



**RULES FOR SETTING
TRANSMISSION WHEELING RATES
for
2003 to around 2027**

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Republic of the Philippines
Energy Regulatory Commission

Pacific Center, San Miguel Avenue, Pasig City

RULES FOR SETTING
TRANSMISSION WHEELING RATES
for 2003 to around 2027

Pursuant to Section 43(f) of Republic Act No. 9136, otherwise known as the Electric Power Industry Reform Act of 2001, and Rule 15, Section 5(a) of the Implementing Rules and Regulations issued pursuant to that Act, the Energy Regulatory Commission (ERC) hereby promulgates the following Rules for the Setting of Transmission Wheeling Rates.

This set of Rules is an amendment to the Guidelines on the Methodology for Setting Transmission Wheeling Rates for 2003 to around 2027, dated May 29, 2003, and sometimes referred to in shortened form as the Transmission Wheeling Rate Guidelines (TWRG).

**PHILIPPINE ELECTRICITY INDUSTRY
 RULES FOR SETTING
 TRANSMISSION WHEELING RATES
 for 2003 to around 2027**

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ARTICLE I
GENERAL PROVISIONS

1.1 Purpose

1.1.1 The purpose of these Rules is to set out the methodology to be used in setting the maximum transmission wheeling rates that may be charged for the provision of Regulated Transmission Services by the Regulated Entity.

1.2 Content of the Rules

1.2.1 These Rules set out:

- (a) the methodology to be used in setting the maximum transmission wheeling rates that may be charged for the provision of Regulated Transmission Services by the Regulated Entity during the First Regulatory Period and the Second Regulatory Period;
- (b) the pricing principles with which the ERC must comply for the purposes of regulating the maximum transmission wheeling rates that may be charged for the provision of Regulated Transmission Services by the Regulated Entity during a Subsequent Regulatory Period;
- (c) the annual rate verification and adjustment process which the ERC must undertake in relation to the maximum transmission wheeling rates that may be charged for the provision of Regulated Transmission Services by the Regulated Entity during a Regulatory Period;
- (d) the regulatory processes and timelines to which both the Regulated Entity and the ERC must adhere in order for the methodology established by these Rules to be administered and applied in a timely manner; and
- (e) the performance indicators, performance targets and reporting arrangements with which the Regulated Entity must comply during the Second Regulatory Period and each Subsequent Regulatory Period, and which the ERC must monitor, in order to ensure the effective and efficient delivery of Regulated Transmission Services to consumers.

1.3 Definitions

In these Rules, unless the contrary intention appears, the following words and phrases have the following meanings:

Accredited Expert	An expert who satisfies the requirements set out in Section 14.1.2 and who is included on a list established and maintained by the Regulated Entity pursuant to that Section.
Ancillary Services	Those services that are necessary to support the transmission of capacity and energy from resources to loads while maintaining the reliable operation of the Grid in accordance

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	with good utility practice and the Grid Code, as further defined in clause 3.3.1.1 of the WESM Rules (examples of Ancillary Services are given in clause 3.3.1.2 of the WESM Rules).
Application Year	The Regulatory Year that immediately follows a Calculation Year (see Section 6.2.1(a)(v)).
Approved FM Pass Through Amount	The lesser of an FM Pass Through Amount proposed by the Regulated Entity in relation to a Force Majeure Event and the Eligible FM Pass Through Amount in respect of that Force Majeure Event as referred to in Section 10.3.1(b).
Approved Tax Pass Through Amount	The lesser of a Positive Tax Pass Through Amount proposed by the Regulated Entity in relation to a Tax Change Event and the Eligible Tax Pass Through Amount in respect of that Tax Change Event as referred to in Section 11.2.2(b).
Business Day	A day other than a Saturday or a Sunday or an official Philippine national public holiday.
Business Separation Guideline	The Guideline promulgated by the ERC under Rule 10, Section 1 of the IRR.
Calculation Year	The Regulatory Year that immediately precedes an Application Year (see Section 6.2.1(a)).
Connection Point	The point of connection of a User System or Equipment to the Grid.
CPI	The All Items Consumer Price Index published by the National Statistics Office of the Philippines.
Customer	A person whose User System or Equipment is directly connected to the Grid and who purchases or receives, or who is seeking to purchase or receive, Regulated Transmission Services. For the avoidance of doubt, this may include a person who operates a Generation Facility, a Distribution Utility, a Retail Electricity Supplier, or an End-user. In addition, and notwithstanding the foregoing, a Customer includes an Embedded Generator (as that term is defined in the Grid Code) in so far as that Embedded Generator purchases or receives, or is seeking to purchase or receive, the Regulated Transmission Services referred to in paragraphs (e) or (g) of the definition of “Regulated Transmission Services”.

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Customer Segment	A category of Customers which have similar consumption characteristics for Regulated Transmission Services, based on their geographic location and consumption profile, as measured by the number of connections, the energy throughput (MWh), the non-coincident peak load (MW), the co-incident peak load (MW), the time-of-day or any other physical measure as approved from time to time by the ERC. A Customer Segment is likely to include all of the Customers who are charged the same tariff by the Regulated Entity for the provision of Regulated Transmission Services.
Decision Period	In respect of a Force Majeure Event Claim, the period within which the ERC must give a notice to the Regulated Entity under Section 10.3.1 to avoid a deemed notification of its decision under Section 10.3.2 (see Section 10.3.3).
Effectivity Date	The date on which these Rules take effect.
Eligible FM Pass Through Amount	<p>At any time in respect of a Force Majeure Event, the increase in costs that the Regulated Entity has actually incurred at that time (as calculated by the Regulated Entity under Section 10.1.1 or determined by the ERC under Section 10.3.1, as appropriate):</p> <ul style="list-style-type: none">(a) in the transmission of electricity to Connection Points; and(b) in complying with the provisions of any legislation, or of any rules, regulations or Rules made under the EPIRA, including the IRR and the Grid Code, which must be complied with in relation to the transmission of such electricity, <p>as a result of the occurrence of that Force Majeure Event.</p>
Eligible Tax Pass Through Amount	In respect of a Tax Change Event, the increase in costs in the transmission of electricity to Connection Points that the Regulated Entity has incurred and is likely to incur, until the end of the Regulatory Period in which the Tax Change Event occurs, as a result of that Tax Change Event (as calculated by the Regulated Entity under Section 11.2.1(c) or determined by the ERC under Section 11.2.2(a), as appropriate).
EPIRA	Republic Act No. 9136, otherwise known as the Electric Power Industry Reform Act of 2001.
Equipment	Equipment as defined in the Grid Code.
ERC	The Energy Regulatory Commission created by Section 38 of the EPIRA.
Excluded	A service that is provided in the ordinary course of an

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Service	electricity transmission business that is neither a Regulated Transmission Service nor a service that is contestable (for these purposes, whether or not a service is contestable is a matter that, if disputed, will be determined by the ERC).
First Regulatory Period	The period commencing on the Effectivity Date and ending on the First Regulatory Period End Date (both dates inclusive).
First Regulatory Period End Date	The date on which the First Regulatory Period ends in accordance with Sections 2.2 and 2.3.
First Regulatory Year	The period commencing on the Effectivity Date and ending on 31 December 2003 (both dates inclusive).
FM Pass Through Amount	An amount that is not greater than an Eligible FM Pass Through Amount as referred to in Section 10.1.1.
FM Threshold Amount	In respect of a Regulatory Year, the amount calculated in accordance with Section 10.2.5.
Force Majeure Event	<p>(a) A typhoon, storm, tropical depression, flood, drought, volcanic eruption, earthquake, tidal wave or landslide; or</p> <p>(b) an act of public enemy, war (declared or undeclared), sabotage, blockade, revolution, riot, insurrection, civil commotion or any violent or threatening actions,</p> <p>which results or is likely to result in an increase in the costs incurred by the Regulated Entity in the transmission of electricity to Connection Points, or in complying with the provisions of any legislation, or of any rules, regulations or Rules made under the EPIRA, including the IRR and the Grid Code, which must be complied with in relation to the transmission of such electricity.</p>
Force Majeure Event Claim	A written claim that satisfies the requirements set out in Section 10.2.3.
Force Majeure Event Notice	A written notice that satisfies the requirements set out in Section 10.2.2.
Forecast Period	A twelve month period ending on 30 September in an Application Year (see Section 6.3.3(c)).
Grid	The high voltage backbone system of interconnected transmission lines, substations and related facilities, located

	in each of the island groups of Luzon, Visayas and Mindanao, or as may otherwise be determined by the ERC in accordance with Section 45 of the EPIRA, together with such Subtransmission Systems as are connected to that system and as are operated by the Regulated Entity.
Historical Period	A twelve month period ending on 30 September in a Calculation Year (see Section 6.2.1(a)).
Initial Re-valuation	The asset re-valuation that is referred to in Section 4.6.1.
Initial Re-valuation Report	The report that is referred to as the Initial Re-valuation Report in Section 4.6.2(c) or (d) (as the case may be).
IRR	The Implementing Rules and Regulations issued pursuant to the EPIRA.
Local Government	Local Government as defined in Executive Order No. 292, otherwise known as the Administrative Code of 1987.
National Government	The National Government as defined in Executive Order No. 292, otherwise known as the Administrative Code of 1987.
Negative Tax Change Event	A Tax Change Event which results in the Regulated Entity incurring materially lower costs than it would have incurred but for that event in the transmission of electricity to Connection Points.
Negative Tax Pass Through Amount	An amount that is not greater than a Required Tax Pass Through Amount as referred to in Section 11.1.2.
Network Service Provider	Network Service Provider as defined in the WESM Rules.
OATS Rules	The Open Access Transmission Service Rules that have been filed by the Regulated Entity with the ERC and approved by the ERC.
person	Refers to a natural or juridical person, as the case may be.
PhP	Philippine Peso.
Positive Tax Change Event	A Tax Change Event which results in the Regulated Entity incurring materially higher costs than it would have incurred but for that event in the transmission of electricity to Connection Points.
Positive Tax Pass Through	An amount that is not greater than an Eligible Tax Pass

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Amount	Through Amount as referred to in Section 11.1.1.
Quarter	A period of three months from 1 January to 31 March (both dates inclusive), 1 April to 30 June (both dates inclusive), 1 July to 30 September (both dates inclusive) or 1 October to 31 December (both dates inclusive).
Regulated Entity	Collectively, any entity or entities who provide any Regulated Transmission Services. For the purposes of these Rules, this shall refer to TransCo and its Concessionaire/s, who is currently National Grid Corporation of the Philippines (NGCP).
Regulated Transmission Services	<p>The following services:</p> <ul style="list-style-type: none">(a) the conveyance of electricity through the Grid and the control and monitoring of electricity as it is conveyed through the Grid (including any services that support such conveyance, control or monitoring or the safe operation of the Grid);(b) the planning, maintenance, augmentation and operation of the Grid;(c) the provision, installation, commissioning, testing, repair, maintenance and reading both of meters that are used to measure the delivery of electricity to Customers and of other meters that are used (for the purposes of the WESM) to measure the flow of electricity into or through the Grid;(d) until the commencement of the Second Regulatory Period, Transmission Connection Services;(e) the provision of Ancillary Services that are provided using assets which form part of the Grid¹ (excluding any such Ancillary Services to the extent they are provided to the System Operator under contract or through a spot market established under the WESM Rules);(f) billing, collection and customer service for Customers purchasing (or seeking to purchase) any of the services referred to in paragraphs (a), (b), (c) and (e) and for persons purchasing (or seeking to purchase) any Transmission Connection Services; and(g) those services provided by the System Operator under

¹ An example of such Ancillary Services is services provided by a series reactor or a static VAR compensator.

