



BULK SUPPLY CODE DRAFT

**ELECTRICITY REGULATORY COMMISSION
JORDAN**



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	Initial approval	
	Amendment 1:	
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	Amendment 4:	



BULK SUPPLY CODE

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1. SECTION: GENERAL CONDITIONS

1.1. INTRODUCTION AND PURPOSE

1.1.1. The Bulk Supply Code (this Code) establishes for the single buyer model,

- (a) The principles, procedures and requirements for power procurement, Power Purchase Agreements and resale to Bulk Supply Customers; and
- (b) The principles by which the ERC will review and approve the procurement processes and documents of the Bulk Supplier.

1.1.2. This Section General Conditions establish the general provisions that apply to all the Sections in this Code, including definition of terms, abbreviations and interpretations.

1.2. DEFINITIONS

Any word or expression defined in the General Electricity Law or the licences or the Grid Code and that is not defined otherwise in this Code shall have, unless the contrary intention appears, the same meaning and interpretation when used in this Code, including its Annexes.

When applying the provisions contained in this Code, and unless otherwise specified or the subject matter or context otherwise requires or is inconsistent therewith, the following words and expressions shall have the following meaning:

- **Annex** means an annex of this Code.
- **Bulk Consumer** (or principal consumer) means the consumer directly connected to the transmission system and that during the single buyer model shall be supplied with electrical power by the Bulk Supplier.
- **Bulk Generation** means a generation unit or power station that does not qualify as embedded generation, and that during the single buyer model shall sell its production of electrical power to the Bulk Supplier.
- **Bulk Supply** for the purpose of this Code means the bulk purchase of electric power by the Bulk Supplier, from Bulk Generation and from imports subject to the Council of Ministers authorization, for the resale to Bulk Supply Customers and to export subject to the Council of Ministers authorization.
- **Bulk Supplier** means the holder of the bulk supply license that authorises exclusivity in bulk supply during the single buyer model, granted pursuant to articles (28) and (35) of the General Electricity Law.
- **Bulk Supply Customer** means a Distribution Company or a Bulk Consumer
- **Bulk Supply Tariffs** means the tariffs for sales from the Bulk Supplier to a Bulk Supply Customer, regulated and approved by the ERC.
- **Bulk Supply Tariff Methodology** means the principles for bulk supply tariff calculation and review approved by ERC and applicable to the Bulk Supplier as



described in the licence, and modified from time to time by ERC, in accordance to article (9 B) and (47) of the General Electricity Law.

• **Business Day** means any day other than Friday, Saturday or a public holiday in Jordan, when commercial banks are open for business in Jordan.

• **Central Dispatch** means the process of scheduling and issuing direct instructions for dispatch of available Generating Units by the System Operator in accordance with the Grid Code.

• **Code:** means this code, together with the annexes attached to it;

• **Connection Point** means the point that connects the system or equipment of a Bulk Supply Customer to the transmission system.

• **Demand Charge** means the fixed charge component of the Bulk Supply Tariff calculated in accordance to the Bulk Supply Tariff Methodology.

• **Distribution Company** means the holder of a distribution and retail supply licence, or a concession that authorises distribution and retail supply.

• **Energy Charge** means the variable charge component of the Bulk Supply Tariff, calculated in accordance with the Bulk Supply Tariff Methodology.

• **ERC** means the Electricity Regulatory Commission constituted under the General Electricity Law.

• **Export** means an electricity export by the Bulk Supplier in an international interconnector, pursuant to permission by the Council of Ministers.

• **General Electricity Law (the Law)** means the General Electricity Law No. (64) of the Year 2002 or any amendments thereto or any other law that replaces the said law.

• **Generating Unit** means any apparatus that produces electrical energy, and that in the case of conventional hydro or thermal power station will include the mechanical prime mover, such as turbine or engine, or in the case of non conventional generation such as wind and solar energy the equivalent means of converting another form of energy to electricity.

• **Generation Adequacy** means sufficient generation to meet the load, with a mix of technologies and fuels to ensure sufficient diversity, load following capability and to ensure an acceptable level of reliability.

• **Generation Master Plan** means the generation expansion plan to supply the projected load across a number of years, complying with the generation planning criteria set out in the Grid Code, as approved by the ERC.

• **Government** means Government of the Hashemite Kingdom of Jordan.

• **Grid Code** means the document defined in the General Electricity Law, as modified from time to time and approved by the ERC.

• **Import** means an electricity import by the Bulk Supplier in an international interconnector, pursuant to permission by the Council of Ministers.

• **Initial IPP Contract:** means as defined in the General Electricity Law.

• **Initial Privatisation Contract:** means as defined in the General Electricity Law.

• **Licensing Procedures,** means the procedures approved by ERC to issue a license.



- **Merit Order** means a system establishing economic precedence, subject to transmission system constraints and reliability standards, of electrical energy from Generating Units and imports to supply the load.
- **Non Approval Notice** means a notice issued by the ERC to the Bulk Supplier indicating the procurement process has not been conducted according to the authorised procedures by ERC, and instructing the Bulk Supplier which actions need to be taken.
- **Power Procurement Schedule** mean the detailed schedule, prepared by the Bulk Supplier for procuring power for Bulk Customers, listing the activities and their timeframe which need to be carried out for procuring the power stated in the System Master Plan for the period specified in this Code and approved by ERC.
- **Power Purchase Agreement (or PPA)** means a contract between the Bulk Supplier and a generation licensee for the provision and sale of the whole or any part of the installed capacity and electrical energy (to the extent specified therein) of one or more of its Generating Units, which may also include during the single buyer model the provisions of ancillary services.
- **Pre-Approval Application** means an application submitted by the Bulk Supplier to the ERC asking for a pre-approval of the results of the procurement process which should be issued before conducting the final negotiations with the selected company for concluding a PPA.
- **Pre-Approval Notice** means a notice issued by the ERC to the Bulk Supplier approving the procurement process conducted up to the time of issuing the notice and the prices of the PPA, allowing the Bulk Supplier to conduct the final negotiations with the selected company for concluding a PPA.
- **Procurement Documents** means the set of documents, including the proposed PPA, used by the Bulk Supplier in the tender or negotiation of new power procurement.
- **System Master Plan** means the Generation Master Plan and Transmission Master Plan, both approved by ERC, compiled together in one single document.
- **System Operator** means the holder of the licence that authorises system operation pursuant to articles (28) and (34) of the General Electricity Law.
- **Transmission Master Plan** means the plan for the transmission system including the bulk supply points across a number of years, involving its reinforcement and extension, to ensure sufficient and reliable transmission capacity for the supply of the long-term load forecast and for the connection and operation of generation.
- **Transmission Services Provider** means the holder of the transmission licence granted pursuant to articles (28) and (33) of the General Electricity Law, and that during the single buyer model is also the System Operator and the Bulk Supplier.
- **Warning Notice** means a notice issued by the ERC to the Bulk Supplier indicating the prices in the PPA are not affordable and instructing the Bulk Supplier to conduct negotiations with the selected company with the aim of reducing the prices in the PPA and/or to come up with different procurement alternatives.

