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Kazakhstan: Power Sector Reform

Terms Used in the Documents of the
Power POOl of Kazakhstan

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Glossary

Administrative Price Cap	A price cap used to determine regional spot prices during a period of supply scarcity
aggregate annual revenue	The calculated total annual revenue to be earned by requirement an entity for a defined class of service
agreed capability	the capability to receive or send out power at a connection point determined in accordance with the relevant connection agreement
ancillary service dispatch price	The dispatch price of ancillary services as determined in accordance with Article 10 7
ancillary service price	The price of ancillary services as determined in accordance with Article 10 7 4
ancillary services	The services outlined in Article 11 1
ancillary services agreement	An agreement under which a Member or other Network Service Provider provides ancillary services
annual revenue requirement	An amount representing the revenue requirement of a Network Services Provider calculated in accordance with the POOL Network Pricing Provisions
augment, augmentation	Works to enlarge a network or to increase the capability of a network to transmit or distribute energy
Average Weighted Price	The average of all bids for generation and dispatchable load, weighted by the energy produced or not produced at the capacity bid when these bids have been dispatched
bid minimum	The minimum MW specified in a generating unit's dispatch bid
billing period	The time period that a network service bill incorporates
black start capability	The ability to start and synchronize a Generator without using

	the system supply
black system	The absence of voltage on all or a significant part of the transmission system or within a region following a major supply disruption, affecting one or more power stations and a significant number of Customers
black start-up facilities	The generation facilities described in the POOL System Reliability Provisions
budget period	A financial year
budgeted market revenue	An estimate authorized by the relevant State regulatory commission of the revenue requirement required to meet the expenses incurred by POOL in a financial year in accordance with Article 15 6
busbar	A common connection point, containing no points capable of interruption, for the actual joining of individual electrical circuits
business day	A day other than a Saturday, Sunday or a day which is lawfully observed as a national public holiday
Buyer	For any given trading interval, a Member who purchases electricity from the market in that trading interval
capacitor bank	Electrical equipment used to generate reactive power and therefore support voltage levels on distribution and transmission lines
cascading outage	The occurrence of an uncontrollable succession of outages, each of which is initiated by conditions (such as instability or overloading) arising or made worse as a result of the event preceding it
central dispatch	The process managed by POOL for the optimal dispatch of Member generating units or Member loads in accordance with Article 9
Code	The National Electricity Code of Kazakstan, under which the

	POOL operates
Code User	An entity who is required to observe the provisions of the Code, including POOL, Network Service Providers, System Operators, Network Operators, Generators and other Members
commitment	The commencement of the Process of running up and electrically connecting a generating unit to the network
common service	A service that ensures the integrity of the network and benefits all Network Users and cannot reasonably be allocated on a locational basis
confidential information	For a Code User, confidential information which is or has been provided to that Code User under or in connection with this Code or information which is derived from any such information
connect, connected	Form a physical link between two Code Users at a connection point
connection	The formation of a physical link between two Code Users at a connection point
connection agreement	An agreement between a Network Service Provider and a Code User by which the Code User is connected to the network and/or receives network services
connection point	The agreed point of supply established between Network Service Providers and another Code User and notified to POOL
connection service	An entry service or an exit service
constrained allocation	The process of determining an allocation of generator electricity outputs to service customer electricity demands The allocation is constrained by the requirement that the allocated generator outputs exactly matches actual generation outputs
constrained generating unit	Generating unit for which the amount of electricity it is capable of supplying on a trading day is less than if it