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	<p>the Grid Code, the Distribution Code or the WESM Rules in its capacity as such,</p> <p>but do not include such of these services as are determined by the ERC to be contestable.</p>
Regulatory Period	The First Regulatory Period, the Second Regulatory Period or a Subsequent Regulatory Period (as the case may be).
Regulatory Year	The First Regulatory Year and any subsequent calendar year that occurs during a Regulatory Period.
Relevant Tax	<p>Any Tax payable by the Regulated Entity other than:</p> <ul style="list-style-type: none">(a) corporate income tax or other income tax; or(b) any tax on fringe benefits or capital gains; or(c) real property tax or any other tax on the ownership or occupancy of premises; or(d) customs and import duties; or(e) rates, taxes, fees and charges imposed by any Local Government or other local authority having taxation powers; or(f) withholding tax; or(g) documentary stamp taxes or similar taxes and duties; or(h) any donor's tax; or(i) penalties, charges, fees and interest on late payments, or deficiencies in payments, relating to any Tax; or(j) any Tax that replaces or is the equivalent of any of the Taxes referred to in paragraphs (a) to (h).
Required Tax Pass Through Amount	In respect of a Tax Change Event, the costs in the transmission of electricity to Connection Points that the Regulated Entity has saved and is likely to save, until the end of the Regulatory Period in which the Tax Change Event occurs, as a result of that Tax Change Event (as determined by the ERC under Section 11.1.2).
Rolled-forward depreciated regulatory asset base	The regulatory asset base as determined by the ERC under Section 4.6.12 or as calculated in accordance with Section 4.7.2 (see also Section 4.7.1) (as the case may be).
Second Regulatory Period	The period commencing on the day immediately following the First Regulatory Period End Date and ending on the fifth anniversary of the First Regulatory Period End Date (both

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	dates inclusive).
Significant Project	<p>A capital expenditure project:</p> <ul style="list-style-type: none">(a) which is contained in the capital expenditure program that is approved by the ERC under Section 4.10.5; and(b) for which the capital expenditure forecast in any Regulatory Year for that project (as contained in that program) is greater than 10% of the total capital expenditure forecast for that Regulatory Year under that program.
Subsequent Regulatory Period	A Regulatory Period other than the First Regulatory Period or the Second Regulatory Period, the duration of which is determined in accordance with Section 2.5.
System Operator	System Operator as defined in the WESM Rules.
Tax	Any tax, levy, impost, deduction, charge, rate, duty or withholding which is levied or imposed by the National Government or a Local Government or any agency, department, instrumentality or other authority of the National Government or a Local Government.
Tax Change Event	<ul style="list-style-type: none">(a) A change in (or a change in the application or official interpretation of) a Relevant Tax or the way in which a Relevant Tax is calculated; or(b) the removal of a Relevant Tax; or(c) the imposition of a Relevant Tax, <p>which results in the Regulated Entity incurring materially higher or lower costs than it would have incurred but for that event in the transmission of electricity to Connection Points. For these purposes:</p> <ul style="list-style-type: none">(i) if the Tax Change Event occurs in the First Regulatory Period, the Regulated Entity will only be deemed to incur materially higher or lower costs where the change in costs that the Regulated Entity has incurred and is likely to incur until the end of the First Regulatory Period, as a result of that Tax Change Event, exceeds an average of PhP 16.7 million for each month in the period from the occurrence of that Tax Change Event to the end of the First Regulatory Period; and(ii) if the Tax Change Event occurs in a Regulatory Period other than the First Regulatory Period,

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the Regulated Entity will only be deemed to incur materially higher or lower costs where the change in costs that the Regulated Entity has incurred and is likely to incur until the end of that Regulatory Period, as a result of that Tax Change Event, exceeds 1% of such of the total forecast operating and maintenance expenditure in nominal terms (excluding forecast taxes, levies and duties) as is used for the purposes of the Regulatory Reset Process under Article VII for that Regulatory Period and as pertains to the period from the occurrence of that Tax Change Event to the end of that Regulatory Period.

Third Regulatory Period	The Regulatory Period which immediately follows the Second Regulatory Period.
Transmission Connection Assets	The components of the Grid used to provide Transmission Connection Services.
Transmission Connection Services	The following services: <ul style="list-style-type: none">(a) the provision of capability at a Connection Point to deliver electricity to or take electricity from the Connection Point;(b) the conveyance of electricity:<ul style="list-style-type: none">(i) from the User System or Equipment of a Customer to the Connection Point; or(ii) from the Connection Point to the User System or Equipment of a Customer;(c) the planning, installation, maintenance, augmentation, testing and operation of Transmission Connection Assets; and(d) the provision of services that support any of the services referred to in paragraphs (a) to (c).
Trigger Condition	A condition the occurrence of which entitles the Regulated Entity to apply to the ERC for a change in the method used to calculate the Maximum Annual Revenue cap as referred to in Section 12.1.1.
User System	User System as defined in the Grid Code.

In addition, words and phrases used in these Rules which are defined in the EPIRA or the IRR have the meaning given to them in the EPIRA or the IRR (as the case may be).

1.4 Interpretation

1.4.1 In these Rules, unless the contrary intention appears:

- (a) the singular includes the plural and conversely;
- (b) where a term is defined, its other grammatical forms have a corresponding meaning;
- (c) a reference to any law or the rules and regulations issued implementing such a law or to any particular provision of a law or of any rules or regulations issued implementing such a law is taken to include any modification, consolidation, amendment, re-enactment, replacement or codification of the law, rules and regulations, or provision; and
- (d) mentioning anything after include, includes or including does not limit what else might be included.

1.4.2 All calculations made under or for the purposes of these Rules must be rounded to four significant digits, except that any amount which is calculated solely in PhP (as opposed to, for example, PhP/kWh) must be rounded to the nearest peso. For these purposes, significant digits are all the non-zero digits of a number and the zeros that are included between them or that are final zeros and signify accuracy (eg. the significant digits of 0.01230 are 1, 2, 3 and the final 0, which signifies accuracy to five places).²

1.4.3 When a calculation is required under these Rules:

- (a) Regulatory Year “t” or calendar year “t” is the Regulatory Year or calendar year (as the case may be) in respect of which the calculation is being made;
- (b) Regulatory Year “t-1” or calendar year “t-1” is the Regulatory Year or calendar year (as the case may be) immediately preceding Regulatory Year “t” or calendar year “t”;
- (c) Regulatory Year “t-2” or calendar year “t-2” is the Regulatory Year or calendar year (as the case may be) immediately preceding Regulatory Year “t-1” or calendar year “t-1”; and
- (d) Regulatory Year “t-3” or calendar year “t-3” is the Regulatory Year or calendar year (as the case may be) immediately preceding Regulatory Year “t-2” or calendar year “t-2”.

1.5 Rights and Obligations of Regulated Entity

1.5.1 Where more than one entity provides any Regulated Transmission Services, with the result that the Regulated Entity comprises more than one entity, the rights of the Regulated Entity under these Rules may be exercised by any of those entities and such exercise of those rights by such an entity will be deemed, for the

² Webster's College Dictionary, Random House, New York, 1991.

- purposes of these Rules, to irrevocably and unconditionally bind each of those entities.
- 1.5.2 Where more than one entity provides any Regulated Transmission Services, with the result that the Regulated Entity comprises more than one entity, each of those entities will be jointly and severally liable for the performance of the obligations of the Regulated Entity under these Rules and the performance of such obligations by any of those entities will be deemed, for the purposes of these Rules, to be the performance of those obligations by each of those entities.
- 1.5.3 Where more than one entity provides any Regulated Transmission Services, with the result that the Regulated Entity comprises more than one entity, the performance by the ERC of its obligations under these Rules in respect of any one of those entities will be deemed, for the purposes of these Rules, to be the performance of those obligations in respect of all of those entities.
- 1.5.4 Where more than one entity provides any Regulated Transmission Services, with the result that the Regulated Entity comprises more than one entity, these Rules must be construed and applied in such a manner that, as far as is reasonably practicable, results in all of those entities being treated (in the aggregate) in the same manner as a single entity would have been treated in those circumstances if that single entity alone had comprised the Regulated Entity.
- 1.5.5 It is acknowledged that a range of ownership, operating, corporate and other structures may be implemented in relation to the provision of Regulated Transmission Services (including structures which are put in place in connection with the award of a Concession Contract to a Concessionaire and subcontracting arrangements). Accordingly, these Rules must be construed and applied by the ERC in such a manner that accommodates such structures but that does not permit the use of such structures to avoid the tenor of the obligations imposed by these Rules (even if this means a departure from a literal interpretation of these Rules).
- 1.6 Services other than Regulated Transmission Services**
- 1.6.1 Except as otherwise provided in the OATS Rules, a person may only be charged a fair and reasonable charge for an Excluded Service.
- 1.6.2 In the event of a dispute in respect of the amount of a charge for an Excluded Service, what is a fair and reasonable charge will be determined by the ERC.
- 1.6.3 For the purposes of determining what is a fair and reasonable charge for an Excluded Service, both where a charge for an Excluded Service is being negotiated and where a dispute in respect of such a charge is being determined by the ERC, the following matters must be taken into account (without limitation to any other matters that may be taken into account for those purposes):
- (a) the reasonable costs incurred in efficiently providing the Excluded Service, including:
 - (i) an allowance for appropriately attributable operating and maintenance and overhead costs;

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- (ii) an allowance for the depreciation of the assets used to provide the Excluded Service over the economic life of those assets;
 - (iii) a reasonable return on the depreciated value of the assets used to provide the Excluded Service (such reasonable return might, for example, be the then-applicable weighted average cost of capital as calculated pursuant to Section 4.9 or Section 5.9); and
 - (iv) an allowance for taxes paid in connection with the provision of the Excluded Service or the income derived from the provision of the Excluded Service;
- (b) the charge that would have been likely to be negotiated for the provision of the Excluded Service in an arm's length commercial negotiation between a willing seller and a willing buyer if the market for the Excluded Service were competitive;
- (c) whether any assets used to provide the Excluded Service to the person purchasing (or seeking to purchase) the Excluded Service will be or have been specifically constructed for that purpose;
- (d) any special value of the Excluded Service to the person purchasing (or seeking to purchase) the Excluded Service (for example, as a result of any assets used to provide the Excluded Service being dedicated to the provision of that Excluded Service to that person); and
- (e) whether any costs incurred in providing the Excluded Service (including any return on assets used to provide the Excluded Service) have been or are likely to be recovered from other persons (for example, as a result of any assets used to provide the Excluded Service subsequently being used to provide that Excluded Service to such other persons).
- 1.6.4 Without in any way limiting the services that may constitute an Excluded Service, Transmission Connection Services will, with effect from the commencement of the Second Regulatory Period, be treated as Excluded Services (except to the extent they are determined by the ERC to be contestable). For the purposes of determining what is a fair and reasonable charge for such Transmission Connection Services, both where a charge for such Transmission Connection Services is being negotiated and where a dispute in respect of such a charge is being determined by the ERC (and without limiting any other matters that may be taken into account for those purposes):
- (a) the matters referred to in Section 1.6.3 must be taken into account; and
 - (b) to the extent any assets used to provide such Transmission Connection Services as at the commencement of the Second Regulatory Period were, immediately prior to the commencement of the Second Regulatory Period, included in the regulatory asset base (see Section 4.6.8), those assets will be valued at the value that was then attributed to them as part of the regulatory asset base (to the extent such assets are used to provide Transmission Connection Services following the expiry of the First

Regulatory Period, those assets will cease to form part of the regulatory asset base: see Section 4.6.8(a).

1.7 Subtransmission Assets

- 1.7.1 The Regulated Entity must maintain an asset register which clearly identifies each asset owned by it that is a Subtransmission Asset.

1.8 Provision of Information

- 1.8.1 The Regulated Entity must, on the written request of the ERC, provide the ERC with such information, calculations, forecasts and other data as the ERC requires from time to time for the purposes of these Rules and for the purposes of assisting the ERC to perform its functions under these Rules.

1.9 Amendment

- 1.9.1 These Rules may only be amended by the ERC for the purposes of giving effect to a decision made by it in accordance with these Rules or with the agreement of the Regulated Entity or as ordered by a court with appropriate jurisdiction.

1.10 Separability

- 1.10.1 If, for any reason, any provision or part of a provision of these Rules is declared unconstitutional or invalid, those provisions which are not thereby affected will continue to be in full force and effect.

1.11 Effectivity

- 1.11.1 Subject to the provisions of any other applicable law, these Rules take effect 15 days after notice of their making has been given in two newspapers of general circulation.