1.3. INTERPRETATION

In this Code (including the Annexes), unless the context otherwise specifies or requires:



1.3.1. References to "the Bulk Supply Code " or "this Code" are a reference to the whole of the Bulk Supply Code, including any Annexes or other documents attached to any part of this Code;

1.3.2. The Annexes shall be deemed to be part of this Code;

1.3.3. Capitalised words used shall have the meanings assigned to them in the Definition Chapter of this Section;

1.3.4. Words in singular only also include the plural and vice versa where the context requires;

1.3.5. Words in the masculine shall include the feminine and neuter and vice versa;

1.3.6. Any reference to a day, month or year shall be construed as reference to a calendar day, month or year, as the case may be, and all references to specific dates shall be to the day commencing on such date at 00:00 hours;

1.3.7. The headings are for ease of reference only and shall not be deemed part of and shall neither affect nor be used in the interpretation or construction of this Code;

1.3.8. The word “include” or “including” shall be construed without limitation;

1.3.9. The word “shall” refers to a procedure, requirement or any provision of this Code that requires mandatory compliance;

1.3.10. All references to a numbered Annex, section, chapter or condition is respectively a reference to the Annex, section, chapter or condition bearing that number in this Code,

1.3.11. All references to numbered paragraph in a condition or Annex is respectively a reference to the paragraph bearing that number in that condition or Annex, unless indicated otherwise;

1.3.12. References to the consent or approval of the ERC shall be references to the approval or consent of the ERC in writing, which may be given subject to such conditions as may be determined by the ERC, as that consent or approval may be amended, modified, supplemented or replaced from time to time and to any proper order, instruction or requirement or decision of the ERC given, made or issued under it; and

1.3.13. Reference to any law, by-law, code, regulation made under any law, directive or other document issued by the ERC shall be construed to refer to such law, by-law, code, regulation made under any law, directive or other document issued by the ERC as amended, modified or replaced from time to time. In particular, any reference to any licence shall be to that licence as amended, modified or replaced from time to time and to any rule, document, decision or arrangement promulgated or established under that licence.



1.4. APPLICABILITY

1.4.1. This Bulk Supply Code shall apply during the single buyer model to

- (a) The Bulk Supplier;
- (b) The System Operator;
- (c) The Transmission Services Provider;
- (d) Bulk Generation and Bulk Supply Customers.

1.4.2. The Bulk Supplier shall comply with the criteria, guidelines and procedures established in this Code.

1.4.3. The obligations of the Bulk Supplier established in this Code regarding planning and power procurement applies to all power purchased and PPAs agreed to supply, partly or totally, Bulk Supply Customers. Therefore, the provisions in this Code are not applicable to power procurement dedicated exclusively to exports.

1.4.4. Any reference to a power procurement or PPA for Bulk Supply Customers includes any power procurement or PPA of the Bulk Supplier to supply only Bulk Supply Customers or to supply both Bulk Supply Customers and exports.

1.5. OBJECTIVES

1.5.1. The ERC has the responsibility for the regulatory oversight of the activities of the Bulk Supplier and monitoring compliance with the conditions in its bulk supply licence. Therefore, this Code, established by the ERC, has the purpose of:

- (a) Defining the principles, criteria and procedures on generation planning, bulk supply procurement to cover the long-term load forecast of Bulk Supply Customers;
- (b) Establishing the rights and obligations of the Bulk Supplier; and
- (c) Establishing the relationships and interactions between the ERC, the Bulk Supplier, the System Operator, Transmission Services Provider and the Bulk Supply Customers.

1.5.2. The Code has the following objectives:

- (a) To ensure that power is procured in an economic, efficient and timely manner;
- (b) To promote a least cost Generation Master Plan that ensures reliable Bulk Supply at reasonable costs;
- (c) To ensure that the procurement process maximises competition, to the maximum possible extent;
- (d) To establish predictable and efficient approval mechanisms for the ERC to monitor the Bulk Supplier compliance with the conditions in its bulk supply licence and this Code, and protect the interests of investors, licensees and consumers;



1.5.3. The ERC shall monitor and enforce the provisions of this Code; in particular the ERC may monitor any power procurement by the Bulk Supplier.

1.5.4. The ERC may issue directives with further guidelines for specific procurement processes.

1.6. HIERARCHY

1.6.1. In the event of any inconsistency between this Code and the General Electricity Law or a licence, the General Electricity Law or the licence, as applicable, shall prevail to the extent of such inconsistency.

1.6.2. In the event of any inconsistency between this Code and any other code approved by the ERC, this Code shall prevail to the extent of such inconsistency unless the contrary intention is explicit in this Code.

1.6.3. Nothing in this Code is intended to or shall derogate the Bulk Supplier or Bulk Generation or Bulk Supply Customer from any licence obligation.

1.6.4. If any provision of this Code is found to be unlawful or wholly or partially invalid for any reason, the validity of all remaining provisions of this Code shall not be affected.

1.6.5. If any part of a provision of this Code is found to be unlawful or invalid but the rest of such provision would remain valid if part of the wording were deleted, the provision shall apply with such minimum modification as may be:

- (a) Necessary to make it valid and effective; and
- (b) Most closely achieves the result of the original wording but without affecting the meaning or validity of any other provision of this Code.

1.7. AMENDMENTS AND UNFORESEEN CIRCUMSTANCES

1.7.1. The ERC in coordination with concerned parties shall:

- (a) Keep this Code and its implementation under review;
- (b) Issue guidance in relation to this Code and its implementation and interpretation upon the reasonable request by the Bulk Supplier, or any Bulk Supply Customer, or licensee or person participating or interested in participating in a procurement process of the Bulk Supplier;
- (c) Decide on any conflict of interpretation of this Code
- (d) Consider what amendments are necessary to this Code, arising out of any unforeseen circumstances or experience during this Code application or any reasonable recommendation by the Bulk Supplier.



1.7.2. In case of unforeseen circumstances or divergent interpretations of any provisions included in this Code, the ERC will complete any gap or problem in the Code and, until such amendment is drafted and approved, the ERC will establish through a directive the applicable procedures indicating what is to be done. The ERC shall notify the Bulk Supplier and the concerned parties on this directive and the notification shall be added as an Annex to this Code until an amendment to clarify or complete this Code is made, if necessary.

1.7.3. The ERC may amend from time to time this Code in any of the following circumstances:

- (a) To cope with changes in the power sector, Government policies and decisions on increasing competition; or
- (b) To improve its efficiency and effectiveness; or
- (c) In case of unforeseen circumstances as described in the previous paragraph; or
- (d) Correct any gap or problem identified in the implementation and application of this Code; or
- (e) Upon a justified request from the Bulk Supplier, the System Operator, the Transmission Service Provider or the Bulk Customers;
- (f) If any provision of this Code should be found to be unlawful or wholly or partially invalid.

1.7.4. From time to time but not less than once every (2) years, the ERC shall initiate a consultation process with the parties to whom this Code applies and any other person or entity the ERC considers an affected or interested party. The parties shall submit their comments and amendment proposals within the period specified by the ERC, including a comprehensive description of any proposal with its justification which shall not be binding to the ERC. The ERC shall review and assess all the comments and proposals received.

1.7.5. Under emergencies or unforeseen circumstances that substantially affect a planning or power procurement process and if the ERC considers it appropriate, the ERC may issue an urgent amendment to this Code without prior consultation.

1.7.6. The ERC shall decide amendments to this Code based on the principles of transparency, promoting efficiency, protecting consumers and the Bulk Supplier and promoting supply adequacy at reasonable costs.

1.7.7. Any amendment to this Code shall be approved by the Council and shall be published by the ERC. The amendment shall take effect from and including the date specified in the Council decision. The ERC shall notify the Bulk Supplier of the amendment approved at least twenty (20) Business Days prior to the revision taking effect, provided that in the case of an urgent amendment shorter advance notice may apply.

1.7.8. Any amendment to this Code shall not be applicable to any power procurement or PPA approved by the ERC prior the date such amendment becomes effective.



1.8. INFORMATION AND NOTICES

1.8.1. Submission of information and data under this Code shall be in print and electronic format, or any other suitable format prescribed by the ERC.