	were dispatched to its full nominated availability for the whole trading day
constrained off	For a generating unit, due to a network constraint the output of that generating unit is limited below the level to which it would otherwise have been dispatched by POOL on the basis of its dispatch bid
constraint, constrained	A limitation on the capability of the network or a generating unit preventing it from either transferring or generating the level of electrical power which would otherwise be available if the limitation was removed
contingency capacity reserve	Actual active and reactive energy capacity, interruptible load arrangements and other arrangements organized to be available to be utilized on the actual occurrence of one or more contingency events to allow the restoration and maintenance of transmission system security
contingency capacity reserve	The level of contingency capacity reserves standards determined by POOL as being necessary for the purposes of maintaining power system security
contingency event	An event described in the POOL System Reliability Procedures
control system	Means of monitoring and controlling the operation of the network or equipment including dispatchable generating units connected to the network
cost reflective network pricing	A cost allocation method which reflects the value of network assets used by connected Members
coupling point	The point at which a Network User's connection service and use of system service joins on a network It is used to identify the use of system price applicable to a Network User
credible contingency event	An event described in the POOL System Reliability Procedures
critical single credible contingency	An event described in the POOL System Reliability event Procedures

critical single credible contingency	The contingency capacity reserves available for the capacity reserves purpose described in the POOL System Reliability Procedures
critical single credible contingency	The requirements described in the POOL Reliability capacity reserve requirements Procedures
Customer	Includes a Distribution Customer and a Transmission Customer
data collection system	All equipment and arrangements that lie between the metering database and the point where the metering data enters the public tele-communications network
day	Unless otherwise specified, the 24 hour period beginning and ending at midnight Almaty time
de-synchronizing,	The act of disconnection of a generating unit from de-synchronization the connection point with the transmission system, normally under controlled circumstances
decommission	For a generating unit, ceasing to generate and disconnecting from the network
demand based price	A price expressed in Tenge per MW per time period
directed price trading interval	A trading interval for which POOL has issued a direction under Article 8
Disclosee	An entity to whom a Code User discloses confidential information
disconnection, disconnect	The operation of switching equipment so as to prevent the flow of electricity at a connection point
dispatch	The act of initiating all or part of the response bid by a generating unit or a load in accordance with Article 9
dispatch algorithm	The algorithm used to determine dispatch in accordance with Article 9 6

dispatch bid	A bid submitted by a Member for dispatch of a generating unit or a load in accordance with Articles 9 3 and 9 4
dispatch instruction	An instruction given to a Member under the POOL System Reliability Provisions for dispatch by a dispatchable generating unit or dispatchable load
dispatch interval	The period between re-evaluation of the dispatch algorithm
dispatch optimization software	The computer program used by POOL for computing the dispatch algorithm
Dispatchable	For a generating unit or load, which has been bid into the market and is capable of participating in central dispatch in accordance with the Market Rules
dispatched generating unit	A generating unit which received instructions from the System Operator in accordance with a dispatch schedule
dispatched Generator	A Generator who has received a dispatch instruction from POOL
dispatch price	The price determined for each regional reference node and connection point by the dispatch algorithm each time it is run by POOL
Dispute Resolution Panel	The dispute resolution panel established by the POOL Dispute Resolution Provisions
Distribution	Activity pertaining to a distribution network
Distribution Customer	A Customer, Eligible Customer, Franchise Customer or Distribution Network Service Provider having a connection point with a distribution network It can also include Member Suppliers acting on behalf of their Customers
distribution line	A power line that is part of a distribution network
distribution loss correction	A loss correction determined according to Article 7 3 2
distribution losses	Electrical energy losses incurred in distributing electricity between the network connection point and the customer and

	represented by a volume weighted average of the losses incurred
distribution network	Those assets between the connection point to a transmission network and connection points to Customers that do not fall within the definition of transmission network
Distribution Network Operator	An entity who performs the following functions for the distribution network (a) management of the operation of the whole or a portion of the physical distribution network, (b) directing operations on the distribution network during system emergencies
Distribution Network Owner	The owner of a distribution network
distribution network service	The network service used by Network Users connected to distribution networks that operate at nominal voltages of 110 KV and below
Distribution Network Service	An entity that provides services to a distribution Provider network
Distribution Network User	Includes Distribution Customers and Embedded Generators
distribution use of system	A service provided to an Embedded Generator or Distribution Customers for use of the distribution network
dynamic performance	The response and behavior of networks and connected facilities when they are not operating in steady state
electrical energy loss	Energy loss incurred in the production, transportation and/or use of electricity
electronic communication system	Includes the electronic communication and the electronic data transfer system provided to Code Users by POOL
electronic data transfer	The transfer of data by electronic means from one location to another