ARTICLE II

TIMING FOR REGULATORY PERIODS

2.1 Steps to Incentive Based Rate Regulation

- 2.1.1 Subject to Articles X, XI and XII, the Maximum Annual Revenue cap (MAR_t) as calculated in accordance with the formula set out in Section 3.2.1 will apply for the First Regulatory Period (excluding the First Regulatory Year).
- 2.1.2 Subject to Section 4.3.4 and Articles VIII, X, XI and XII, the Maximum Annual Revenue cap (MAR_t) as calculated in accordance with the formula set out in Section 4.2.1 will apply for the Second Regulatory Period.
- 2.1.3 Subject to Articles V, X and XI, the revenue cap, price cap or hybrid cap that is calculated in a manner determined by the ERC in accordance with the provisions of Article V will apply for the relevant Subsequent Regulatory Period.
- 2.1.4 Once the Effectivity Date has occurred, the provisions of these Rules will apply, irrespective of whether or not a Concessionaire has been awarded a Concession Contract.

2.2 Conclusion of First Regulatory Period

- 2.2.1 The First Regulatory Period will end on 31 December 2005 unless:
 - (a) the Regulated Entity provides a written request to the ERC to terminate the First Regulatory Period in accordance with Section 2.2.2 – in which case the First Regulatory Period will end on 31 December 2004; or
 - (b) the ERC extends the First Regulatory Period End Date to 31 December 2006 in accordance with Section 2.3.1 – in which case the First Regulatory Period will end on 31 December 2006.
- 2.2.2 The Regulated Entity may only request the ERC to terminate the First Regulatory Period under Section 2.2.1(a) if:
 - (a) that request is provided to the ERC by 30 June 2003;
 - (b) the Regulated Entity's financial and operational information systems are up to date, are in a condition which will allow an audit to be undertaken (if required by the ERC), and can provide the information required for the ERC to undertake the Regulatory Reset Process for the Second Regulatory Period under Article VII;
 - (c) the Regulated Entity is able to provide to the ERC such information as is required under the Business Separation Guideline;
 - (d) the Regulated Entity has up to date and reliable records of the assets which it uses in the provision of Regulated Transmission Services and such records include all of the information required to enable those assets to be re-valued in accordance with Section 4.6; and

- (e) the Regulated Entity has sufficient information and data which is documented to enable it to prepare the forecasts contemplated by Sections 4.10 and 4.11 and to enable those forecasts to be properly reviewed by an independent expert in accordance with Sections 4.10 and 4.11.

2.3 Extension of First Regulatory Period

2.3.1 The ERC may extend the First Regulatory Period End Date to 31 December 2006 if:

- (a) in the ERC's opinion, the requirements referred to in Section 2.2.2(b) to (e) will not be satisfied by 30 July 2004; or
- (b) the Regulated Entity applies in writing to the ERC, before 30 July 2004, for an extension of the First Regulatory Period End Date on the grounds that the requirements referred to in Section 2.2.2(b) to (e) are unlikely to be satisfied by 30 July 2004.

2.3.2 If the ERC extends the First Regulatory Period End Date pursuant to this Section 2.3, the value of X for the purposes of calculating MAR_{2006} in accordance with the formula contained in Section 3.2.1 will be 0.03 plus the value of X (if any) determined by the ERC under Section 12.8.2.

2.4 Second Regulatory Period

2.4.1 The Second Regulatory Period will end on the fifth anniversary of the First Regulatory Period End Date.

2.5 Subsequent Regulatory Periods

2.5.1 Subject to Section 2.5.2, each Subsequent Regulatory Period must be five calendar years in duration.

2.5.2 The ERC may, during the Regulatory Reset Process for a Subsequent Regulatory Period under Article VII, determine that the duration of that Subsequent Regulatory Period is greater than five calendar years provided that:

- (a) the relevant Subsequent Regulatory Period is not the Third Regulatory Period;
- (b) the duration of that Subsequent Regulatory Period as determined by the ERC is such duration (if any) as is requested by the Regulated Entity, being a duration which:
 - (i) is a whole number of calendar years;
 - (ii) is not less than five calendar years and is not more than ten calendar years; and
 - (iii) is such that the Subsequent Regulatory Year commences on 1 January and ends on 31 December;
- (c) the Regulated Entity has provided to the ERC such forecasts of capital expenditure and operating and maintenance expenditure, for each

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Regulatory Year occurring during that Subsequent Regulatory Period, as the ERC requires for the purposes of the Regulatory Reset Process; and

- (d) the ERC has available to it forecasts of inflation for each Regulatory Year occurring during that Subsequent Regulatory Period, being forecasts that are made by a reputable and appropriately qualified entity such as the National Economic Development Authority of the Philippines.

2.5.3 The last Subsequent Regulatory Period will be the Regulatory Period in which 31 December 2027 occurs.

ARTICLE III
FIRST REGULATORY PERIOD

3.1 General Price Control Principles

3.1.1 Subject to Section 6.2.1(f) and (g), the maximum transmission wheeling rates that the Regulated Entity may charge for the provision by it of Regulated Transmission Services during the First Regulatory Year are the rates set out in or calculated in accordance with:

- (a) the ERC Order on the Matter of the Application for the Approval for the Revised Unbundled Power Rates (ERC Case No. 2001-901) by National Power Corporation dated 20 September 2002 and 27 September 2002; or
- (b) any superseding decision should there be a reconsideration of that order.

3.1.2 The Regulated Entity must ensure that the total revenue that is derived from the provision by it of Regulated Transmission Services during a Regulatory Year t (other than the First Regulatory Year) that occurs in the First Regulatory Period does not exceed the Maximum Annual Revenue cap for that Regulatory Year t as calculated in accordance with Section 3.2.1. Notwithstanding the foregoing, a failure to comply with this obligation will not be a violation of these Rules (any revenue that exceeds the Maximum Annual Revenue cap will effectively be applied as a reduction in the Maximum Annual Revenue cap for the following Regulatory Year t+1).

3.2 Price Control Formula

3.2.1 Subject to Articles X, XI and XII, the maximum allowed revenue (expressed in PhP) for a Regulatory Year t (other than the First Regulatory Year) that occurs during the First Regulatory Period (the Maximum Annual Revenue cap for that Regulatory Year t or MAR_t) is calculated in accordance with the following formula³:

$$MAR_t = [MAR_{t-1} \times \{1 + CWI_t - X\}] - K_t - RBR_t$$

Where:

MAR_{t-1} = Maximum allowed revenue (expressed in PhP) for Regulatory Year t-1 as calculated in accordance with this Section 3.2.1. Subject to Section 6.6, where Regulatory Year t commences on 1 January 2004, MAR_{t-1} equals PhP 24,591 million;

³ Within the formulas provided in these Rules, “x” means multiply, “/” means divide, “+” means add, “-” means subtract, and “^” means “raised to the power of”. Normal mathematical concepts apply.

- CWI_t = Change in Weighted Index for Regulatory Year t as calculated in accordance with Section 3.3;
- X = A productivity or efficiency factor for Regulatory Year t. Subject to Sections 2.3.2 and 12.8.2, X equals 0 (zero) for each Regulatory Year occurring during the First Regulatory Period;
- K_t = Correction Factor to adjust for over or under recovery of revenue in Regulatory Year t-1. Where Regulatory Year t commences on 1 January 2004, K_t equals 0 (zero) and for subsequent Regulatory Years is calculated in accordance with Section 3.4; and
- RBR_t = A portion (expressed in PhP) of the net income derived, during the 12 month period ending on 30 September in Regulatory Year t-1, from each related business engaged in by the Regulated Entity or (if the Regulated Entity does not include TRANSCO) by TRANSCO, which business utilizes assets that form part of the regulatory asset base (see Section 4.6.8), being a portion that is determined by the ERC pursuant to Section 20 of the EPIRA and that may vary as between such businesses but which, for each such business, does not exceed 50% of the net income that is so derived from that business.

3.3 Change in Weighted Index

3.3.1 The change in Weighted Index for Regulatory Year t (CWI_t) is calculated as follows:

$$CWI_t = \{ (W1 \times \Delta CPI_t) + (W2 \times \Delta USER_t) \}$$

Where:

Subject to Section 4.18:

- (a) if Section 12.9.1 applies in respect of Regulatory Year t, $W1 = 0.455$; or
- (b) if Section 12.9.1 does not apply in respect of Regulatory Year t, $W1 = 1$;

Subject to Section 4.18:

- (a) if Section 12.9.1 applies in respect of Regulatory Year t, $W2 = 0.545$; or
- (b) if Section 12.9.1 does not apply in respect of Regulatory Year t, $W2 = 0$;

ΔCPI_t is the change in CPI for Regulatory Year t and is calculated in accordance with Section 3.3.2; and

$\Delta USER_t$ is the change in the PhP/\$US exchange rate for Regulatory Year t and is calculated in accordance with Section 3.3.3.

3.3.2 The change in CPI for Regulatory Year t (DeltaCPI_t) is calculated as follows (assuming all index data is derived from, or adjusted to, the same base year⁴):

$$\text{DeltaCPI}_t = (\text{CPI}_{t-1} / \text{CPI}_{t-2}) - 1$$

Where:

$$\text{CPI}_{t-1} = \{\text{CPI}_{(Q4, t-2)} + \text{CPI}_{(Q1, t-1)} + \text{CPI}_{(Q2, t-1)} + \text{CPI}_{(Q3, t-1)}\}; \text{ and}$$

$$\text{CPI}_{t-2} = \{\text{CPI}_{(Q4, t-3)} + \text{CPI}_{(Q1, t-2)} + \text{CPI}_{(Q2, t-2)} + \text{CPI}_{(Q3, t-2)}\}$$

where:

CPI_(Q4, t-2) is the CPI for the Quarter ending on 31 December in calendar year t-2;

CPI_(Q1, t-1) is the CPI for the Quarter ending on 31 March in calendar year t-1;

CPI_(Q2, t-1) is the CPI for the Quarter ending on 30 June in calendar year t-1;

CPI_(Q3, t-1) is the CPI for the Quarter ending on 30 September in calendar year t-1;

CPI_(Q4, t-3) is the CPI for the Quarter ending on 31 December in calendar year t-3;

CPI_(Q1, t-2) is the CPI for the Quarter ending on 31 March in calendar year t-2;

CPI_(Q2, t-2) is the CPI for the Quarter ending on 30 June in calendar year t-2; and

CPI_(Q3, t-2) is the CPI for the Quarter ending on 30 September in calendar year t-2.

As an example, using National Statistics Office data dated 2 December 2002, where 1994 was the base year with index of 100:

CPI_(Q4, 2000) = 157.8, CPI_(Q1, 2001) = 159.4, CPI_(Q2, 2001) = 161.5, CPI_(Q3, 2001) = 163.2, CPI_(Q4, 2001) = 164.3, CPI_(Q1, 2002) = 165.2, CPI_(Q2, 2002) = 166.3 and CPI_(Q3, 2002) = 167.9.

Consequently:

DeltaCPI₂₀₀₃ = 0.0340 (Note this escalation is not required under Section 3.2 or 3.3, but is provided only as an example of the calculation of DeltaCPI_t).

3.3.3 The change in the PhP/\$US exchange rate for Regulatory Year t (DeltaUSER_t) is calculated as follows (assuming all US consumer price index data is derived from, or adjusted to, the same base year⁵):

⁴ CPI information from the National Statistics Office of the Philippines (NSO) currently uses an index base of "1994 = 100". In the future, should the NSO change the base year for its reported CPI, the CPI values used in Section 3.3.2 must all be adjusted to use the same base year (see Section 3.3.4).