1.8.2. Submission of notice(s) under this Code shall be by hand delivery, registered first-class mail, telex or facsimile transfer. Exceptions to this requirement may be made with the agreement of the party with the ERC.

1.8.3. Any notice required to be given by this Code shall be deemed to have been given or received:

- (a) If sent by hand, at the time of delivery;
- (b) If sent by post, from and to any address within Jordan, four (4) Business Days after posting unless otherwise proven; or
- (c) If sent by facsimile, subject to confirmation of uninterrupted transmission report, or by e-mail, one hour after being sent, provided that any transmission sent after 14:00 hours on any day shall be deemed to have been received at 08:00 hours on the following Business Day unless the contrary is shown to be the case.

1.8.4. The ERC may publish in its web site the approved master plans in such manner as see it suitable.



2. SECTION: NEW GENERATION ENTRY

2.1. GENERAL CONDITIONS

2.1.1. Subject to competitive tenders the Bulk Supplier has the exclusive right to procure from Bulk Generation, to resell to Distributors and Principal Consumers.,.

2.1.2. The decision on new generation to enter the system shall be the result of an annual least cost Generation Master Plan, as established in this Code, prepared by the Bulk Supplier and approved by the ERC



3. SECTION: LONG-TERM LOAD FORECAST

3.1. PRINCIPLES AND GENERAL CHARACTERISTICS

3.1.1. The long-term load forecast used for generation and transmission planning shall require the prior approval of the ERC.

3.1.2. To ensure the long-term reliable supply of consumers, the ERC may from time to time prescribe in an instruction or a directive to the Bulk Supplier matters that should be dealt with in preparing long-term load forecasts for planning purposes.

3.2. PREPARATION AND COORDINATION

3.2.1. The Bulk Supplier shall prepare in coordination with the System Operator a long-term load forecast covering not less than the next (10) years, to be used in planning generation and transmission master plans. The long-term load forecast shall be updated annually, before the end of every year to be used in system planning and to identify need for additional generation.

3.2.2. The Bulk Supplier shall prepare the load forecast using adequate models, reasonable assumptions and best possible available data with cooperation with the ERC, including:

- (a) Data provided by Distribution Companies and Principal Consumer on their load forecasts;
- (b) Historical data and trends provided by System Operator;
- (c) Annual load forecast for the next year, prepared by the System Operator in accordance with the Grid Code
- (d) Economic growth projection and new development that may impact significantly load growth; and
- (e) Information on international interconnection agreements and approved exports, or changes to existing ones, if any.

3.2.3. The Bulk Supplier shall prepare a request for information for Distribution Companies and Principal Consumers, indicating in details the information that they have to supply for the purpose of this load forecast, and the dates within which this information has to be delivered. The delivery of this information is mandatory.

3.3. ERC APPROVAL OF LOAD FORECAST

3.3.1. Each year and not later than (March 1st), the Bulk Supplier shall prepare and submit for ERC approval a Long Term Load Forecast Report, which will include at least the following:

- (a) The forecasting period, which shall be not less than the next (10) years



- (b) The description of the forecasting methodology, models and assumptions
- (c) Historical load (consumption, peak demand, growth and trends) and transmission losses during the previous (5) year period, prepared by the System Operator;
- (d) Deviations between previous long-term load forecasts and actual load consumption by Bulk Supply Customers;
- (e) Annual load forecast for the next year, prepared by the System Operator in accordance with the Grid Code;
- (f) Future demand data provided by Bulk Supply Customers
- (g) The long-term load forecast (considering the expected average growth load scenario) with a comprehensive description and explanation of assumptions and including, as necessary,
 - (i) Peak and minimum load,
 - (ii) Energy consumption;
 - (iii) Load factors or load profile; and
 - (iv) Load growth;
- (h) In recognition of long-term load forecasting uncertainty, a low growth and high growth load scenario sensitivity analysis; and
 - (i) The explanation of any significant change to the long-term load forecast submitted in the previous year, such as revised assumptions and the reasons for such changes.

3.3.2. In reviewing the submitted Long Term Load Forecast Report and prior to its approval, the ERC may:

- (a) Request the Bulk Supplier to provide clarifications and additional information within a specified period or in meetings; and
- (b) Consult with the System Operator and Bulk Supply Customers on the reasonability of assumptions and forecast.

3.3.3. If based on its review and consultations, if any, should the ERC consider that an assumption or data should be revised; the ERC may require the Bulk Supplier to revise its load forecast prior to its approval.

3.3.4. No later than (March 30th) provided that the Bulk Supplier has promptly answered all clarifications and revisions asked for about the Report. The ERC shall approve the Long Term Forecast Report.

3.3.5. Once approved, the ERC may publish the long-term load forecast in its website in such manner as see it suitable.

3.3.6. The long-term load forecast approved by the ERC shall be used by:

- (a) The Bulk Supplier for the Generation Master Plan.



(b) The Transmission Services Provider for the Transmission Master Plan,
as applicable.



4. SECTION: GENERATION MASTER PLAN

4.1. OBJECTIVES

4.1.1. The Generation Master Plan shall identify the need for additional generation capacity to meet the forecasted load of Bulk Supply Customers and identify the least cost option to achieve generation adequacy.

4.1.2. The results of the Generation Master Plan shall be used:

- (a) To decide the need for new generation entry or new imports and their estimated costs this will affect the procurement costs of the Bulk Supplier and the Bulk Supply Tariff
- (b) As an input for the Transmission Master Plan, providing information regarding new generation capacity and Bulk Supply points to be considered for the development of this Transmission Master Plan.

4.2. COORDINATION

4.2.1. To ensure adequate generation and reliability and to achieve a least cost integrated planning, the Bulk Supplier shall perform its planning responsibilities for efficient and economic generation expansion in close coordination with the System Operator and the Transmission Service Provider.

4.2.2. The System Operator shall prepare and provide to the Bulk Supplier an evaluation of medium term (three years) supply, identifying any risk of shortages, transmission congestion or reliability concerns, in particular any need for adequate generation capability for peaking capacity and load following. The Bulk Supplier shall take into consideration these studies and concerns, to adequately address them in the Generation Master Plan.

4.2.3. In preparing the Generation Master Plan, the Bulk Supplier shall exchange information and coordinate work with the System Operator, in accordance to the Grid Code and this Code, to ensure security of supply by planning adequate generation (in quantity and mix) to supply Bulk Supply Customers while maintaining the required reserve margin, reliability standards and the flexible capacity for load following.

4.2.4. The Bulk Supplier shall jointly coordinate with the System Operator on the following matters:

- (a) Historical data and trends;
- (b) Long-term load forecast assumptions;
- (c) The resources mix and required peaking capacity to achieve Generation Adequacy and sufficient load following capability;
- (d) The generation expansion criteria and maximum size of new Generating Units, which will affect the reserve margin for the long-term planning; and
- (e) The requirements for ancillary services.



4.3. DATA

4.3.1. The Bulk Supplier shall prepare information forms to be filled by Distribution Companies, Bulk Generation and Principal Consumers, indicating in details the information that they have to supply for the purpose of the preparation of the Generation Master Plan, and the dates within which this information has to be delivered. The delivery of this information is mandatory.

4.4. GENERATION PLANNING CRITERIA

4.4.1. For the purpose of achieving supply adequacy, generation shall be planned with adequate and sufficient reserve margin.