Eligible Customer	A customer who meets the regulatory requirements to permit it to purchase electricity from a Member other than the local Supply Company
embedded generating unit	A generating unit connected within a distribution network which does not have direct access to the transmission network
Embedded Generator	A Generator connected to a distribution network An Embedded Generator may be a Member Generator
energize/energization	The act of operation of switching equipment or the start-up of a generating unit, which results in electrical voltage being supplied beyond a connection point or part of the transmission or distribution network
energy	Active energy and/or reactive energy
energy based price	A price expressed in Tenge per MW hour of energy
energy data	The data that results from the measurement of the flow of electricity in a power conductor The measurement is carried out at a metering point
energy cost	The annual revenue requirement associated with the provision of entry service
energy price	The price paid by a Transmission Customer or Distribution Customer to a Transmission Network Service Provider or a Distribution Network Service Provider respectively for connection service
energy service	A service provided to serve a Member Generator or group of Member Generators at a single connection point
equivalent energy	The amount of energy determined by cost reflective network pricing to have been transported by a regional transmission network to all Transmission Customers, including Transmission Customers connected to networks in other interconnected regions, as stated in the POOL Network Pricing Provisions

equivalent energy delivery	The delivery of equivalent energy determined in accordance with the POOL Network Pricing Provisions
excess generation	Aggregate minimum load of committed generation which is in excess of the quantity needed to meet the expected system demand and reserve requirements
excess generation period	A period of excess generation declared by POOL in accordance with Article 9 13
excess generation price	A price determined in accordance with Article 10 6
excluded services	Transmission network services the costs of and revenue for which are excluded from the revenue cap which applies to prescribed services
exit cost	The annual revenue requirement associated with the provision of exit services
exit price	The price paid by a Transmission Customer or Distribution Customer to a Transmission Network Service Provider or a Distribution Network Service Provider respectively for connection service
exit service	A service provided to serve a Transmission or Distribution Customer or group of Transmission or Distribution Customers at a single connection point
extension	An augmentation that requires the connection of a power line or facility outside the present boundaries of the network owned by a Network Service Provider
facility	A generic term associated with the apparatus, equipment, buildings and necessary associated supporting resources provided at, (a) a power station or generating unit, including black start-up facilities, (b) a substation or power station switchyard, © control center (regional control center, POOL coordinating

	center or transmission or distribution control center)
fast response capacity reserves	That part of the contingency capacity reserve described in the POOL System Reliability Provisions
financial year	A period commencing 1 January in one calendar year and terminating on 31 December in the same calendar year
firm access	The level of service at a connecting point guaranteed by the Network Service Provider between the connection point and the regional reference node
firm access contract	A contract between a Network Service Provider and a Code User for the provision of firm access
force majeure	An event as defined in accordance with Article 14 4
forecast demand	A forecast to be provided, as described in the System Reliability Provisions
Franchise Customer	A Customer who is not an Eligible Customer
frequency	For alternating current electricity, the number of cycles occurring in each second The term Hertz (Hz) corresponds to cycles per second
frequency operating standards	The standards set out in the POOL System Reliability Provisions
frequency response mode	The mode of operation of a generating unit which allows automatic changes to the generated power when the frequency of the transmission network changes
generated	For a generating unit, the amount of electricity produced by the unit as measured at its terminals
generating plant	Includes all equipment involved in generating electrical energy at a connecting point
generating unit	The actual generator of electricity and all the related equipment essential to the functioning of the electricity generator's operation as a single entity