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$$\text{DeltaUSER}_t = \{ (\text{USER}_{t-1} / \text{USER}_{t-2}) \times (\text{USCPI}_{t-1} / \text{USCPI}_{t-2}) \} - 1$$

Where:

$$\text{USER}_{t-1} = \{ \text{USER}_{(Q4, t-2)} + \text{USER}_{(Q1, t-1)} + \text{USER}_{(Q2, t-1)} + \text{USER}_{(Q3, t-1)} \}; \text{ and}$$

$$\text{USER}_{t-2} = \{ \text{USER}_{(Q4, t-3)} + \text{USER}_{(Q1, t-2)} + \text{USER}_{(Q2, t-2)} + \text{USER}_{(Q3, t-2)} \}$$

where:

USER for a Quarter (Q) is the average of the Philippine Peso/United States Dollar inter-bank mid-rates prevailing on each of the last 5 Business Days of that Quarter, each such rate being as published by the Bangko Sentral ng Pilipines, expressed as PhP/US\$1 (for example, if PhP50 can purchase US\$1, then USER is 50);

USER_(Q4, t-2) is the USER for the Quarter ending on 31 December in calendar year t-2;

USER_(Q1, t-1) is the USER for the Quarter ending on 31 March in calendar year t-1;

USER_(Q2, t-1) is the USER for the Quarter ending on 30 June in calendar year t-1;

USER_(Q3, t-1) is the USER for the Quarter ending on 30 September in calendar year t-1;

USER_(Q4, t-3) is the USER for the Quarter ending on 31 December in calendar year t-3;

USER_(Q1, t-2) is the USER for the Quarter ending on 31 March in calendar year t-2;

USER_(Q2, t-2) is the USER for the Quarter ending on 30 June in calendar year t-2; and

USER_(Q3, t-2) is the USER for the Quarter ending on 30 September in calendar year t-2; and

$$\text{USCPI}_{t-1} = \{ \text{USCPI}_{(Q4, t-2)} + \text{USCPI}_{(Q1, t-1)} + \text{USCPI}_{(Q2, t-1)} + \text{USCPI}_{(Q3, t-1)} \}; \text{ and}$$

$$\text{USCPI}_{t-2} = \{ \text{USCPI}_{(Q4, t-3)} + \text{USCPI}_{(Q1, t-2)} + \text{USCPI}_{(Q2, t-2)} + \text{USCPI}_{(Q3, t-2)} \}$$

where:

USCPI for a Quarter (Q) is the Consumer Price Index for all urban customers, US city average published by the US Bureau of Labour Statistics for the last month of that Quarter in series CUUR 0000SAO;

USCPI_(Q4, t-2) is the USCPI for the Quarter ending on 31 December in calendar year t-2;

⁵ If the base year for any such US consumer price index data should change, the values used in Section 3.3.3 must all be adjusted to use the same base year (see Section 3.3.4).

$USCPI_{(Q1, t-1)}$ is the USCPI for the Quarter ending on 31 March in calendar year t-1;

$USCPI_{(Q2, t-1)}$ is the USCPI for the Quarter ending on 30 June in calendar year t-1;

$USCPI_{(Q3, t-1)}$ is the USCPI for the Quarter ending on 30 September in calendar year t-1;

$USCPI_{(Q4, t-3)}$ is the USCPI for the Quarter ending on 31 December in calendar year t-3;

$USCPI_{(Q1, t-2)}$ is the USCPI for the Quarter ending on 31 March in calendar year t-2;

$USCPI_{(Q2, t-2)}$ is the USCPI for the Quarter ending on 30 June in calendar year t-2; and

$USCPI_{(Q3, t-2)}$ is the USCPI for the Quarter ending on 30 September in calendar year t-2.

- 3.3.4 If a source of data described in this Section 3.3 is no longer published, or if any other change occurs in relation to such data which would cause the continued use of the source to result in inaccurate comparisons between data calculated using the source prior to the change and data calculated using the source after the change, then such alternative source as the ERC reasonably determines, after consultation with the Regulated Entity, will be substituted.

3.4 Over / Under Recovery Formula

- 3.4.1 The Correction Factor for Regulatory Year t (K_t) is calculated in accordance with Section 3.4.2. For the purposes of Section 3.4.2, the Differential Amount for Regulatory Year t (DA_t) is calculated as follows:

$$DA_t = (TR_{t-1} - MAR_{t-1})$$

Where:

TR_{t-1} = The total qualifying revenue (expressed in PhP) of the Regulated Entity for the 12 month period ending on 30 September in Regulatory Year t-1 and is calculated as:

$$TR_{t-1} = CR_{t-1} + MR_{t-1}$$

Where:

CR_{t-1} is the amount (expressed in PhP) billed to Customers for the provision by the Regulated Entity of Regulated Transmission Services during that period (adjusted to exclude any amounts by which the Regulated Entity's revenue is increased due to the application of Articles X or XI and to include any amounts by which that revenue is decreased due to the application of Article XI); and

MR_{t-1} is the net payments (expressed in PhP) payable to or by the Regulated Entity during that period pursuant to the WESM Rules in

its capacity as either a Network Service Provider or the System Operator and which are referable to that period (including such amounts, if any, as are payable to the Regulated Entity as a result of the operation of clauses 3.13.15 or 3.13.16 of the WESM Rules). If such amounts as are payable to the Regulated Entity exceed such amounts as are payable by the Regulated Entity, then MR_{t-1} will be a positive amount that is equal to that difference. If such amounts as are payable by the Regulated Entity exceed such amounts as are payable to the Regulated Entity, then MR_{t-1} will be a negative amount that is equal to that difference. The value of MR_{t-1} will be zero (0) until such time as the WESM commences to operate; and

MAR_{t-1} = Maximum allowed revenue (expressed in PhP) for Regulatory Year t-1 as calculated in accordance with Section 3.2.1.

3.4.2 The Correction Factor for Regulatory Year t (K_t) is calculated as follows:

(a) if $DA_t > 0$ and $DA_t < (0.05 \times MAR_{t-1})$,

then

$$K_t = DA_t \times (1 + i_t / 100);$$

(b) if $DA_t > 0$ and $DA_t \geq (0.05 \times MAR_{t-1})$ (where \geq means greater than or equal to),

then

$$K_t = \{ [DA_t - (0.05 \times MAR_{t-1})] \times [1 + (i_t + 4\%) / 100] \} + [(0.05 \times MAR_{t-1}) \times (1 + i_t / 100)];$$

(c) if $DA_t = 0$,

then

$$K_t = 0; \text{ and}$$

(d) if $DA_t < 0$,

then

$$K_t = DA_t \times (1 + i_t / 100) \text{ (in such a case } K_t \text{ will be a negative amount because } DA_t \text{ is a negative amount),}$$

Where:

i_t = the simple average of the monthly 180 day weighted-average Manila Reference Rate in nominal percent per annum terms published by the Bangko Sentral ng Pilipinas for the period from 1 October of calendar year t-2 to 30 September of calendar year t-1; and

MAR_{t-1} has the same meaning as in Section 3.4.1.

ARTICLE IV

SECOND REGULATORY PERIOD

4.1 General Price Control Principles

- 4.1.1 Subject to Section 6.2.1(f) and (g), the maximum transmission wheeling rates that the Regulated Entity may charge for the provision by it of Regulated Transmission Services during the first Regulatory Year of the Second Regulatory Period will be set under a Maximum Annual Revenue cap determined by the ERC during the last Regulatory Year of the First Regulatory Period in accordance with the Regulatory Reset Process for the Second Regulatory Period under Article VII.
- 4.1.2 The Regulated Entity must ensure that the total revenue that is derived from the provision by it of Regulated Transmission Services during a Regulatory Year t that occurs in the Second Regulatory Period does not exceed the Maximum Annual Revenue cap for that Regulatory Year t as calculated in accordance with Section 4.2.1. Notwithstanding the foregoing, a failure to comply with this obligation will not be a violation of these Rules (any revenue that exceeds the Maximum Annual Revenue cap will effectively be applied as a reduction in the Maximum Annual Revenue cap for the following Regulatory Year t+1).

4.2 Price Control Formula

- 4.2.1 Subject to Section 4.3.4 and Articles VIII, X, XI and XII, the maximum allowed revenue (expressed in PhP) for a Regulatory Year t that occurs during the Second Regulatory Period (the Maximum Annual Revenue cap for that Regulatory Year t or MAR_t) is calculated in accordance with the following formula:

$$MAR_t = [MAR_{t-1} \times \{1 + CWI_t - X\}] - K_t - RBR_t$$

Where:

MAR_{t-1} = Maximum allowed revenue (expressed in PhP) for Regulatory Year t-1 as calculated in accordance with this Section 4.2.1. ;

CWI_t = Change in Weighted Index for Regulatory Year t as calculated in accordance with Section 3.3;

X = An Efficiency Factor for Regulatory Year t. X equals the value calculated by the ERC for the Second Regulatory Period under Section 4.13.3 or recalculated under Sections 12.7.2 or 12.8.4 (as the case may be) (subject to any recalculation under Sections 12.7.2 or 12.8.4, it is constant for the whole of the Second Regulatory Period). For the avoidance of doubt, as a result of such calculation or recalculation X may be a positive or negative value or may be zero;

K_t = Correction Factor to adjust for over or under recovery of revenue in Regulatory Year t-1; and

RBR_t = A portion (expressed in PhP) of the net income derived, during the 12 month period ending on 30 September in Regulatory Year t-1, from each related business engaged in by the Regulated Entity or (if the Regulated Entity does not include TRANSCO) by TRANSCO, which business utilizes assets that form part of the regulatory asset base (see Section 4.6.8), being a portion that is determined by the ERC pursuant to Section 20 of the EPIRA and that may vary as between such businesses but which, for each such business, does not exceed 50% of the net income that is so derived from that business.

4.2.2 All the provisions in this Article IV apply for the Second Regulatory Period only, except to the extent Article V specifically carries forward all or a part of those provisions for the purposes of their application in a Subsequent Regulatory Period.

4.3 Over / Under Recovery Formula

4.3.1 The Correction Factor for Regulatory Year t (K_t) is calculated in accordance with Section 4.3.2. For the purposes of Section 4.3.2, the Differential Amount for Regulatory Year t (DA_t) is calculated as follows:

$$DA_t = (TR_{t-1} - MAR_{t-1})$$

Where:

TR_{t-1} = The total qualifying revenue (expressed in PhP) of the Regulated Entity for the 12 month period ending on 30 September in Regulatory Year t-1 and is calculated as:

$$TR_{t-1} = CR_{t-1} + MR_{t-1}$$

Where:

CR_{t-1} is the amount (expressed in PhP) billed to Customers for the provision by the Regulated Entity of Regulated Transmission Services during that period (adjusted to exclude any amounts by which the Regulated Entity's revenue is increased due to the application of Articles X or XI and any surcharges of the kind referred to in Section 8.2.2(b), and to include any amounts by which that revenue is decreased due to the application of Article XI or the payment of any rebates of the kind referred to in Section 8.2.2(b)); and

MR_{t-1} is the net payments (expressed in PhP) payable to or by the Regulated Entity during that period pursuant to the WESM Rules in its capacity as either a Network Service Provider or the System Operator and which are referable to that period (including such amounts, if any, as are payable to the Regulated Entity as a result of the operation of clauses 3.13.15 or 3.13.16 of the WESM Rules). If such amounts as are payable to the Regulated Entity exceed such amounts as are payable by the Regulated Entity, then MR_{t-1} will be a positive amount that is equal

to that difference. If such amounts as are payable by the Regulated Entity exceed such amounts as are payable to the Regulated Entity, then MR_{t-1} will be a negative amount that is equal to that difference. The value of MR_{t-1} will be zero (0) until such time as the Financial Transmission Rights as defined in the WESM are defined in relevant Rules and commence to operate; and

MAR_{t-1} = Maximum allowed revenue (expressed in PhP) for Regulatory Year t-1, as calculated in accordance with Section 4.2.1. Where Regulatory Year t is the first Regulatory Year of the Second Regulatory Period, MAR_{t-1} is the MAR_t for the last Regulatory Year of the First Regulatory Period as calculated under Section 3.2.1.

4.3.2 The Correction Factor for Regulatory Year t (K_t) is calculated as follows:

(a) if $DA_t > 0$ and $DA < (0.05 \times MAR_{t-1})$,

then

$$K_t = DA_t \times (1 + i_t / 100);$$

(b) if $DA_t > 0$ and $DA_t \geq (0.05 \times MAR_{t-1})$ (where \geq means greater than or equal to),

then

$$K_t = \{ [DA_t - (0.05 \times MAR_{t-1})] \times [1 + (i_t + 4\%) / 100] \} \\ + [(0.05 \times MAR_{t-1}) \times (1 + i_t / 100)];$$

(c) if $DA_t = 0$,

then

$$K_t = 0; \text{ and}$$

(d) if $DA_t < 0$,

then

(i) where Regulatory Year t is the first Regulatory Year of the Second Regulatory Period, K_t will be a negative amount that is the greater of:

(A) $DA_t \times (1 + i_t / 100)$ (which is a negative amount); and

(B) minus $(0.05 \times MAR_{t-1})$ (which is a negative amount); and

(ii) where Regulatory Year t is any Regulatory Year (other than the first Regulatory Year) occurring during the Second Regulatory Period, $K_t = DA_t \times (1 + i_t / 100)$ (in such a case K_t will be a negative amount because DA_t is a negative amount),

Where

i_t = the simple average of the monthly 180 day weighted-average Manila Reference Rate in nominal percent per annum terms published by the Bangko Sentral ng Pilipinas for the period from 1 October of calendar year $t-2$ to 30 September of calendar year $t-1$; and

MAR_{t-1} has the same meaning as in Section 4.3.1.

