:
 - a) If it considers the submissions made by the Generation Company on the amount in disagreement acceptable, accept the same. In such a case CPPA-G shall correct the undisputed and disputed amounts, as applicable; or

- b) If it considers the submissions made by the Generation Company on the amount in disagreement unsatisfactory CPPA-G shall reject the same.
- 8.3.7 Only undisputed amounts shall be used for settlement purposes. In case there is any kind of disagreement between CPPA-G and the Generation Company in relation with the invoiced amounts, the procedures prescribed by the corresponding power purchase contract shall be applied for the settlement of such disputed amounts.
- 8.3.8 If it is revealed at any subsequent date that the calculation of an invoice has been issued or an amount has been claimed fraudulently and/or such is contrary to the provisions of the relevant power purchase contract, such amounts shall be recovered from such party along with the applicable delayed payment interest without regard to any limitation of time.

8.4 INFORMATION FROM NTDC

- 8.4.1 On a monthly basis, within five [5] working days after the end of previous settlement period, NTDC shall submit to the Market Operator invoices for the Use of System Charges (UoSCs) corresponding to each Market Participant as per Chapter 12. The Market Operator and NTDC shall agree upon the format of exchanging this information electronically.
- 8.4.2 The Market Operator shall verify the adequacy of the calculations performed by NTDC, using the information provided by the Metering System, requiring clarifications and/or corrections if deemed appropriate.

8.5 INFORMATION FROM THE SYSTEM OPERATOR

8.5.1 On a weekly basis and not later than (Tuesday morning) the System Operator shall send to the Market Operator the declared and available capacity of each Generation Unit, Energy despatched and compliance with despatch instructions by each Generation Company, segregating at a generation unit level, as applicable under the provisions of the corresponding power purchase contracts. The Market Operator and the System Operator shall agree upon the format of exchanging this information electronically.

8.6 METER READINGS AT THE CDP

8.6.1 Within two (2) working days after the end of each month, NTDC shall send to the Market Operator the data and information received from the CDP meter reading. The Market Operator and NTDC shall agree upon the format to exchange this information electronically.

8.7 MARKET SETTLEMENT SYSTEM

- 8.7.1 The Market Operator shall administer a market settlement system which shall be operated on a monthly basis.
- 8.7.2 The Market Operator shall be responsible for the development and maintenance of the required software and data for the operation of the market settlement system.
- 8.7.3 The Market Operator shall be responsible for the verification of data and the accuracy of the outputs of the market settlement system, which in turn shall be based on the verification of invoices submitted by the Market Participants.
- 8.7.4 The market settlement system shall be administered by the Market Operator through the following procedure:
 - a) Calculation of the settlement of all Market Participants as per the formulations indicated in Section 6;
 - b) Addition of NTDC's UoSC in the settlement, as it corresponds;
 - c) Calculate the CPPA-G Market Operation fee which shall be shared among the relevant Market Participants as per the Authority's determinations.
- 8.7.5 The market settlement of a Market Participant for a month shall be calculated as follows:
 - a) The actual amount payable or receivable by the Market Participants, as the case may be, of the monthly Final Settlement Statement as per Sub-Section 8.9 corresponding to such Market Participant; plus
 - b) The actual amount payable to the Market Participant corresponding to any accrued interest for previous payments not received on time; minus
 - c) The actual amount receivable by the Market Participant corresponding to any accrued interest of previous payments not made on time.
- 8.7.6 The Market Operator shall include in the market settlement system the monthly calculations of the UoSC, performed by NTDC, adding or subtracting, as the case may be, the corrections to previous UoSC payments by the Market Participants.
- 8.7.7 The Market Operator shall calculate the Market Operation Fee as described in Chapter 11 of this Commercial Code.

8.8 PRELIMINARY SETTLEMENT STATEMENT

8.8.1 For each month the Market Operator shall send to each Market Participant a Preliminary Settlement Statement. This preliminary settlement statement shall include:

- a) For Generation Companies, the net Energy and, when applicable, generation of Electric Capacity bought or sold as reflected in the invoice and according to each power purchase contract, and total for the Participant Generation Company;
- b) For other Market Participants, NTDC's Use of System Charge, net Energy bought by the demand, and the Market Operator's Market Operation Fee; and
- c) The payable or accrued interest for previous payments not made on time;
- 8.8.2 If a Market Participant claims that an error or discrepancy exists in the Preliminary Settlement Statement, the Market Participant shall convey its claim to the Market Operator within [five (5)] working days of receipt of the Preliminary Settlement Statement.
- 8.8.3 The Market Operator shall review the Preliminary Settlement Statement in light of any claim made by such Market Participant and conclude whether the claim of any such error or discrepancy is correct or incorrect before the Final Settlement Statement is released to Market Participants.
- 8.8.4 The Market Operator shall notify affected Market Participants of the claimed error or discrepancy in the Preliminary Settlement Statement and whether or not the claimed error or discrepancy shall be corrected in the Final Settlement Statement.

8.9 FINAL SETTLEMENT STATEMENT

8.9.1 Within twenty (20) working days after the beginning of each month, the Market Operator shall send the Final Settlement Statement to each Market Participant, using a format similar to the Preliminary Settlement Statement. If no discrepancy is reported by the Market Participants, the Preliminary Settlement Statement shall be considered as Final Settlement Statement.

8.10 FAILURE OF THE SETTLEMENT SYSTEM

8.10.1 In case of emergencies and/or a failure of the settlement system, the Market Operator may issue an estimated settlement statement and/or modify the schedule for issuing preliminary settlement statements and/or final settlement statements. In such cases, the Market Operator shall inform all Market Participants of the temporary procedural changes as soon as practicable, as detailed in chapter 12.

8.11 ISSUING OF SETTLEMENT ADVICES

- 8.11.1 The verification of settlement to all Market Participants shall be subject, *inter alia*, to:
 - a) Verified power purchase price calculated by the CPPA-G;

- b) Verified generation invoices based on the power purchase agreements of the Generation Companies;
- c) Verified quantities of kilowatt-hours injected to and extracted from NTDC Transmission Grid at each Common Delivery Point, as informed by NTDC;
- d) Verified Megawatts available by generation and demanded by DISCOs as informed by NTDC and its System Operator;
- e) Applicable notified NTDC use-of-system charge as determined by Authority;
- f) Verified tariff differential subsidy released by the Government of Pakistan; and
- g) Verified monies provided by the DISCOs;
- 8.11.2 Invoices for settlement submitted by the NTDC to the Market Participants through Market Operator in accordance with the Final Settlement Statements shall include, *inter alia*:
 - a) the UoSC for the month;
 - b) Taxes as applicable; and
 - c) Total invoiced monthly bill to the Market Participants.
- 8.11.3 The settlement statement issued by the Market Operator to the Market Participants shall include, if applicable:
 - a) Total Transfer Price as calculated by the Market Operator in accordance with the transfer pricing mechanism;
 - b) Energy and Electric Capacity charges;
 - c) The UoSC;
 - d) Interest for late payment, if applicable;
 - e) Kilowatt-hours delivered during each Settlement Period;
 - f) Adjustments from previous months settlement, if necessary;
 - g) Taxes, as applicable;
 - h) Total bill for Settlement Period; and
 - i) The Payment Due Date.