generation	The production of electrical power by converting another form of energy in a generating unit
generation center	A geographically concentrated area containing a generating unit or generating units with significant combined generating capability
Generator	An entity who owns and/or operates an electricity generating unit that can be connected to a network
good electricity industry practice	The exercise of that degree of skill, diligence, prudence and foresight that reasonably would be expected from a significant proportion of operators of facilities forming part of the system for the generation, transmission or supply of electricity under conditions comparable to those applicable to the relevant facility consistent with applicable laws, regulations, licenses, codes, reliability, safety and environmental protection
high voltage (HV)	A voltage greater than 110 KV
inter-regional loss correction	A loss correction determined according to Article 7 1 2
inter-regional losses	Electrical energy losses that would occur with an incremental increase in electricity transmitted for the reference node in one region to the reference node in an adjacent region
inter-regional network	A constraint on the network between regions as constraint specified in Article 7 4
interconnection, interconnector	An electrical link between two regions that may have different market reference prices
interconnector capability	The capability of MW of the network connecting two regions to transfer electricity between those regions
interconnector flow	The quantity of electricity in MW being transferred by an interconnector
interconnector owner	The Member registered with POOL the owner of interconnector assets
intermittent	Generation produced by generating units which is not

	continuous and which has no material storage capability
inter-regional	Between regions
interruptible	A load which is able to be disconnected, either manually or automatically initiated, which is provided for the restoration or control of the transmission frequency by POOL to be available for contingency events or shortages of supply
intra-regional	Within a region
intra-regional loss correction	A loss correction determined according to Article 7 2
intra-regional losses	Electrical energy losses that would occur with an incremental increase in electricity transmitted from the reference node in a region to connection points in the same region
intra-regional network constraint	A constraint on the part of the network within a region as specified in Article 7 5
lack of reserve	Any of the conditions described in the POOL System Reliability Provisions
load	The amount of electrical power delivered at a defined instant to a Member or to another network at a connection point , or aggregated over a defined set of connection points
load center	A geographically concentrated area containing load or loads with a significant combined consumption capability
load class	A grouping of customers with like load characteristics
load shedding	Reducing or disconnecting load form the system
load level	The level of output or consumption (in MW) of a generating unit or load
local area	The geographical area allocated to a Network Service Provider
local black system procedures	The procedures described in the POOL System Reliability Provisions as approved by POOLCO

Local Network Service Provider	The Network Service Provider who owns the network assets at the connection point or proposed connection point
local spot price	A price determined according to Article 10 2
long term capacity reserve	The amount of surplus generating capacity indicated as being available for a particular period, being more than 7 days in the future but not more than 24 months, assessed as being in excess of the capacity requirement to meet the forecast load, taking into account the known or historical levels of demand management
long term capacity reserve	The level of long term capacity reserve determined by standard POOL in accordance with the POOL System Reliability Provisions to be required for a particular period
Long Term System Reliability Plan	The 24 month period commencing from the current trading day in accordance with Article 8 2
loss factor	A correction used to describe the additional electrical energy loss for each increment of electricity used or transmitted
low reserve	The conditions described in the POOL System Reliability Provisions
marginal value of supply	A value determined according to Article 10 2
market	Any of the markets conducted or facilitated by POOL
market fees	Includes the fees, charges and costs described in Article 15 6
market fee rate	A rate determined by POOL in accordance with Article 15 7 for the purposes of setting market fees
Market Rules	The Market Rules of the Pool
market suspension	Suspension of the market by POOL in accordance with Article 14 4
material force majeure event	An event defined in accordance with Article 14 4
maximum average charge	A charge determined in accordance with the POOL Network

	Pricing Provisions
maximum allowed revenue	A revenue amount determined in accordance with the POOL Network Pricing Provisions
maximum demand	The highest amount of electrical power delivered, or forecast to be delivered, over a defined period either at a connection point, or simultaneously at a defined set of connection points
maximum power input	The largest single supply input to a particular location or region, typically the output of the largest single Generator or the maximum power transfer of a single transmission line or interconnection
Medium Term System Reliability	The period from the 8th day after the current trading Plan day to 24 months after the current trading day in accordance with Article 8 2
medium term capacity reserve	The amount of surplus generating capacity indicated as being available for a particular period, being more than 7 days in the future but not more than 12 weeks , assessed as being in excess of the capacity requirement to meet the forecast load
medium term capacity reserve	The level of medium term capacity reserve standard determined by POOL in accordance with the POOL System Reliability Provisions to be required for a particular period
Member	A member of the Pool
Member compensation fund	The fund established and maintained by POOL under Article 16
Member Customer	A Member who buys and does not supply (on-sell) electricity
Member Generator	A Generator who is a Member
Member Supplier	A Member who buys electricity through the market and sells electricity to Customers