4.3.3 If the Correction Factor for the first Regulatory Year of the Second Regulatory Period is calculated pursuant to Section 4.3.2(d)(i) and the absolute value of the Differential Amount for that Regulatory Year (as calculated in accordance with Section 4.3.1) is greater than 5% of the maximum allowed revenue for the last Regulatory Year of the First Regulatory Period (as calculated under Section 3.2.1), then the Regulated Entity may apply to the ERC in writing for the recovery by it of that excess amount, such application to be made at the same time as the Regulated Entity, acting pursuant to Section 6.2.1(b), submits to the ERC its proposal for the maximum transmission wheeling rates that may be charged by it for the provision of Regulated Transmission Services during the second Regulatory Year of the Second Regulatory Period.

4.3.4 Upon receiving an application under Section 4.3.3, the ERC must:

- (a) determine how much of the Differential Amount for the first Regulatory Year of the Second Regulatory Period is the result of circumstances that are outside the control of the Regulated Entity; and
- (b) permit the Regulated Entity to recover such of the amount determined pursuant to Section 4.3.4(a) as exceeds 5% of the maximum allowed revenue for the last Regulatory Year of the First Regulatory Period (as calculated under Section 3.2.1) by determining to increase the maximum allowed revenue for all or any of the second, third and fourth Regulatory Years of the Second Regulatory Period (as calculated under Section 4.2.1) by such an amount or amounts that equal, in the aggregate, the amount that the Regulated Entity is permitted to so recover under this Section 4.3.4(b) (together with interest at the same rate i_t as applies under Section 4.3.2).

4.4 General Building Block Principles

4.4.1 As part of the Regulatory Reset Process for the Second Regulatory Period under Article VII, the ERC must determine the Annual Revenue Requirement for each Regulatory Year t in the Second Regulatory Period (ARR_t), based on a forward-looking analysis of forecast cash flow requirements, to ascertain the optimal forecast revenue requirement of the Regulated Entity in each Regulatory Year of the Second Regulatory Period. The ARR_t must reasonably compensate the Regulated Entity for the economically efficient costs and risks it incurs in providing Regulated Transmission Services in order to encourage:

- (a) a commercial environment which is transparent and stable, and which does not discriminate between the users of Regulated Transmission Services;

- (b) the same outcomes in the market for Regulated Transmission Services as would be achieved if that market were competitive;
 - (c) competition in the provision of Regulated Transmission Services wherever practicable;
 - (d) the commercial viability of the Regulated Entity through allowing it to recover its efficient costs, together with a reasonable return on its approved capital invested in the Grid, as determined by the ERC;
 - (e) competition in upstream and downstream markets;
 - (f) stability in the transmission wheeling rates charged for Regulated Transmission Services;
 - (g) recovery of only those costs which are related to the provision of Regulated Transmission Services (eg. costs associated with responsibilities as Market Operator are excluded from the transmission wheeling rates);
 - (h) fairness in the charges made for Regulated Transmission Services, including through the progressive removal of cross-subsidies;
 - (i) as a minimum, maintenance of service delivery levels subsisting at the beginning of the Second Regulatory Period and an improvement of service delivery levels during that period as contemplated by Article VIII; and
 - (j) maintenance of the Grid such that, at the end of the term of the Second Regulatory Period, the Grid is able to continue to provide sustainable electricity transmission service delivery into the future without above average expenditure on upgrades or critical maintenance, and with the ability of continuing the service delivery levels previously achieved.
- 4.4.2 The ARR_t must result from an economic and financial analysis of the forecast cash flow requirements of the Regulated Entity based on a Building Block analysis pursuant to Section 4.5, which uses a 'classical' weighted average cost of capital as defined in Section 4.9.
- 4.4.3 For financial analysis integrity and for transparency purposes, the corporate income tax cash flow requirements of the Regulated Entity must be included as a specific line item in the Building Blocks, thus ensuring the ARR_t includes the estimated cash flows necessary for the Regulated Entity to meet its expected corporate income tax payment obligations each Regulatory Year as and when they fall due.
- 4.4.4 Any taxes, other than corporate income tax, must be included as a specific line item in the Building Blocks alongside the operating and maintenance expenditures to which they are related.
- 4.4.5 When undertaking the economic and financial analysis to determine the ARR_t , the ERC will adequately compensate the Regulated Entity for all identified and justifiable risks inherent in an electricity transmission business in the Philippines, it being recognised that the over compensation for such risks will be to the disadvantage of Customers because it will permit unjustifiably high tariffs and

that the under compensation for such risks will be to the disadvantage of the Regulated Entity (and ultimately Customers) because it will adversely affect the viability of the Regulated Entity.

4.5 Primary Building Blocks

4.5.1 The financial Building Blocks which will form the basis of calculating the ARR_t are as follows:

- operating and maintenance expenditure;
- taxes other than corporate income tax;
- regulatory depreciation;
- return 'on' capital; and
- corporate income tax.

4.5.2 The operating and maintenance expenditure for Regulatory Year t is constituted by the forecasts of such expenditure for that Regulatory Year as approved by the ERC in accordance with Section 4.11.

4.5.3 The taxes, other than corporate income tax, for Regulatory Year t are constituted by the forecasts of payments of such taxes for that Regulatory Year as approved by the ERC in accordance with Section 4.11.

4.5.4 The Regulatory Depreciation for Regulatory Year t is that which is determined by the ERC on the basis of the methodology for its determination set out in Section 4.8.2.

4.5.5 The return 'on' capital for Regulatory Year t is the Regulatory Asset Base for that Regulatory Year (RAB_t), as determined by the ERC on the basis of the methodology for its determination set out in Section 4.7, increased by an allowance for working capital in accordance with Section 4.5.7, multiplied by the classical weighted average cost of capital (WACC), as determined by the ERC in accordance with Section 4.9.

4.5.6 The corporate income tax for Regulatory Year t is the estimated corporate income tax payable by the Regulated Entity in that Regulatory Year as determined by the ERC in accordance with Sections 4.12.1 to 4.12.3 (an income tax adjustment, as determined by the ERC in accordance with Section 4.12.4, is also included for the purposes of calculating ARR_t).

4.5.7 The Building Block formula to be used in calculating ARR_t is as follows:

$$ARR_t = Opex_t + Tax_{m,t} + RegDepr_t + [(RAB_t + WC_t) \times WACC] + Tax_{p,t} + ITA_t$$

Where:

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$Opex_t$	=	The nominal ⁶ operating and maintenance expenditure for Regulatory Year t which is forecast for that Regulatory Year and approved by the ERC in accordance with Section 4.11;
$Tax_{m,t}$	=	The payment of taxes, other than corporate income tax, for Regulatory Year t in nominal terms which are forecast for that Regulatory Year and approved by the ERC in accordance with Section 4.11;
$RegDepn_t$	=	The Regulatory Depreciation for Regulatory Year t in real ⁷ terms as determined by the ERC on the basis of the methodology for its determination set out in Section 4.8.2;
RAB_t	=	The Regulatory Asset Base for Regulatory Year t in real terms as determined by the ERC on the basis of the methodology for its determination set out in Section 4.7;
WC_t	=	<p>The working capital allowance for Regulatory Year t, which is set at a proportion of the difference between:</p> <ul style="list-style-type: none">(a) the nominal operating and maintenance expenditure which is forecast for that Regulatory Year and approved by the ERC in accordance with Section 4.11; and(b) the nominal amount of the bad debts which are forecast for that Regulatory Year and approved by the ERC in accordance with Section 4.11, <p>such proportion being determined by the ERC, as part of the Regulatory Reset Process for the Second Regulatory Period under Article VII, after a lead/lag study of relevant payables and receivables;</p>
$WACC$	=	The weighted average cost of capital calculated using a 'classical' formula and as determined by the ERC in accordance with Section 4.9. This value is determined by the ERC as part of the Regulatory Reset Process for the Second Regulatory Period under Article VII and remains constant for each Regulatory Year in the Second Regulatory Period;

⁶ In these Rules the word 'nominal' is used with its financial meaning, such that nominal peso numbers are represented with inflation applied, and are in pesos of the day. Notionally these are end of year (EoY) figures unless stated otherwise.

⁷ In these Rules the word 'real' is used with its financial meaning, such that real peso numbers are represented without inflation applied. Notionally these are end of year (EoY) figures unless stated otherwise.

$Tax_{p,t}$ = The estimated corporate income tax payable by the Regulated Entity in Regulatory Year t as determined by the ERC in accordance with Sections 4.12.1 to 4.12.3; and

ITA_t = The income tax adjustment amount for Regulatory Year t as determined by the ERC in accordance with Section 4.12.4.

4.6 Asset Valuation

4.6.1 Prior to the commencement of the Second Regulatory Period an asset re-valuation must be undertaken in accordance with this Section 4.6 (the "Initial Re-valuation").

4.6.2 The asset re-valuation referred to in Section 4.6.1 must be undertaken by either:

- (a) an independent appraisal company engaged by the Regulated Entity, in which case the ERC must also require the Regulated Entity to retain an independent expert or experts pursuant to Article XIV for the purposes of reviewing that re-valuation; or
- (b) an independent expert or experts, being an independent expert or experts who the ERC requires the Regulated Entity to retain pursuant to Article XIV for the purposes of undertaking that re-valuation,

the choice of which option is adopted being at the discretion of the ERC after consulting with the Regulated Entity. Where:

- (c) paragraph (a) applies - both the independent appraisal company and the independent expert or experts referred to in that paragraph must comply with the requirements relating to the Initial Re-valuation, and (in so far as their reports are concerned) the requirements relating to the Initial Re-valuation Report, as set out in this Section 4.6, the independent appraisal company must provide its asset re-valuation report to the ERC at the latest by 11 months prior to the commencement of the Second Regulatory Period and the review of that report by the independent expert or experts referred to in paragraph (a) must be provided to the ERC at the latest by 10 months prior to the commencement of the Second Regulatory Period (for the purposes of this Section 4.6, the report of the independent appraisal company as modified by the report of the independent expert or experts is referred to as the "Initial Re-valuation Report");
- (d) paragraph (b) applies – the independent expert or experts referred to in that paragraph must comply with the requirements relating to the Initial Re-valuation, and (in so far as their asset re-valuation report is concerned) the requirements relating to the Initial Re-valuation Report, as set out in this Section 4.6, and those experts must provide their asset re-valuation report to the ERC at the latest by 11 months prior to the commencement of the Second Regulatory Period (for the purposes of this Section 4.6, the report of the independent expert or experts is referred to as the "Initial Re-valuation Report").