4.4.2. The Bulk Supplier shall determine the required generation capacity considering the following generation planning criteria:

- (a) Primary criterion: Loss of load probability criterion, measured in number of days per year.
- (b) Secondary criterion: Single outage

4.4.3. Based on a study performed by Bulk Supplier or preformed by an independent expert, the Bulk Supplier shall include in the Generation Master Plan to be submitted to the ERC for approval, the proposed maximum number of days per year of expected loss of load which would be considered acceptable in Jordan and to be used as primary criterion in the Generation Master Plan. The Bulk Supplier shall submit its proposal with a report, including:

- (a) The explanation of the methodology and model(s) used in deciding this criterion;
- (b) A comprehensive justification of the proposed criterion;
- (c) Results of the studies and supporting data,
- (d) An evaluation, in coordination with the System Operator, of current situation number of days per year of expected loss of load (due to shortages or load shedding) according to existing system conditions and operational practices, such as operational reserve and flow in interconnectors; and
- (e) Should the criterion differ significantly with the current situation as evaluated in the previous point, a transition plan over the next (5) years to move towards increasing reliability by gradually lowering the maximum number of expected loss of load per year

4.4.4. To assess the proposed criterion, the ERC may

- (a) Require clarifications and additional information from the Bulk Supplier;
- (b) Consult with other licensees and Bulk Supply Customers; and
- (c) Request expert advice



4.4.5. Once a primary criterion is approved by the ERC, the Bulk Supplier may propose not to modify it in the next Generation Master Plans, provided that the primary criterion shall be revised not less than once every (5) years and in any year in which the system experiences shortages or inadequate reserve subject to ERC approval.

4.4.6. To comply with the secondary criterion, the Bulk Supplier shall make adequate studies to verify that in the proposed Generation Master Plan, the loss of the largest Generating Unit or the loss of an interconnector should not lead to system collapse or load shedding greater than (15%) . The corresponding study will be performed by the System Operator, or by an expert subject to review and agreement with the System Operator.

4.4.7. In view of the single outage criterion and to avoid excessive cost of spinning reserve, the Bulk Supplier, in coordination with the System Operator, shall determine the maximum size of the new Generating Unit that may be added to the system. This constraint shall be included as information in the Generation Master Plan and shall be taken into consideration in the procurements of the Bulk Supplier.

4.5. GENERATION EXPANSION

4.5.1. The Bulk Supplier shall prepare the Generation Master Plan for a period not less than the next (10) years, to identify the need for additional capacity (size, fuel and technology). The Generation Master Plan shall be updated annually, before the end of every year.

4.5.2. The Generation Master Plan shall be prepared using adequate models, reasonable assumptions and best available data, and comply with the procedures and criteria established in applicable codes.

4.5.3. In the preparation of the Generation Master Plan, the Bulk Supplier may contract expert advice and modelling support.

4.5.4. In determining the expected generation capacity and energy balance in Jordan, the Generation Master Plan shall include as input and considered in determining the least cost option:

- (a) Existing generation taking into consideration units retirement dates and expected availability;
- (b) Generation under construction;
- (c) Generation projects which are about to be awarded to successful bidders;
- (d) Generation projects already approved;
- (e) Generation capacity committed to long-term exports;
- (f) Long-term imports agreed with interconnected countries;
- (g) Specific projects that qualify as Initial IPP Contracts as defined in the Law;



- (h) Alternative resources different than generation, such as imports and demand side management or other energy efficiency mechanisms; and
- (i) Type of renewable energy projects if the Government energy policy which determinate required percentage of the total installed capacity to be from such projects or a specific renewable project(s). In which case the Generation Master Plan should include the corresponding feasibility study and estimated project cost.

4.5.5. The Generation Master Plan shall:

- (a) Comply with Government energy policies; and
- (b) Select the least cost resources to supply the approved load forecast of Bulk Supply Customers with the required reliability; and
- (c) Complying with generation expansion criteria defined in this Code.

4.5.6. To select the best possible option, in particular regarding technology and fuel, the Bulk Supplier shall include as alternatives

- (a) A list of standard generation projects (type of technology, fuel and size);
- (b) The potential for additional imports; and
- (c) In existing power stations, the potential for additional Generating Units or refurbishing.

4.5.7. In designing the generation alternatives, the Bulk Supplier shall take into consideration any request by the System Operator for special technology or technical characteristics to ensure sufficient ancillary services and load following capability.

4.6. COORDINATION WITH TRANSMISSION PLANNING

4.6.1. The Bulk Supplier shall coordinate with the Transmission Services Provider and the System Operator the proposed new generation entry and new imports, to allow the Transmission Services Provider to take into consideration in planning the transmission, the impact on transmission performance and investments, and for the System Operator to inform any issues on system operation, ancillary services and security.

4.6.2. The Transmission Services Provider shall prepare a Transmission Master Plan to supply the load forecast, connect the new generation proposed in the Generation Master Plan and comply with the reliability criteria defined in the Planning Code of the Grid Code.

4.6.3. Except for specific renewable projects that resulting from Government renewable energy policies or generation that qualifies as Initial IPP Contracts, the specific location and connection for additional generation shall be decided in the Transmission Master Plan.



4.7. ERC APPROVAL OF MASTER PLAN

4.7.1. The Bulk Supplier shall submit the Generation Master Plan each year not later than (June 1st), for ERC approval, including the following:

- (a) Load forecast, which shall correspond to the Long Term Load Forecast Report approved by the ERC;
- (b) Assumptions, models and methodology used;
- (c) The explanation of any significant change to the previously submitted Generation Master Plan (the previous year plan).
- (d) Energy and capacity balance during the previous five years, including generation procurement and imports made by the Bulk Supplier and exports
- (e) Existing and proposed demand side management plans, if any, and assumed impact;
- (f) The energy and peak demand balance forecasted for the next (ten) years, taking into consideration expected imports and exports and estimated transmission losses, and identifying:
 - (i) The expected generation capacity availability and energy generated by existing power plants and additional generation under construction or within an awarded PPA,
 - (ii) The expected imports according to current agreements with interconnected parties;
 - (iii) Availability assumptions
 - (iv) Peaking capacity and load following capability; and
 - (v) Required additional capacity, if any, to balance peak demand and comply with generation expansion criteria.
- (g) The coordination process with the Transmission Services Provider and the System Operator and results of such coordination, in particular describing how the medium term shortages and reliability concerns submitted by the System Operator, if any, have been addressed in the proposed Plan;
- (h) Specific requirements in new generation units, as agreed with the System Operator, such as maximum size allowed for new Generating Units and black start capability, or required by the Transmission Services Provider such as power system stabilisers;
- (i) Sufficient information, supporting data and explanations, for the ERC to review and understand the constraints, methods and assumptions used to prepare the plan;
- (j) Any issues of concern or risks that should be taken into consideration.

4.7.2. To approve Generation Master Plan the ERC shall ensure that:

- (a) The long-term demand forecast used as the basis for new generation planning has been reviewed and approved by the ERC.
- (b) Data and assumptions are reasonable;
- (c) The plan complies with Government energy policy



- (d) Least cost integrated resource planning to supply the forecasted demand has been conducted according to reliability standards and generation expansion criteria established in this Code;
- (e) Adequate coordination with the System Operator has been exercised to ensure adequacy of generation technology and capabilities to provide the required ancillary services; and
- (f) It has been demonstrated that the proposed plan complies with generation expansion criteria, is least cost based within Government environmental and energy policies.
- (g) Any other issues or quires deemed to be necessary by ERC.

4.7.3. The Bulk Supplier shall demonstrate to the ERC satisfaction that it has performed the studies and coordination procedures to ensure least cost integrated resource planning within generation expansion criteria for the supply of the load forecasted for Bulk Supply Customers.