meter	A device complying with the standards of the Code which records the production or consumption of electrical energy
metering	Recording the production or consumption of electrical energy
metering database	A database of metering data which may be supplied to POOL under contract
metering point	The point of physical connection of the device measuring the current in the power conductor
monitoring equipment	The testing instruments and devices used to record the performance of plants for comparison with the expected performance
nameplate rating	The maximum continuous output or consumption on MW of an item of equipment as specified by the manufacturer
national grid	The sum of all connected transmission networks and distribution networks used for trading in the market
network capability	The capability of the network or part of the network to transfer electricity from one location to another
network coupling point	The point at which a Customer's connection service joins the use of system service, used to identify the network service price payable by the Customer
network loss	Energy loss incurred in the transfer of electricity over the network
Network Operator	An operator of a transmission network or a distribution network
Network Owner	The owner of a transmission network or a distribution network
network service	Transmission network service and distribution network service
Network Service Provider	An entity who provides the services of a network
Network User	Includes Generators, Transmissions Customers and

	Distribution Customers
non-regulated service	A service provided by a Network Owner which is not regulated by a State regulatory body
normal operating band	The range of the frequency of the transmission system which is specified in the POOL System Reliability Provisions
normal operating excursion band	The range of the frequency of the transmission system which is specified in the POOL System Reliability Provisions
normal operating state	For the transmission system, has the meaning given in the POOL System Reliability Provisions
off-loading	The reduction in electricity output or consumption
on-line dispatch process	The process for dispatch which sets the spot price for electricity for each ___ minute period and for the trading interval in accordance with Article 9 17
operational tolerance band	The range of frequency of the transmission system which is given in the POOL System Reliability Provisions
optimal dispatch	A centrally performed process to dispatch bids for generating units and loads to minimize the spot price
outage	Any full or partial unavailability of equipment or facility
payment period	The period of 7 days commencing at the start of the trading interval ending midnight on Sunday
peak load	Maximum load
physical plant capability	The maximum MW output or consumption of which an item of electrical equipment is capable of achieving for a given period
plant	All equipment involved in generating, utilizing or transmitting electrical energy at a connection point
power factor	The ratio of the active power to the apparent power at a metering point

power station	A facility in which any of a Generator's dispatched generating units is located
power system	The electricity power system including associated generation and transmission networks for the bulk supply of electricity, operated as an integrated arrangement
power system frequency	The frequency of oscillation of alternating current on the power system
power transfer	The instantaneous rate at which active energy is transformed between connection points
power transfer capability	The maximum permitted power transfer through a network or part thereof
pre-dispatch	Dispatch performed one day before the trading day on which dispatch is scheduled to occur
pre-dispatch schedule	A schedule prepared in accordance with Article 9 16
price band	A MW quantity specified in a dispatch bid as being available for dispatch at a specified price
price cap under market	A price cap to apply to a regional reference price, suspension with the levels of the price cap and the circumstances under which it can be invoked by POOL specified in Article 14
price cap period under market	A period declared by POOL, in accordance with suspension Article 14 3, in which a price cap may be invoked
pricing zone	A geographic area within which Network Users are charged a specific set of distribution network service prices
profile	The quantification in MW of the variation of the output from a generating unit, electricity consumption by a load or system demand over a given period
protection system	A system, which includes equipment, used to protect a Code User's facilities from damage due to an electrical or mechanical fault