- 4.6.3 The Initial Re-valuation must be undertaken using an optimised replacement cost approach, for which purposes the following applies:
- (a) the criteria which must be used in undertaking the Initial Re-valuation must be determined by the ERC prior to the commencement of the Initial Re-valuation and in any event not later than 31 December 2003 (unless the First Regulatory Period is to end on 31 December 2004 pursuant to Section 2.2.1(a), in which case those criteria must be determined by the ERC as soon as is reasonably practicable); and
 - (b) the principles referred to in Sections 4.6.4, 4.6.5 and 4.6.6 must be applied.
- 4.6.4 For the purposes of the Initial Re-valuation, and in the circumstances specified below in connection with them, the following methods of re-valuation may be used for different Asset Categories (as defined in, or otherwise approved by the ERC pursuant to, Section 4.6.5):
- (a) **Indexation** - this method is appropriate for assets where there has been little technological change and most, if not all, direct costs that have been incurred and capitalised in respect of those assets would have to be incurred if they were replaced. This method has the feature that the valuation is directly linked to the historical value of the relevant assets, thereby ensuring that all relevant costs are included in the valuation.
 - (b) **Absolute valuation by replacement cost analysis** - this method of valuation involves valuing the relevant assets at their current unit prices multiplied by their volumes. Such prices may be verified by reference to the purchase price of like assets within the last twelve (12) months or by reference to recent documented arm's length quotations for the sale of those (or similar) assets. Such prices should include the discounts available from purchasing in the volumes which have been used in the normal course of business and must be increased to cover relevant costs arising from design, procurement, mobilisation, construction and commissioning. This approach may be used in valuing an asset where there has not been significant technological change and where it has not been possible to develop an appropriate index for the valuation of that asset for the purposes of the re-valuation method referred to in paragraph (a).
 - (c) **Absolute valuation using modern equivalent asset analysis** - this method of valuation involves valuing the relevant assets at the cost of a modern equivalent asset with similar service potential (for example, an asset which replicates at least their current capacity and functionality). It may be used when it is not possible to determine the current replacement cost for an asset, eg. because that asset is no longer manufactured.
- 4.6.5 The Initial Re-valuation must be undertaken utilising more than a single weighted average asset category, the detail of the re-valuation must be reconciled back to the Regulated Entity's asset register or general ledger (as required), and such reconciliation must be fully documented in advance of the submission of the

Initial Re-valuation Report to the ERC. The Initial Re-valuation Report must specify the reported re-valued asset values, the sources of the information used in calculating those values, the weighted average age of the assets, and the proposed weighted average economic life, of the following Asset Categories j (or of such other asset categories as the ERC approves):

- (a) for transmission lines, the relevant Asset Categories are as follows:
 - (i) buildings, civil works and establishment;
 - (ii) towers and associated lines;
 - (iii) poles and associated lines;
 - (iv) underground cables;
 - (v) sub-sea cables;
 - (vi) easements owned by the Regulated Entity;
 - (vii) other;
 - (viii) spares;
- (b) for transmission substation components, the relevant Asset Categories are as follows:
 - (i) buildings, civil works and establishment;
 - (ii) transformers;
 - (iii) circuit breakers;
 - (iv) instrument transformers;
 - (v) meters and protection;
 - (vi) reactors;
 - (vii) buswork;
 - (viii) other;
 - (ix) spares;
- (c) for communications plant, the relevant Asset Categories are as follows:
 - (i) buildings, civil works and establishment;
 - (ii) communications plant and infrastructure;
 - (iii) ancillary infrastructure;
 - (iv) other;
 - (v) spares;
- (d) for system operations, the relevant Asset Categories are as follows:
 - (i) buildings, civil works and establishment;
 - (ii) control room and control infrastructure;

- (iii) ancillary infrastructure;
 - (iv) other;
 - (e) for non-network assets, the relevant Asset Categories are as follows:
 - (i) computers and office equipment;
 - (ii) plant, tools and equipment;
 - (iii) furniture and fittings;
 - (iv) commercial buildings;
 - (v) land;
 - (vi) other.
- 4.6.6 In undertaking the optimisation of the re-valuation of the assets based on replacement cost, at least the following optimisation principles must be employed:
- (a) assets which are assessed to have an unreasonable degree of over capacity or excess redundancy (ie. assets which are unreasonably over-designed or have unreasonably excessive installed capacity) will have their value split between the value of that capacity or redundancy which is reasonably necessary to meet Customer requirements for Regulated Transmission Services within the electricity transmission network planning horizon (see paragraph (b)) and the value of that capacity or redundancy which is in excess of this requirement – for these purposes, what is reasonable must be assessed having regard to the need to ensure reliability in the provision of Regulated Transmission Services into the future, and investment that is reasonably undertaken to meet the target levels of performance determined by the ERC pursuant to Article VIII will be deemed to be reasonable;
 - (b) the electricity transmission network planning horizon will be taken to be 15 years or as otherwise determined by the ERC based on reasonable planning policies in the context of an electricity transmission network in the Philippines; and
 - (c) the analysis of over capacity or excess redundancy will be based on there being no changes to the location of supply and demand (ie. take-off points for generators and loads), transmission line or cable routes, easements or substation locations, but existing network elements can be re-rated or re-designed in a notional sense to assess their optimised value.
- Other optimisation principles may be used as approved by the ERC following advice from an independent expert or experts referred to in Section 4.6.2. Such principles must include the manner in which windfall gains and losses arising from the Initial Re-valuation are to be treated.
- 4.6.7 The date of the Initial Re-valuation must be twelve (12) months prior to the commencement of the Second Regulatory Period.

4.6.8 The Initial Re-valuation Report must differentiate between those assets which are to be included in the regulatory asset base and those assets which are to be excluded from the regulatory asset base on the basis that the regulatory asset base must only include assets to the extent that such assets:

- (a) are necessary to meet Customer requirements for Regulated Transmission Services within the electricity transmission network planning horizon referred to in Section 4.6.6(b);
- (b) except in the case of spares, are in service (ie. have been commissioned and are providing a service);
- (c) in the case of spares, are in reasonable quantities as determined by the ERC (following the provision to the ERC, pursuant to Section 7.1.2(b), of information relating to usage and delivery lags); and
- (d) in the case of easements, are clearly documented as being owned by the Regulated Entity.

4.6.9 For the purposes of Section 4.6.10, the CWIP Factor as it applies in respect of all assets or an Asset Category is intended to compensate for the investment cost (ie. the time value of money), calculated using a typical spend profile for assets of the relevant type (at the weighted average cost of capital determined by the ERC in accordance with Section 4.9), over the typical period from the commencement of the construction of such assets to the commissioning of those assets (excluding any periods of unjustified delay). The CWIP Factor must be derived from a calculation method approved by the ERC which could take the form of:

- (a) uniformly escalating the optimised depreciated replacement cost of the revalued assets by a constant factor; or
- (b) directly estimating the investment cost for specific past projects and adding this cost to the optimised replacement cost of the revalued assets; or
- (c) another method approved by the ERC.

The CWIP Factor may be the same for all revalued assets or may differ as between Asset Categories.

4.6.10 The Initial Re-valuation Report must estimate the rolled-forward depreciated regulatory asset base for each Asset Category j as at the commencement of the first Regulatory Year (t) in the Second Regulatory Period ($RAB_{oj,t}$). For these purposes, $RAB_{oj,t}$ is equal to $RAB_{cj,t-1}$ as calculated in accordance with the formula specified in Section 4.7.2 except that, for the purposes of applying that formula:

- (a) $RAB_{oj,t-1}$ will be deemed to be the value of each asset in Asset Category j that is to be included in the regulatory asset base (as defined in Section 4.6.8) and that is in existence as at the date of the Initial Re-valuation, such value being its optimised depreciated replacement cost as at the date of the Initial Re-valuation increased by the application of the relevant CWIP

Factor (except that the CWIP Factor must not be applied to the extent the asset is categorised as part of spares, easements, buildings, civil works and establishment, or non-network assets);

- (b) $Capex_{j,t-1}$ will be deemed to be the actual or budgeted capital expenditure of the Regulated Entity on assets within Asset Category j for the period from the date of the Initial Re-valuation to the date of commencement of the Second Regulatory Period to the extent such expenditure is reasonable and to the extent it is attributable to assets which would (if they had been in existence as at the date of the Initial Re-valuation) be included in the regulatory asset base (as defined in Section 4.6.8), increased by the application of the relevant CWIP Factor (except that the CWIP Factor must not be applied to the extent the relevant capital expenditure is on an asset that is categorised as part of spares, easements, buildings, civil works and establishment, or non-network assets);
- (c) $RegDepn_{oj,t-1}$ will be deemed to be the Regulatory Depreciation of those assets in Asset Category j that are to be included in the regulatory asset base (as defined in Section 4.6.8) and that are in existence as at the date of the Initial Re-valuation, excluding spares, easements and land, such Regulatory Depreciation being calculated in accordance with Section 4.8.1 (but as if the reference to Regulatory Year t in that Section were instead a reference to the period from the date of the Initial Re-valuation to the date of commencement of the Second Regulatory Period);
- (d) $RegDepn_{cj,t-1}$ will be deemed to be the Regulatory Depreciation of the capital expenditure on assets within Asset Category j , which is referred to in Section 4.6.10(b), excluding spares, easements and land, such Regulatory Depreciation being calculated consistently with the methodology set out in Section 4.8.1 (but as if the reference to Regulatory Year t in that Section were instead a reference to the period from the actual or budgeted date of commissioning of the asset to the date of commencement of the Second Regulatory Period); and
- (e) $Disposals_{j,t-1}$ will be deemed to be the actual or budgeted net receipts from the disposal, during the period from the date of the Initial Re-valuation to the date of commencement of the Second Regulatory Period, of assets within Asset Category j that are to be included in the regulatory asset base (as defined in Section 4.6.8) to the extent such net receipts are reasonable. The net receipts from the disposal of such an asset will be determined as the receipts from the disposal of that asset, minus the value of that asset at the actual or budgeted date of its disposal. The value of that asset at the actual or budgeted date of its disposal will be determined as the rolled-forward depreciated regulatory asset base value of that asset at that time. Where the net receipts from the disposal of an asset are negative and are materially different from the rolled-forward depreciated regulatory asset base value of that asset, the net value must be retained in a separate asset category, and must be amortized over the remaining life of the disposed

asset, as if it constituted an asset which continues to be used to provide services.

- 4.6.11 The Initial Re-valuation Report must also identify the historical cost of the regulatory asset base (as defined in Section 4.6.8) at the date of the Initial Re-valuation. Such historical cost must be depreciated in a similar manner to the rolled-forward depreciated regulatory asset base under Section 4.6.10 to obtain the opening written-down historical cost of the regulatory asset base at the commencement of the first Regulatory Year in the Second Regulatory Period. Further, the opening written-down historical cost must be rolled-forward for the Second Regulatory Period in a similar manner to the rolled-forward depreciated regulatory asset base under Section 4.7 to obtain an opening written-down historical cost of the regulatory asset base at the commencement of each subsequent Regulatory Year in the Second Regulatory Period. These written-down historical costs are used in the Building Block methodology to determine the $HCDepn_{t-1}$ as set out in Section 4.12.3.
- 4.6.12 The ERC must determine the rolled-forward depreciated regulatory asset base for each Asset Category (as defined in, or otherwise approved by the ERC pursuant to, Section 4.6.5) as at the commencement of the first Regulatory Year in the Second Regulatory Period based on consideration of the information available to it including the estimate of the rolled-forward depreciated regulatory asset base for that Asset Category as contained in the Initial Re-valuation Report pursuant to Section 4.6.10.

4.7 Regulatory Asset Base

- 4.7.1 The Regulatory Asset Base for any Regulatory Year t (RAB_t) is derived from a roll-forward calculation of the value of each Asset Category j and is calculated as follows:

$$RAB_t = (RAB_{o,t} + RAB_{c,t}) / 2$$

Where:

$RAB_{o,t}$ = In the case where Regulatory Year t is the first Regulatory Year in the Second Regulatory Period, the sum across the Asset Categories j of the rolled-forward depreciated regulatory asset base for each Asset Category j as at the commencement of the first Regulatory Year in the Second Regulatory Period ($RAB_{oj,t-1}$) as determined by the ERC under Section 4.6.12; or

= In the case where Regulatory Year t is a Regulatory Year (other than the first Regulatory Year) in the Second Regulatory Period, the sum across the Asset Categories j of the opening rolled-forward depreciated regulatory asset base for each Asset Category j for that Regulatory Year t ($RAB_{oj,t} = RAB_{cj,t-1}$), as defined in Section 4.7.2.

$RAB_{c,t}$ = The sum across the Asset Categories j of the closing rolled-forward depreciated regulatory asset base for each Asset

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Category j for Regulatory Year t ($RAB_{cj,t}$), as defined in Section 4.7.2.