4.7.4. In reviewing the Generation Master Plan submitted by the Bulk Supplier, the ERC may ask for clarifications, additional information and changes as necessary to ensure compliance with licence conditions and the Bulk Supply Code. The Bulk Supplier shall send the required information or review the Generation Master Plan within the period specified by the ERC.

4.7.5. The ERC shall approve the Generation Maser Plan no later than (July 31st), provided that the Bulk Supplier has timely provided all clarifications and revisions indicated in 4.7.4.



5. SECTION: POWER PROCUREMENT SCHEDULE AND PERFORMANCE

5.1. SUBMISSION AND APPROVAL

5.1.1. Within (4) weeks after the approval of the Generation Master Plan, the Bulk Supplier shall submit for ERC approval a Power Procurement Schedule for procuring power for Bulk Supply Customers during the next (5) years.

5.1.2. The Power Procurement Schedule shall include:

- (a) The timetable showing the initiation of the procurement process for each additional capacity required by the Generation Master Plan;
- (b) The demonstration that the procurement timetable is consistent with the commissioning dates in the Generation Master Plan;
- (c) Any issue of concern or risks that should be taken into consideration
- (d) Any significant change to the previously submitted Procurement Power Schedule, such as any problem or delays in the procurement process or in new generation entry; and
- (e) Any request for exemption to competitive procurement for processes scheduled during the next (24) months.

5.1.3. The timetable in the Power Procurement Schedule shall indicate for each power procurement:

- (a) Whether it is:
 - (i) Additional generation, identifying the project as indicated in the Generation Master Plan;
 - (ii) Refurbishing of existing generation, identify the power plant;
 - (iii) Additional imports, identification of the country and interconnector
- (b) Except for non competitive procurement, the steps and timeframe for preparation and approval of Procurement Documents, proposals, evaluation and award of the new contract.

5.1.4. In reviewing the submitted Power Procurement Schedule, the ERC may require the Bulk Supplier clarifications, additional information and changes as necessary to ensure compliance with the approved Generation Master Plan.

5.1.5. The Bulk Supplier shall submit the required information or revised Power Procurement Schedule within the time period specified by the ERC.

5.1.6. After approval by the ERC, the Bulk Supplier shall use the approved Power Procurement Schedule to initiate the long-term power procurement for Bulk Supply Customers.



5.2. MONITORING THE POWER PROCUREMENT SCHEDULE

5.2.1. The ERC will monitor the Power Procurement Schedule, and use it to measure the Bulk Supplier performance.

5.2.2. Based on the approved power procurement schedule, the Bulk Supplier shall submit (quarterly) Procurement Progress Reports to the ERC indicating the progress in the scheduled tasks. Compliance with this schedule shall also be used by the ERC to identify the performance of Bulk Supplier, as established in the Bulk Supply Licence.

5.2.3. In its progress report, the Bulk Supplier shall indicate any concern or risk that may delay the Power Procurement Schedule, or any delays or problems to comply with the approved schedule. If the process is behind schedule or future delays are expected, the Bulk Supplier shall inform the ERC and propose remedial actions together with the proposed changes to the Power Procurement Schedule.

5.2.4. If the Bulk Supplier reasonably determines that a task in the Power Procurement Schedule has not been, or is unlikely to be, met in time, and that this delay could postpone the entry of new generation and may lead to shortages or risk of shortages, the Bulk Supplier shall as soon as practical notify the System Operator and the ERC. In such case, the Bulk Supplier and the System Operator shall prepare and submit a special report to the ERC, describing with sufficient details:

- (a) The cause or causes of the delay,
- (b) The remedial actions that were or will be taken to speed up the remaining tasks in the Power Procurement Schedule
- (c) An estimation of the postponement and new expected date where the new generation will be in commercial operation, and
- (d) An evaluation of possible shortages and proposed other means (such as imports or additional generation that could be procured fast) that can be used to compensate the potential shortfall.



6. SECTION: POWER PROCUREMENT

6.1. PRINCIPLES AND GENERAL CONSIDERATIONS

6.1.1. The decision on long-term power procurement for Bulk Supply Customers by the Bulk Supplier and new generation to enter the system shall be the result of the Generation Master Plan, updated annually and approved by the ERC, with the exceptions provided in the General Electricity Law

6.1.2. Power procurement by the Bulk Supplier shall be subject to competitive procurement, with the exceptions provided in the General Electricity Law.

6.2. NON COMPETITIVE PROCUREMENT

6.2.1. The Bulk Supplier may not be subject to competitive procurement in the following cases:

- (a) For small size generation, with a capacity to be procured equal to or less than (5)MW, as established in the General Electricity Law;
- (b) No competitive tender will be applicable for imports if only one country can sell in the interconnector, provided that the imports have the prior permission of the Council of Ministers.
- (c) Addition of Generating Unit(s) in an existing power station, when such addition has been selected in the Master Plan;
- (d) Refurbishing / upgrading of an existing Generating Unit, when decided and justified in the approved Master Plan
- (e) Short term procurement decided by the System Operator

6.2.2. Should the Bulk Supplier reasonably consider that a power procurement and not included in the cases listed above should be exempted from a competitive process due to time constraints or insufficient competition (e.g. insufficient number of qualified bidders), the Bulk Supplier shall request an exemption from the ERC with the corresponding justification. The Bulk Supplier shall explain the reasons that justify the request and the mechanism proposed to ensure that the power procurement shall have the best possible terms and reasonable and fair prices for Bulk Supply Customers. The request for an exemption shall include:

- (a) Description of the negotiation mechanisms and procedures to ensure the best possible conditions and prices
- (b) The PPA draft , and
- (c) Any other document required for the approved procurement mechanism.

6.2.3. When the ERC instructs or allows a procurement mechanism for Bulk Supply Customers that is not based on a competitive process, the Bulk Supplier shall not be exempted from procuring on economical bases and shall implement reasonable measures to protect that, even in the absence of competition; the Bulk Supplier shall obtain the best possible terms and prices.



6.2.4. The ERC will review the reasons for non competitive procurement process, taking into account the general objectives of maximizing when possible competition, protect consumers interest and ensure an efficient and transparent procurement. In particular, approval will be subject to the Bulk Supplier proving to the ERC satisfaction that the measures and the alternative procurement procedure proposed will ensure reasonable conditions and fair prices.

6.2.5. The ERC shall evaluate any request for non competitive procurement and may require further information or measures to ensure reasonable competitive prices and conditions before deciding whether to approve or reject the request.

6.3. SHORT TERM PROCUREMENT

6.3.1. The Short term procurement will not be governed by the competitive process procedures, but this procurement must comply with the following conditions and principles:

- (a) Economic and cost saving. Short term opportunity purchases (such as opportunity imports) can be used by the Bulk Supplier to reduce power procurement costs.
- (b) Adequacy of supply. Short-term purchases can be used for emergency support (in case of shortages or risks of shortages or inadequate reserve). In this case, the Bulk Supplier shall use its best endeavours to minimise the bulk supply cost.

6.3.2. The Bulk Supplier shall notify the ERC in advance the possibility and nature of potential short-term purchases.

6.4. PROCUREMENT OF ANCILLARY SERVICES

6.4.1. The System Operator has the responsibility of procuring ancillary services.

6.4.2. The Bulk Supplier may coordinate and agree with the System Operator to include the procurement of ancillary services in the power procurement contract..

6.4.3. Procurement of ancillary services will be included in the PPAs of the Bulk Supplier according to the following procedure:

- (a) The System Operator shall coordinate with the Bulk Supplier to ensure that the necessary ancillary services provisions and efficient ancillary services pricing systems are included in the corresponding PPA or contracts;
- (b) The Bulk Supplier shall pay to the bulk generator the cost of the ancillary services and recover these ancillary services costs from the System Operator.