ramp rate	The rate of change of electricity produced from a generating unit
reactive energy	The component of electrical energy that supports the creation of alternating current networks
reactive plant	Plant which is normally specifically provided to be capable of providing or absorbing reactive power and includes the plant identified in the POOL System Reliability Provisions as well as shunt capacitors and shunt reactors
reactive power	A necessary component of alternating current electricity which is separate from active power and is predominately consumed in the creation of magnetic fields in motors and transformers produced by plant such as (a)alternating current generators, (b)capacitors, including the capacitor-effect of parallel transmission wires, (c)synchronous condensers
reactive power capability	The maximum rate at which reactive energy may be transferred from a generating unit to a connection point as specified in a connection agreement
reactive power reserve	Unutilized sources of reactive power arranged to be available to provide for the unavailability of a source of reactive power
reactive power support	The provision of reactive power
reactor	A device, similar to a transformer, specifically arranged to be connected into the transmissions system during periods of low load demand or low reactive power demand to counteract the natural capacitor-effects of long transmission lines in generating excess reactive power to correct any transmission voltage effects during these periods
Ready standby capacity reserves	That part of the contingency capacity reserve described in the POOL System Reliability Provisions

reference node	A location on the network to be determined for each region by POOL in accordance with Article 6 3
region, regional	Area served by a particular part of the transmission network containing one or more major load centers or generation centers or both which is characterized by the existence of potentially constrained interconnection with other areas
Regional reference price	Spot price at the regional reference node
regulating capability	The capability to perform regulating duty
Regulating capability constraints	Constraints on the formulation of a realizable dispatch or pre-dispatch schedule due to the need to provide for regulating capability
regulating duty	A generating unit allocated the duty to have its generated output adjusted frequently so that any transmission system frequency variations can be corrected
Regulator	The relevant State regulatory commission
reliability	The probability of a device performing its function adequately for the period of time intended, under the operating conditions encountered
reliable	The expression of a recognized degree of confidence in the certainty of an event or action occurring when expected
reserve	The active power and reactive power available to the system at a nominated time but not currently utilized
reserve contract	A contract between a Member and POOL to provide reserve
revenue meter	The meter that is used for obtaining the primary source of metering data
revenue metering data	The metering data obtained from a revenue metering installation
revenue metering installation	A metering installation used as the primary source of

	metering data for the settlements process
revenue metering point	The metering point at which the revenue metering installation is connected
round	A cycle comprising the submission of bids in the market and the matching of those bids
scheduling error	Is deemed to have occurred if the Dispute Resolution Panel determines in accordance with the Code that POOL has failed to follow the dispatch process in accordance with the Market Rules
secondary equipment	Those assets of a Member's facility which do not carry the energy being traded, but are required for control, protection or operation of assets which carry such energy
sent out	The amount of electricity supplied by a generating unit to the network at its connection point
settlement	The activity of producing bills and credit notes for Members
settlement residue	The surplus of fund retained by POOL upon completion of settlements to all Members for a trading interval
settlements account	The bill or credit note prepared by the Settlements Manager for a Member as a result of interaction with the market
shared network service	Those parts of transmission and distribution networks whose use is shared by more than one Code Use (Network Service Provider, Member Customer or Member Generator)
short term capacity reserve	The amount of surplus or unused generating capacity indicated as being available for any half hour period at present or any time until the end of the next 7 days, assessed as being in excess of the capacity requirement to meet the current forecast load demand
short term capacity reserve	The level of short term capacity reserve determined standard by POOL in accordance with the POOL System Reliability Provisions as being required

Short Term System Reliability Plan	The period from 2 days after the current trading day to 8 days after the current trading day for each half hour in that period
Short Term System Reliability Plan	To be prepared by POOL in accordance with Article inputs 8 3
shunt capacitor	A type of plant connected to a network to generate reactive power
shunt reactor	A type of plant connected to a network to absorb reactive power
single contingency	A sequence of events which result in the removal from service of one Member, transmission or distribution line or transformer The sequence of events may include the application and clearance of a fault of defined severity
slow start generating unit	A generating unit which is unable to synchronize and increase generation or load within ___ minutes of receiving an instruction from POOL
slow start reserve generating unit	A slow start generating unit providing reserve
spot market	The spot market established by POOL in accordance with Article 5 1
spot price	The price for electricity in a trading interval as determined in accordance with Article 10 2
spot price forecast	A forecast of spot price
statement of opportunity	A statement prepared by POOL to provide information to assist Members in making an assessment of the future need for electricity generating or demand management capacity or network augmentation
static VAR compensator	Devices specifically provided on the transmission network to provide the ability to generate and absorb reactive power and to automatically respond rapidly to voltage fluctuations or voltage instability arising from a disturbance or disruption on the transmission network