4.7.2 The closing rolled-forward depreciated regulatory asset base for Asset Category j for Regulatory Year t ($RAB_{cj,t}$) is calculated as follows:

$$RAB_{cj,t} = RAB_{oj,t} - \text{RegDepn}_{oj,t} + \text{Capex}_{j,t} - \text{RegDepn}_{cj,t} - \text{Disposals}_{j,t}$$

Where:

$RAB_{oj,t}$ = The opening rolled-forward depreciated regulatory asset base for Asset Category j for Regulatory Year t, which is numerically equal to $RAB_{cj,t-1}$ except that, where Regulatory Year t is the first Regulatory Year in the Second Regulatory Period, $RAB_{oj,t}$ is the rolled-forward depreciated regulatory asset base for Asset Category j as at the commencement of the first Regulatory Year in the Second Regulatory Period as determined by the ERC under Section 4.6.12;

$\text{RegDepn}_{oj,t}$ = The Regulatory Depreciation, for Regulatory Year t, of those assets in Asset Category j (excluding spares, land and easements) that were included in the rolled-forward depreciated regulatory asset base for Asset Category j as at the commencement of the first Regulatory Year in the Second Regulatory Period as determined by the ERC consistently with its determination under Section 4.6.12 and with the method for calculating the Regulatory Depreciation for that Asset Category as set out in Section 4.8.1;

$\text{Capex}_{j,t}$ = The forecast capital expenditure of the Regulated Entity on assets within Asset Category j for Regulatory Year t as approved by the ERC under Section 4.10.5;

$\text{RegDepn}_{cj,t}$ = The Regulatory Depreciation, for Regulatory Year t, of the forecast capital expenditure of the Regulated Entity on assets (excluding spares, land and easements) within Asset Category j (as approved by the ERC under Section 4.10.5) to the extent that such forecast capital expenditure relates to a Regulatory Year in the Second Regulatory Period which precedes Regulatory Year t, such Regulatory Depreciation being calculated consistently with the methodology set out in Section 4.8.1; and

$\text{Disposals}_{j,t}$ = The forecast receipts from the disposal, during Regulatory Year t, of assets within Asset Category j, as determined by the ERC as part of the Regulatory Reset Process for the Second Regulatory Period under Article VII.

Such forecast receipts will be at the rolled-forward depreciated regulatory asset value for the relevant assets.

- 4.7.3 For the purposes of this Section 4.7 and Section 4.8, assets are to be included in the same categories as defined in, or otherwise approved by the ERC pursuant to, Section 4.6.5 or in smaller categories (Asset Categories $j = 1 \dots n$) such that each category includes similar assets with similar economic lives (such lives being calculated in accordance with Section 4.8.1).

4.8 Regulatory Depreciation

- 4.8.1 The Regulatory Depreciation for Asset Category j for Regulatory Year t ($\text{RegDepn}_{j,t}$) is calculated on a straight line basis using either of the following methods depending on the available data :

$$\text{RegDepn}_{j,t} = \text{ORC}_{j,t} / \text{RegL}_{j,t} \text{ or } \text{ODRC}_{j,t} / \text{RemL}_{j,t}$$

Where:

$\text{ORC}_{j,t}$ = the optimised replacement cost for the assets that are within Asset Category j as at the commencement of Regulatory Year t ;

$\text{RegL}_{j,t}$ = the Regulatory Life of Asset Category j and is equal to the weighted average⁸ economic life of the assets that are within Asset Category j as at the commencement of Regulatory Year t , where the economic life of an asset is taken to expire when the costs of maintenance and repair of that asset exceed the efficient replacement cost of it on a project comparison basis, using a forward looking discounted cash flow analysis, or as otherwise determined by the ERC. As a result of the report referred to in Section 4.8.3, $\text{RegL}_{j,t}$ may differ from the asset life used for financial reporting or taxation purposes;

$\text{ODRC}_{j,t}$ = the optimised depreciated replacement cost for the assets that are within Asset Category j as at the commencement of Regulatory Year t , calculated (on the basis of the application of straight line depreciation of the optimised replacement cost for those assets) by multiplying their optimised replacement cost by the weighted average Remaining Life of Asset Category j ($\text{RemL}_{j,t}$) and dividing that product by the Regulatory Life of Asset Category j ($\text{RegL}_{j,t}$);

$\text{RemL}_{j,t}$ = $(\text{RegL}_{j,t} - \text{Age}_{j,t})$; and

⁸ Weighted by optimised replacement cost or by optimised depreciated replacement cost, depending on the information availability for asset age in the Regulated Entity's asset register systems.

$Age_{j,t}$ = the weighted average age of the assets that are within Asset Category j as at the commencement of Regulatory Year t .

4.8.2 The Regulatory Depreciation for Regulatory Year t in real terms ($RegDepn_t$) is calculated as follows:

$RegDepn_t$ = ($RegDepn_{o,t}$ + $RegDepn_{c,t}$)

Where:

$RegDepn_{o,t}$ = Sum of $RegDepn_{oj,t}$ for Regulatory Year t for each Asset Category j , as defined in Section 4.7.2; and

$RegDepn_{c,t}$ = Sum of $RegDepn_{cj,t}$ for Regulatory Year t for each Asset Category j , as defined in Section 4.7.2.

4.8.3 For the purposes of this Section 4.8, the ERC must require the Regulated Entity to retain an independent expert or experts pursuant to Article XIV for the purpose of preparing a written report in respect of:

- (a) the condition of such assets as are used by the Regulated Entity to provide Regulated Transmission Services and as are specified by the ERC (either specifically or by reference to a category of assets); and
- (b) the regulatory life which should be attributed to such assets.

Such report must also recommend the manner in which windfall gains and losses arising from changes in the regulatory life of the assets referred to in this Section 4.8.3 are to be treated.

4.9 Weighted Average Cost of Capital Determination

4.9.1 The purpose of calculating the weighted average cost of capital is to provide a cost of capital for regulatory purposes which can be applied to a Building Block cash flow model that generates a regulated revenue stream over a defined regulatory period for the Regulated Entity providing Regulated Transmission Services.

4.9.2 For these purposes a classical weighted average cost of capital (WACC) is to be used as, in the ERC's view, it best balances the financial Building Blocks in Section 4.5.7 and the principles in Section 4.4.1. The ERC must require the Regulated Entity to retain an independent expert or experts pursuant to Article XIV for the purpose of assisting the ERC to determine the WACC during the Regulatory Reset Process for the Second Regulatory Period under Article VII.

4.9.3 The WACC (expressed in decimal, as opposed to percentage, terms) is to be calculated as follows:

$WACC$ = $[r_e \times E / V] + [r_d \times D / V]$

Where:

r_e = the cost of equity and is calculated in accordance with Section 4.9.4;

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r_d	=	the cost of debt and is calculated in accordance with Section 4.9.10;
E	=	the amount of equity funding assumed for regulatory purposes in the capital structure of the Regulated Entity, being 50% of V for the Second Regulatory Period ⁹ ;
D	=	the amount of debt funding assumed for regulatory purposes in the capital structure of the Regulated Entity, being 50% of V for the Second Regulatory Period ⁹ ; and
V	=	$E + D$.

4.9.4 The cost of equity (r_e), expressed in decimal terms, is calculated as follows:

$$r_e = r_f + \text{Beta}_e \times (r_m - r_f)$$

Where:

r_f = the risk-free rate within the Philippines, expressed in decimal terms, as determined in accordance with Section 4.9.5;

Beta_e = the Equity Beta for the electricity transmission business undertaken by the Regulated Entity as determined by the ERC for regulatory purposes in accordance with Sections 4.9.6 to 4.9.8; and

$(r_m - r_f)$ = the Market Risk Premium (MRP), expressed in decimal terms, adopted by the ERC as specified in Section 4.9.9.

4.9.5 The best approximation of a risk-free rate is generally the yield on the longest dated government borrowing instrument, usually a Treasury Bill or equivalent. In the USA this is either the 10 year government bond or the 30 year government bond. Some regulators in overseas jurisdictions prefer to use the yield for a government bond with the same duration as the relevant regulatory period. In the Philippines, the longest dated government bond is a 10 year Treasury Bill. The ERC will use the yield on such Treasury Bills as traded in the Philippines secondary bond markets¹⁰ as the risk-free rate in the Philippines unless there is insufficient liquidity, or the time to maturity is too short, for that market yield to be a satisfactory estimate of the risk-free rate within the Philippines. If the latter is the case, the ERC will determine the risk-free rate only after considering alternative overseas data sources and the related adjustment calculations which

⁹ OFGEM in the UK has used $D=60\% - 70\%$ for its decisions on NGC (2000). The ACCC in Australia has used $E = 40\%$ and $D=60\%$ for its decisions on SPI Powernet (Dec 2002), ElectraNet SA (Dec 2002), Powerlink (Nov 2001), TransGrid (Jan 2000), and Snowy (Jan 2001).

¹⁰ A secondary bond market or equivalent must be used so that sufficient liquidity (ie. volume of trading) in the market allows the yields to represent a market price for the bonds. The yield on direct government issues to the banks does not have sufficient liquidity for regulatory purposes.

lead to the derivation of a viable proxy for the risk-free rate within the Philippines.

- 4.9.6 The Equity Beta of a business is a measure of the systematic or non-diversifiable risk of that business in comparison to the risk of the equity market as a whole. The Equity Beta is a function of the covariance of the volatility of the returns to the business in the active market place compared to the volatility of average market returns: it is higher than 1.0 for businesses which exhibit higher share price volatility than the market average, and lower than 1.0 for those with share price volatility that is less than the market average. The Equity Beta is difficult to measure accurately for an individual business due to low sample size of data and the volatile nature of returns (the circumstances of businesses change over time).
- 4.9.7 For the Second Regulatory Period, the ERC will determine the Equity Beta for the electricity transmission business undertaken by the Regulated Entity ($Beta_e$) in accordance with the following formula:

$$Beta_e = Beta_a \times [1 + (D / E)]$$

Where:

- $Beta_a$ = the Asset Beta determined for the Regulated Entity by the ERC in accordance with Section 4.9.8, based on submissions made to the ERC as part of the Regulatory Reset Process for the Second Regulatory Period under Article VII;
- D = as defined in Section 4.9.3; and
- E = as defined in Section 4.9.3.

- 4.9.8 The Asset Beta for the Regulated Entity would normally be derived from an examination of the Equity Betas observed in the local Philippines equity market place. However, because such market information may not be readily available and may suffer from either low trading volumes or insufficient data points for statistical veracity, the ERC will determine the Asset Beta for the Regulated Entity on the basis of the Asset Betas of comparable overseas electricity businesses¹¹. The ERC recognises that such comparison is difficult due to the different circumstances which apply in other jurisdictions as a result of, for example, differences in geographic and climatic conditions, market structures, business structures and other matters which may affect equity return volatility. Accordingly, for this purpose, the ERC will primarily have regard to the Asset Betas of electricity transmission businesses in overseas countries of a similar nature to the Philippines but, where issues relating to market liquidity, data availability or data consistency are of concern, it will also have regard to the Asset

¹¹ OFGEM in the UK has used Asset Beta = 0.63 – 0.42 for its decisions on NGC (2000). The ACCC in Australia has used Asset Beta = 0.40 for its decisions on SPI Powernet (Dec 2002), ElectraNet SA (Dec 2002), Powerlink (Nov 2001), and Snowy (Jan 2001), and Asset Beta was within the range of 0.35 to 0.50 for TransGrid (Jan 2000).

Betas of integrated electricity businesses or of electricity transmission or distribution businesses in developed countries, with an emphasis on those businesses subject to incentive based and/or competitive regulatory regimes. The ERC will calculate the Asset Beta of each such business ($Beta_a$) in accordance with the following formula:

$$Beta_a = Beta_e / [1 + (1 - T_e) \times D_m / E_m]$$

Where:

$Beta_e$ = the equity beta of the relevant overseas business as measured empirically by an independent international ratings agency or financial market reporting company such as Bloomberg or a similar service;

T_e = the effective corporate tax rate for that business as ascertained from information provided by an independent international ratings agency or financial market reporting company or, in the absence of such data, the corporate income tax rate for the country in which the relevant business is located (in either case expressed in decimal terms);

D_m = the amount of debt funding in the capital structure of that business as ascertained from information provided by an independent international ratings agency or financial market reporting company; and

E_m = the amount of equity funding in the capital structure of that business as ascertained from information provided by an independent international ratings agency or financial market reporting company.