6.5. COMPETITIVE PROCUREMENT

6.5.1. Prior to the Bulk Supplier initiating a competitive power procurement or solicitation of offers, the Bulk Supplier shall submit the proposed power procurement for ERC approval.



6.5.2. The ERC shall review the Procurement Documents, including the proposed draft PPA, to verify compliance with the legal and regulatory framework, and the principles and procedures on competitive power procurement.

6.5.3. To facilitate the procurement approval, the Bulk Supplier will develop, as possible, a standard PPA and standard Procurement Documents.

6.6. PROCUREMENT DOCUMENTS

6.6.1. All terms and conditions in the Procurement Documents, including PPA design and conditions, must comply with the Bulk Supply licence and relevant Codes approved by ERC.

6.6.2. The Bulk Supplier shall, as far as possible, draft and submit for approval by the ERC the following standard Procurement Documents for long-term power procurement:

- (a) Standard pre qualification documents,
- (b) Power procurement tender documents, and bidding qualifications criteria .
- (c) Standard Power Purchase Agreements (PPA) with a reasonable allocation of risks and efficiency obligations or incentives

6.6.3. Prior to initiating a solicitation or tender of power procurement, the Bulk Supplier shall submit to the ERC the relevant Procurement Documents, for review and approval.

6.6.4. The technical specifications to be included in the RFP shall have the approval of the System Operator and the Transmission Licensee. For this, and prior to sending the documents to ERC for approval, the Bulk Supplier shall send the technical specifications to the System Operator and the Transmission Licensee for its approval.

6.6.5. In the case of a competitive process, the Procurement Documents shall include the following:

- (a) Description of mechanisms to advertise and notify potential bidders sufficiently in advance, to attract the maximum number of qualified bidders and maximise competition
- (b) If a pre qualification is justified, a request for qualifications (RFQ) establishing the technical and financial requisites to select companies that are deemed qualified to bid. The RFQ documents submitted to the ERC shall include the list of potential investors to whom the RFQ will be sent or the mechanism to be used to advertise and make known the RFQ in advance to sufficient number of potentially interested parties.
- (c) The Request for Proposals (RFP) describing quantity, technical specifications, timetable, the evaluation procedure and all other information to prepare the bid and clarify how the winner shall be selected. The RFP documents submitted to the ERC shall include the list of short list selected bidders to whom the RFP will be sent or the mechanism to be used to



advertise and make known the RFP with sufficient advance and to a sufficient number of potentially interested parties.

- (d) The draft PPA, with quantity and pricing systems.
- (e) The clarification that the winner shall be granted by ERC with the corresponding generation license, as foreseen in the Licensing Procedures.

6.7. APPROVAL OF A POWER PROCUREMENT PROCESS

6.7.1. The Bulk Supplier shall not initiate the procurement process of a new Power Purchase Agreement (PPA) for Bulk Supply Customers unless included in the approved Power Procurement Schedule and until the ERC has reviewed and authorised the proposed Procurement Documents.

6.7.2. Whenever the Bulk Supplier wishes to initiate the procurement of a new PPA for Bulk Supply Customers, it must notify the ERC including the following information:

- (a) Identify the quantity in the approved Power Procurement Schedule. If the Bulk Supplier proposes any changes to the approved Plan, the notification should include the explanation and justification of the matters and conditions in which the required procurement departs from the approved Power Procurement Schedule.
- (b) Except when competitive procurement does not apply, the steps and timeframe (plan) for the procurement process.
- (c) The Procurement Documents as defined in this Code.

6.7.3. The proposed procurement shall comply with the Bulk Supply License and this Code, in particular with regards to conditions that maximise competition, ensure transparency, can be reasonably expected to identify the best bid and/or obtain reasonable prices, and not expose Bulk Customers to undue risks or unreasonable costs.

6.7.4. During the review of the Procurement Documents, the ERC may request the Bulk Supplier to provide additional information, explanations or make changes relevant to compliance with licence conditions and the this Code..

6.7.5. In view of the ERC comments and conditions for approval, the Bulk Supplier shall, as necessary, modify the Procurement Documents during the ERC review process. In particular, the ERC may request changes to maximise competition and promote fair prices.

6.7.6. The ERC may instruct the Bulk Supplier not to proceed with the proposed power procurement for Bulk Supply Customers until all additional information and clarifications are submitted or changes made to the Procurement Documents.

6.7.7. The ERC may grant conditional approval and instruct the Bulk Supplier to continue with the power procurement process conditioned to presenting the changes and additional information requested by the ERC within a deadline.



6.8. PROCUREMENT PROCESS

6.8.1. For the ERC to oversee compliance with the authorised Procurement Documents and power procurement for Bulk Supply Customers, as well as Bulk Supply licence conditions and the Bulk Supply Code, the Bulk Supplier shall prepare and submit to the ERC, on a quarterly basis, a report and documents with the development and results of the procurement process.

6.8.2. After the Bulk Supplier has initiated a procurement process for Bulk Supply Customers, the ERC may issue an order interrupting the process and ending the authorization within (10) days of issuing the report mentioned in item 6.8.1 only if the ERC has reason to believe that:

- (a) The Bulk Supplier is not following the approved procurement procedure; or
- (b) The procurement process and documents differs materially from the documents approved by the ERC; or
- (c) The procurement process was not conducted by the Bulk Supplier in accordance with any applicable law, licence conditions or approved Codes.

6.8.3. In the case of interrupting a procurement process, the ERC shall notify the Bulk Supplier that the procurement authorization has been suspended, explaining the reasons, and initiate an investigation. The Bulk Supplier shall have the right to present its case before the ERC to prove compliance with all applicable conditions, codes and Procurement Documents approved by the ERC. The Bulk Supplier shall not sign a PPA for the procurement process pending the outcome of the suspension.

6.8.4. If the ERC determines that the procurement process did not comply with the authorised Procurement Documents and conditions, the ERC may order the Bulk Supplier to take corrective actions, including temporarily suspending the procurement process, or to cancel the procurement authorization and declare the results of the competitive process or negotiation void. In the latter case, the ERC shall prescribe the actions to be taken to ensure enough generation capacity will be available to supply the Bulk Supply Customers. The Bulk Supplier shall notify the bidders.

6.8.5. The Bulk Supplier shall retain all Procurement Documents, proposals and negotiation documents, records of review and evaluation, any post bid negotiation and any other documents relevant to the procurement process for a period not less than (5 years).



7. SECTION: POWER PURCHASE AGREEMENTS

7.1. PRINCIPLES AND GENERAL CONSIDERATIONS

7.1.1. In all power procurements for Bulk Supply Customers, the PPAs shall comply with the following principles:

- (a) The PPA conditions are fully compatible with applicable codes and standards;
- (b) Conditions identifying the matter and procedures that involve the System Operator, as a separate activity from transmission and Bulk Supply, to provide for possible future separation of the System Operator from NEPCO as established in the General Electricity Law ;
- (c) Reasonable allocation of risks between the parties;
- (d) The PPA has fair and economic pricing systems, that promote efficiency and adequate availability of contracted capacity; and
- (e) Clarity in indexations to be used, if any.

7.2. ERC PRE-APPROVAL OF PPA

7.2.1. Prior to start final negotiations for signing a new PPA for Bulk Supply Customers, either in case of competitive or non-competitive procurement, the Bulk Supplier shall submit to the ERC an application for pre-approval of the new PPA. This application shall be sent to the ERC:

- (a) In case of competitive procurement: Immediately after the opening session of the financial offers and prior to start final negotiations with the selected company.
- (b) In case of non-competitive procurement: Immediately after the initial negotiations have taken place, and the basic characteristics of the PPA, and in particular its prices, have been determined.