sub-region	A notional sub-division of a region established by POOL to comprise Member Generators which are subject to an intra-regional constraint
substation	A facility at which two or more lines are switched for operational purposes, may include one or more transformers so that some connected lines operate at different nominal voltages than others
supply	The delivery of electricity
switchyard	The connection point of a generating unit into the transmission network
synchronize	The act of synchronizing a generation unit to the power system
synchronizing, synchronization	To electrically connect a generating unit to the system
synchronous condensors	Plant, similar in construction to a generating unit of the synchronous generator category, which operates at the equivalent speed of the frequency of the transmission system specifically provided to generate or absorb reactive power through the adjustment of rotor current
synchronous generator	The alternating current generators of most thermal and hydro driven power turbines which operate at the equivalent speed of the frequency of the transmission system on its normal operating state
synchronous generator voltage	The automatic voltage control system of a control generating unit of the synchronous generator category which changes the output voltage of the generating unit through the adjustment of the generator rotor current and effectively changes the reactive power output from that generating unit
system	The national network for the generation, transmission, distribution and supply of electricity, operated as an integrated power system
system demand	The total MW load supplied by the power system
system frequency	The number of complete cycles that a current or voltage goes

	through in one second On the national grid, the nominal system frequency is 50 cycles per second
system operating procedures	The procedures to be followed by Code Users in carrying our and operating maintenance activities on or in relation to primary and secondary equipment connected to or forming part of the transmission network or connection points
System Operator	An entity whom POOL has appointed as its agent toperform some or all of the following functions (a) management of the operation of the whole or a portion of the physical transmission network, (b)dispatch of generation and demand bids from the transmission network, on the basis of information provided by POOL, (c)directing operations on the transmission network during system emergencies, (d)carry out any other nominated tasks of behalf of POOL
system reserve constraint	A constraint in the optimal dispatch due to the need to provide or maintain a specified type and level of reserve,
system security	The safe scheduling, operation and control of the system on a continuous basis in accordance with the specified technical, security and operational standards prescribed by the Code
time	Time in Almaty
timetable	The timetable published by POOL under Article 5 3 for the provision of market information
trading day	The 24 hour period commencing at ___ hours and finishing at ___ hours on the following day
trading interval	A 30 minute period ending on the hour or on the half hour and, where identified by a time, means the 30 minute period ending at that time

transformer	A plant or device that reduces or increases the voltage of alternating current
transmission	Activities pertaining to a transmission network
Transmission Customer	A Customer or Distribution Network Service Provider having a connection point with a transmission network
transmission line	A power line that is part of a transmission network
transmission network	Those systems operating above nominal voltages of 110 KV plus any systems operating at 110 KV that operate in parallel with and provide support to the higher voltage network
Transmission Network Owner	The owner of a transmission network
transmission network service	Any service provided by a transmission network
Transmission Network Service	An entity that provides services to a transmission Provider network
transmission plant	Apparatus or equipment associated with the function or operation of a transmission line or an associated substation or switchyard, which may include transformers, circuit breakers, reactive plant and monitoring equipment and control equipment
transmission system	The meshed national transmission network for the generation, transmission and bulk supply of electricity, operated as an integrated power system
transmission system reliability	The safe operation and control of the transmission system on a continuous basis in accordance with the specified technical, reliability and operational standards prescribed in or under the Code
transmission use of system	A service provided to a Generator or Transmission Customer for use of the transmission network that can be reasonably allocated on a locational basis
unconstrained	Free of constraint

use of system	Includes transmission use of system and distribution use of system
violation	A failure to meet the requirements of the POOL System Reliability Provisions for system security
voltage	The electronic force or electric potential between two points that gives rise to the flow of electricity
voltage transformer	A transformer for use with meters and/or protection devices in which the voltage across the secondary terminals is, within prescribed error limits, proportional to and in phase with the voltage across the primary terminals