7.2.2. The application for pre-approval's of PPA shall include the following:

- (a) PPA conditions identifying changes, if any, to the PPA approved by the ERC prior to the procurement process;
- (b) For competitive procurement: documents summarising the review and evaluation of the bids received, the result of the selection criteria, proposed winning party and the list of bids (ordered from least cost to highest cost);
- (c) For non competitive procurement, a summary of the negotiation conducted and their result (conditions agreed and prices);

7.2.3. Within a time-frame of (15) working days after receiving the application, the ERC will review the submitted application, request any additional clarification required, and it will issue a Pre-Approval Notice, a Warning Notice or a Non-Approval Notice depending on the results of the review. If no such notices have been issued in this time-frame a Pre-Approval Notice shall be deemed to be issued.



7.2.4. The matters to be reviewed by the ERC when issuing a Pre-Approval, Warning or Non-Approval Notices for the planned purchases of generation capacity and energy under a Power Purchase Agreement (PPA) will include the following:

- (a) The ERC will determine whether the timing, conditions, quantity and cost of the PPAs proposed by the Bulk Supplier are appropriate and reasonably based on the conditions and criteria established in the bulk supply licence and approved Generation Master Plan;
- (b) The results of the ERC monitoring of the power procurement process to ensure that it complies with all applicable laws, licence conditions and codes;
- (c) The efficiency and reasonability of the PPA design and conditions, in particular pricing systems and indexation;
- (d) The competitiveness of the costs of the PPA, including compliance with the competitive solicitation when applicable, to award the PPA to the best possible price, and
- (e) Assessment of PPA affordability in view of pass through of approved PPAs costs to Bulk Supply Tariffs.

7.2.5. A PPA will be considered as exceeding the tariff threshold if incorporating the proposed PPA in ERC tariff models:

- (a) The average retail tariffs increases more than (5%); or
- (b) The average Bulk Supply Tariffs for Principal Consumers increases more than (8%)

7.2.6. Pre-Approval Notice: The ERC will issue a Pre-Approval Notice authorising the Bulk Supplier to conclude the negotiations with the selected company if the procurement process was in compliance with the approved documents and mechanisms, and the PPA impact on tariffs does not exceed the threshold.

7.2.7. Warning Notice: The ERC will issue a Warning Notice if the procurement process was in compliance with the approved documents and mechanisms, but the PPA lead to an increase in tariffs greater than the threshold. The ERC will instruct the Bulk Supplier to intend conduct the negotiations to reduce the PPA cost or, alternatively, to come back with a lower cost alternative within a specified timeframe. The ERC may make recommendations on changes to PPA conditions or financial arrangements to reduce costs.

7.2.8. Non-Approval Notice: The ERC will issue a Non-Approval Notice if the procurement process was conducted not in compliance with the approved documents and mechanisms; or material changes have been introduced in the PPA without previous authorisation of the ERC. In this case the ERC will put the procurement on hold and will issue specific instructions to the Bulk Supplier regarding how to continue, or cancel, the procurement process. These instructions may include indications to the Bulk Supplier that if the deficiencies detected in the procurement process are not adequately corrected, and / or the procurement process continues in a different way than instructed, the PPA will not be, partially or totally, passed to the Bulk Supply Tariffs.



7.2.9. The ERC shall keep all report and documents confidential until the procurement process has been completed.

7.3. ERC APPROVAL OF PPA – PRE-APPROVAL NOTICE ISSUED

7.3.1. Once received a Pre-Approval Notice, the Bulk Supplier shall conduct the negotiations with the selected company and to conclude all the documentation related with the procurement process.

7.3.2. In order to assure approval of the final PPA, the Bulk Supplier may seek for ERC assistance and advice in cases where the negotiation yields to situations where material changes in the PPA need to be introduced, and in particular if these changes may affect prices.

7.3.3. Prior to the signing the PPA for Bulk Supply Customers at the end of the final negotiations of the procurement process, the Bulk Supplier shall submit to the ERC a final application for approval of the new PPA, including the following:

- (a) PPA conditions identifying changes, if any, to the PPA approved by the ERC prior to issuing the Pre-Approval Notice;
- (b) Documents summarising the negotiations conducted, the result of these negotiations and the final agreements reached.

7.3.4. Within a time-frame of (10) working days after receiving the application, the ERC will review the submitted documentation, request any additional clarification required, and it will issue a Final Authorisation in case the conditions and prices agreed in the PPA do not materially differ from those submitted in the application for Pre-Approval.

7.4. ERC APPROVAL OF PPA – WARNING NOTICE ISSUED

7.4.1. Within the timeframe specified by the ERC, the Bulk Supplier shall either:

- (a) Conduct a re-negotiation of the PPA with the bidder(s) or investor; or
- (b) Submit to the ERC a new application for PPA approval with lower cost procurement through:
 - (i) A lower cost alternative (e.g. imports); or
 - (ii) The Government establishes a funding mechanism from outside the power sector to reduce procurement costs and not impact tariffs above the established threshold.

7.4.2. Prior to the signing the PPA for Bulk Supply Customers at the end of the procurement process, the Bulk Supplier shall submit to the ERC a final application for approval of the new PPA, including the following:

- (a) Summary of the negotiations maintained with the aim to reduce the procurement cost
- (b) PPA conditions identifying changes, if any, to the PPA approved by the ERC prior to issuing the Pre-Approval Notice;



7.4.3. Should the Bulk Supplier proves to the ERC satisfaction and provides sufficient documentation that it has used its best endeavours to minimise procurement costs, but the PPA still exceeds the tariff threshold, the ERC will approve the new PPA including in the approval document the concern on impact on future tariffs.

7.5. INFORMATION

7.5.1. Upon approval of the PPA, the Bulk Supplier shall notify: all bidders and the ERC of the winning bidder not more than seven days after making any binding commitment to the winning bidder to procure power in accordance with that bid. This notification shall include among others the following:

- (a) The winning party;
- (b) In case of competitive procurement, all other bidders;
- (c) To the System Operator and the Transmission Services Provider, the new generation entry or import characteristics and expected operational date.

7.6. BULK SUPPLY TARIFF

7.6.1. Once a PPA has been approved by the ERC, the power procurement costs given in the PPA shall be included in Tariff Methodology for Bulk Supply Tariff.

7.6.2. Any modification of the conditions or prices in an approved PPA will result in a loss of its approval as recognised costs for bulk supply tariff calculation, unless such modification with its justification is submitted by the Bulk Supplier to the ERC for review. The ERC will verify that the proposed modification does not substantially change the PPA in matters related to allocation of risks and availability obligations, and that the proposed changes lead to better prices and efficiency. Subject to this review, the ERC will approve the modification and the costs of the modified PPA will be included in the calculation of Bulk Supply Tariffs.



8. SECTION: IMPORTS AND EXPORTS

8.1. GENERAL CONSIDERATIONS

8.1.1. The Bulk Supplier shall ensure that any long-term Import or Export does not impose significant risks and has no adverse impact on the Bulk Supplier financial capability and its capacity to procure power for Bulk Supply Customers.



9. SECTION: OPERATIONAL PLANNING AND MERIT ORDER

9.1. COORDINATION AND EXCHANGE OF INFORMATION

9.1.1. The Bulk Supplier shall establish adequate procedures and systems for the exchange of information with the System Operator, in accordance to the Grid Code and this Code, to ensure effective and timely coordination and the sharing of sufficient and accurate information to ensure the Merit Order and economic Central Dispatch of contracted generation and the least cost scheduling of procured ancillary services.

9.1.2. To achieve the objectives set in the previous paragraph, the Bulk Supplier shall periodically prepare and send to the System Operator the information required for the Merit Order, the Central Dispatch and scheduling of ancillary services in such manner and format as the System Operator may establish from time to time.

9.1.3. The System Operator shall send to the Bulk Supplier the information, including data and reports, established in the Grid Code and, when necessary, shall provide additional data or clarification required by the Bulk Supplier to fulfil its Bulk Supply obligations.

9.1.4. On a weekly basis, the System Operator will prepare and send to the Bulk Supplier the week ahead information on:

- (a) Load forecasts for each day of the next week including maximum morning and evening peak demand and minimum demand and consumption for each Bulk Supply customer
- (b) Expected transmission constraints; and
- (c) Planned maintenance outages.
- (d) Availability of central dispatch generation unit (CDGU).

9.2. MERIT ORDER

9.2.1. The Bulk Supplier is responsible for the preparation of the merit order of available contracted resources for the System Operator to economically dispatch contracted generation and interconnector trading. This merit order shall be prepared by the Bulk Supplier at least on a week a head basis.

9.2.2. The System Operator and the Bulk Supplier will agree the level of detail for this data exchange, to ensure both use the same relevant information.

9.2.3. The Bulk Supplier must prepare the merit order information to determine the order to dispatch available resources minimising total variable costs, taking into consideration the following:

- (a) Requirements by the Government of Jordan to prioritise use of certain fuels. In such case, the Bulk Supplier shall inform the System Operator of the fuel priorities.



- (b) The energy price as defined in the contract or in the international trading arrangement;
- (c) If fuel is procured by the Bulk Supplier, the heat rate and fuel costs to calculate fuel costs

9.2.4. Weekly, the Bulk Supplier will prepare and provide the System Operator the Merit Order including the following information:

- (a) Availability of contracted generation;
- (b) Variable costs (energy prices, fuel costs), ordered by increasing prices, for the System Operator economic dispatch of contracted generation, subject to security and operation constraints,
- (c) Proposed imports and associated prices, as agreed with interconnected parties;
- (d) Start up costs of contracted generation, for the System Operator to determine unit commitment;
- (e) Price of ancillary services in each contracted generation, when such prices are established in the PPA, for the System Operator to minimise ancillary services costs within the economic dispatch.;
- (f) Power export - import availability.

9.2.5. Additionally, the Bulk Supplier will prepare and notify the System Operator the weekly Energy Balance Statement showing the following:

- (a) Expected week ahead generation, used to estimate fuel use and natural gas procurement;
- (b) Special cases where constraints define minimum or maximum generation that should be scheduled in each plant, with the corresponding justification (e.g. fuel constraint).

9.2.6. If the Bulk Supplier provide incorrect information to the System Operator that leads to higher dispatch costs, such greater costs will not be recognised in the Bulk Supply Tariff.

9.2.7. The ERC shall have the right to periodically audit the merit order and Energy Balance Statement information sent by the Bulk Supplier to the System Operator. The periodical audit will be on annual basis, or upon special circumstances where the ERC reasonably considers that the Bulk Supplier may not be complying with its merit order obligations, or when a special audit to the System Operator identifies the need to also perform a special audit on the information submitted by the Bulk Supplier on merit order and constraints.

9.2.8. The ERC shall have the right to periodically audit the economic security constrained dispatch of the System Operator. The dispatch audits of the System Operator will be on annual basis, except on the following conditions:

- (a) The Bulk Supplier requests the ERC a special audit on the System Operator to verify compliance with licence conditions and Grid Code rules and procedures on the economic dispatch;



- (b) The ERC on its own initiative decides a special audit is needed, in view of actual costs of power procurement and dispatch of available resources;
- (c) The ERC decides that the annual audit is not needed, in view of costs of power procurement and that there has been no request for a special audit.



10. SECTION: SALES TO BULK SUPPLY CUSTOMERS

10.1. BULK SUPPLIER OBLIGATIONS

10.1.1. The Bulk Supplier shall sell to the Bulk Supply Customers the power procured at regulated Bulk Supply Tariffs, calculated and approved by the ERC according to the Tariff Methodology for Bulk Supply Tariffs.

10.2. INVOICES

10.2.1. Not later than the (5th) day of each month, the Bulk Supplier shall prepare and send to each Bulk Supply Customer a Bulk Supply invoice of the sales for the previous month describing the quantities (energy and generation capacity) sold, Demand Charge, Energy Charge, and total amount due. The invoice shall indicate among others the following:

- (a) The date within which payment is due, which shall not be earlier than (15) working days after receipt of the invoice.
- (b) The bank account to which the payment must be done.
- (c) The consequences of late payment or non-payment. Such consequences must comply with the conditions established in the Bulk Supply Code.

10.2.2. The energy sold during the previous month to each Bulk Supply Customer will correspond to the energy metered in the transmission connection points, in accordance to the Grid Code, the Metering Code and the site specific Connection Agreement. The supporting data will be sent and made available to both parties by the System Operator in the administration of the metering system. The price to be applied will correspond to the corresponding Energy Charge of the Bulk Supply Tariff approved by the ERC.

10.2.3. The generation capacity sold to each Bulk Supply Customer will correspond to the applicable maximum demand. The price to be applied will correspond to the corresponding Demand Charge of the Tariff Methodology for Bulk Supply Tariff approved by the ERC.

10.2.4. All amounts and payments in the invoice shall be in Jordanian Dinars (JD).

10.2.5. If the Bulk Supply Customer disputes the amount or quantities in the invoice, the affected Customer shall notify the Bulk Supplier. If within the payment date an agreement has not been reached by the parties, the Bulk Supply Customer:

- (a) Shall pay any undisputed amount within the payment date and provide reasons for disputing the payment of the remaining amount;
- (b) When the disputed amount is settled, pay the settled amount within (30) days of the dispute resolution agreement. In such case, the due amount shall be affected by a reference interest rate approved by the ERC from the due date of payment for the Invoice, up to, but excluding, the date of actual payment.



10.3. PAYMENT BY BULK SUPPLY CUSTOMERS

10.3.1. If at the date due, the Bulk Supply Customer has not paid the full amount due or, if it has paid only part of the amount, no dispute reason has been provided for the amount not paid, the Bulk Supplier must notify the Bulk Supply Customers and repeat the request for payment due, informing the interests that will apply and that continued non payment may lead to disconnection.

10.3.2. The Bulk Supplier has the right to charge as interest for late payment, at a reference interest rate approved by the ERC on the amount due from the due date for payment indicated in the invoice up to, but excluding, the date of actual payment.

10.3.3. If the Bulk Supply Customer does not pay within (30) days of receiving the invoice and the Bulk Supply has sent the notes reiterating that the amount is due, the Bulk Supplier has the right to notify the ERC and request remedial actions, including disconnections of the Bulk Supply Customer.

10.4. DISPUTE RESOLUTION

10.4.1. Any disputes on metering or invoices shall be managed first through the dispute resolution mechanism established in the Metering Code. In case the parties do not reach an agreement using such mechanism, the dispute shall be submitted to the ERC dispute resolution mechanism, provided that in case the both party are a licensed electricity company both Parties shall agree on such a reference, pursuant to the provisions of the General Electricity Law.

10.4.2. If the Bulk Supply Customer considers that Bulk Supplier is not providing non-discriminatory services, or is giving unfair preferences to another Bulk Supply Customer outside the Bulk Supply conditions established in the licence, the Bulk Supply Customer may present its complaints to the ERC for investigation.