4.9.9 The Market Risk Premium (MRP) is a measure of the risk associated with holding a portfolio of equity market assets rather than a portfolio of long-dated government bonds. The premium effectively measures the difference between the long-term average return to investors in the equity market of the Philippines (r_m) and the risk-free rate within the Philippines (r_f). Due to the smaller size, and potential lower liquidity, of the publicly traded equity market in the Philippines, the absence of history on long-term government bonds with reasonable liquidity and the absence of a reasonably long time-series of market data, the ERC will adopt, for the Second Regulatory Period, an MRP of 0.06¹².

4.9.10 The cost of debt (r_d), expressed in decimal terms, is calculated as follows:

¹² OFGEM in the UK has used $MRP = 0.035$ for its decisions on NGC (2000). The ACCC in Australia has used $MRP = 0.06$ for its decisions on SPI Powernet (Dec 2002), ElectraNet SA (Dec 2002), Powerlink (Nov 2001), TransGrid (Jan 2000), and Snowy (Jan 2001), and the ACCC has consistently suggested that in its view this number is too high.

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$$r_d = r_f + DM$$

Where:

r_f = the risk-free rate within the Philippines, expressed in decimal terms, as determined in accordance with Section 4.9.5; and

DM = the debt margin (or premium) within the Philippines (expressed in decimal terms) as determined by the ERC, which conceptually represents the margin above the risk-free rate within the Philippines that is requested by debt providers for providing funds to the Regulated Entity to the extent such debt arrangements are representative of arms length negotiated rates in liquid markets and are financially efficient.

In the Philippines, there may be an expectation that the debt margin for a regulated electricity transmission business will be higher than in more developed countries. The size and availability of debt funding sources from within the Philippines may be limited due to either bond market size or bank lending covenants. As a result access to the required debt levels may require the inclusion of a “guarantee” premium of one form or another in the cost of debt, which is above the debt margin seen in overseas markets. This margin might be for either a peso guarantee (where debt funds are sought in the Philippines and are guaranteed by an offshore bank) or a partial risk guarantee from the World Bank or similar international funding agency (where debt funds are sought outside the Philippines). The ERC must not allow the risks associated with the provision of debt finance to be double counted or over compensated within the debt margin, but the debt margin must reflect a realistic market outcome at the time it is determined. The ERC will determine the debt margin for the purposes of calculating the cost of debt only after considering alternative sources of debt funds which may be appropriate in the context of funding the Regulated Entity within the Philippines, such consideration to occur during the Regulatory Reset Process for the Second Regulatory Period under Article VII.

- 4.9.11 During the Regulatory Reset Process for the Second Regulatory Period under Article VII, the ERC will give the Regulated Entity and other interested parties the opportunity to make written submissions to the ERC on the method and data sources which the ERC should rely upon in its determination of the risk-free rate within the Philippines, the Equity and the Asset Betas, and the cost of debt for the Regulated Entity for the purposes of calculating WACC.
- 4.9.12 Once these Rules have come into effect, the formula for calculating WACC and its components as set out in this Section 4.9 must not be altered by the ERC for the Second Regulatory Period except with the agreement of the Regulated Entity.

4.10 Capital Expenditure Forecast

- 4.10.1 During the Regulatory Reset Process for the Second Regulatory Period under Article VII, the Regulated Entity must provide the ERC with its forward forecasts

of its proposed annual capital expenditure for each Regulatory Year in the Second Regulatory Period. This capital expenditure program must separately identify each capital expenditure project which is forecast to cost PhP 50 million or more. For both these separately identified projects and the remaining forecast capital expenditure, the forecasts must each be broken down into the asset categories identified in Section 4.6.5 or such other asset categories as the ERC approves. The capital expenditure program will be subject to review by an independent expert or experts under Section 4.10.4.

- 4.10.2 For each of the capital expenditure projects which is separately identified in accordance with Section 4.10.1, the capital expenditure program must be accompanied by:
- (a) a description of the project;
 - (b) the reason for the ranking of the project relative to other projects in terms of its proposed commissioning date;
 - (c) the impact the project is expected to have on those measures of the performance of the Grid which are determined by the ERC under Article VIII;
 - (d) a classification of the project into the following categories:
 - (i) load growth (identifying the load growth expected to be met over the electricity transmission network planning horizon of 15 years referred to in Section 4.6.6 (b));
 - (ii) non-load growth (identifying the primary reasons for the expenditure) which is to be further sub-categorized as follows:
 - (A) network; or
 - (B) non-network; or
 - (C) network control, safety or metering;
 - (e) a further sub-classification of the projects in Section 4.10.2 (d) into the following:
 - (i) replacement related (identifying why the assets need replacing, what remaining asset value is sought to be written off, if any, and the potential disposal value of the replaced assets); or
 - (ii) refurbishment related (identifying the increase in operational life expected from the refurbishment, if any); or
 - (iii) new assets (identifying which assets are for shared network infrastructure and which are for new connections); and
 - (f) a division of the forecast capital expenditure for that project into the forecast annual capital expenditure on that project, with a further division into directly attributable expenditures and allocated overheads.

4.10.3 For the remaining forecast capital expenditure which is not allocated to separately identified capital expenditure projects in accordance with Section 4.10.1, the capital expenditure program must be accompanied by a justification against each of the asset categories identified in Section 4.6.5, or such other asset categories as the ERC approves, as to why the forecast expenditures are necessary and are of reasonable magnitude, and must be categorised as follows:

- (a) network; or
- (b) non-network; or
- (c) as otherwise determined by the ERC.

4.10.4 The ERC must require the Regulated Entity to retain an independent expert or experts pursuant to Article XIV for the purpose of reviewing the capital expenditure program and accompanying documentation to determine:

- (a) whether the capital expenditure program has been represented fairly such that all related capital expenditure is grouped together into the one project and has not been sub-divided to place it below the individual project reporting threshold in Section 4.10.1, is based upon the best available prices (adjusted to PhP) obtainable from international markets, is reasonably efficient from a design and implementation point of view, is likely to support the forecast growth in customer connections, co-incident peak demand and energy delivered and is sufficient to allow the Regulated Entity to achieve or exceed the applicable target levels of performance specified under Article VIII; and
- (b) whether the PhP/\$US exchange rate and CPI forecasts referred to in Section 4.10.6 are reasonable.

4.10.5 Once the independent expert or experts referred to in Section 4.10.4 have presented their written reports to the ERC as required by Section 14.2.7, the ERC must decide, following a consideration of the recommendations of the independent expert or experts as provided in their written reports:

- (a) whether the capital expenditure program is based upon the best available prices (adjusted to PhP) obtainable from international markets, is reasonably efficient, is likely to support the forecast growth in customer connections, co-incident peak demand and energy delivered and is sufficient to allow the Regulated Entity to achieve or exceed the applicable target levels of performance specified under Article VIII; and
- (b) whether the PhP/\$US exchange rate and CPI forecasts referred to in Section 4.10.6 are reasonable.

If the ERC decides these conditions have been met it must approve:

- (c) the capital expenditure program proposed by the Regulated Entity; and
- (d) the PhP/\$US exchange rate and CPI forecasts used by the Regulated Entity.

If the ERC decides these conditions have not been met it must, after consulting with the Regulated Entity, approve such program or forecasts with such amendments as it considers necessary for those conditions to be met.

- 4.10.6 The capital expenditure forecasts provided by the Regulated Entity as part of the capital expenditure program must be provided in nominal terms and must be supported by detailed documentation which clearly and comprehensively substantiates those forecasts, including details of the PhP/\$US exchange rate and CPI forecasts, for each Quarter of the Second Regulatory Period, which have been used by the Regulated Entity to generate those forecasts.
- 4.10.7 Any proposed capital expenditure for a Regulatory Year in the Second Regulatory Period which is contained in a plan for expansion or improvement of transmission facilities that is approved by the ERC pursuant to Section 9(d) of the EPIRA or Rule 6, Sections 7(d) or 10(c) of the IRR will be deemed to be forecast capital expenditure for that Regulatory Year that is approved for the purposes of this Section 4.10.
- 4.10.8 The ERC must determine the capital expenditure forecast to be included in the Building Block analysis based on consideration of the information available to it including any reports of an independent expert or experts referred to in Section 4.10.4.
- 4.10.9 At the same time as the Regulated Entity provides the ERC with its forward forecasts of its proposed annual capital expenditure pursuant to Section 4.10.1, the Regulated Entity must also provide to the ERC a written statement that separately identifies, for each Regulatory Year in the Second Regulatory Period, the Regulated Entity's proposed annual capital expenditure on Ancillary Services that are provided using the Grid.
- 4.10.10 The ERC must consider the written statement referred to in Section 4.10.9 and, if it is of the view that the proposed annual capital expenditure referred to in Section 4.10.9 is likely to be inadequate to enable the requirements of the Grid Code to be complied with, may advise that view to the Regulated Entity and the Grid Management Committee which is established under the Grid Code.

4.11 Operating and Maintenance Expenditure

- 4.11.1 During the Regulatory Reset Process for the Second Regulatory Period under Article VII, the Regulated Entity must provide the ERC with:
 - (a) its historical operating and maintenance expenditure for each of the three calendar years preceding the commencement of the Second Regulatory Period (the last such calendar year must include the Regulated Entity's best estimate of such expenditure for that year to the extent such operating and maintenance expenditure for that year has not then been incurred); and
 - (b) its forward forecasts of its proposed annual operating and maintenance expenditure for each Regulatory Year in the Second Regulatory Period.

Such annual historical and forecast operating and maintenance expenditure must separately identify operating and maintenance expenditure grouped into the following categories and sub-categories:

- (c) payroll, in sub-categories as follows:
 - (i) network operations supervision and engineering staff;
 - (ii) network operations other staff;
 - (iii) network planning supervision and engineering staff;
 - (iv) system operations supervision and engineering staff;
 - (v) administration, human resources, finance, corporate and regulatory staff;
- (d) network operations;
- (e) network maintenance;
- (f) plant and equipment insurance;
- (g) system operations;
- (h) WESM compliance (excluding any expenses incurred as the Market Operator);
- (i) bad debts;
- (j) internal and external audit functions;
- (k) regulatory liaison and compliance (including the reasonable costs associated with any independent experts retained by the Regulated Entity pursuant to Article XIV, the reasonable costs of any independent appraisal company engaged by the Regulated Entity pursuant to Section 4.6.2(a), the reasonable costs of any external consultants engaged by the ERC as referred to in Section 14.2.9 which the Regulated Entity is required to reimburse, and the reasonable costs associated with complying with the Business Separation Guideline);
- (l) corporate and central office;
- (m) IT licences, operations and maintenance;
- (n) lease payments (buildings, vehicles, furniture & fittings and other);
- (o) net foreign exchange, ie. foreign exchange losses (positive) plus foreign exchange gains (negative);
- (p) property maintenance;
- (q) property insurance;
- (r) other.

4.11.2 During the Regulatory Reset Process for the Second Regulatory Period under Article VII, the Regulated Entity must also provide the ERC with:

- (a) a summary of its historical payments of taxes, levies and duties (other than corporate income tax) for each of the three calendar years preceding the commencement of the Second Regulatory Period (the last such calendar year must include the Regulated Entity's best estimate of such payments for that year to the extent such payments for that year have not then been made); and
- (b) its forward forecasts of its expected payments of taxes, levies and duties (other than corporate income tax) for each Regulatory Year in the Second Regulatory Period.

Such payments (where they can be separately identified) must be grouped into the same expenditure categories and sub-categories as in Section 4.11.1 and the Regulated Entity must ensure that such payments are not double counted.

- 4.11.3 The annual operating and maintenance expenditure forecasts must be accompanied by a justification against each of the expenditure categories identified in Section 4.11.1 as to why the forecast expenditures are necessary and are of reasonable magnitude (such forecasts could, for example, be supported by benchmarks against overseas electricity transmission businesses). The written justification must also demonstrate improvements in operational efficiency and productivity over the Second Regulatory Period. For these purposes, benchmarks against operational parameters such as staff numbers, energy throughput, number of customer connections, service performance or other measures may be used to justify the relevant expenditures.
- 4.11.4 The ERC must require the Regulated Entity to retain an independent expert or experts pursuant to Article XIV for the purpose of reviewing the operating and maintenance expenditure forecasts and accompanying documentation to determine:
 - (a) whether the forecast operating and maintenance expenditure is reasonably efficient, is likely to support the forecast growth in customer connections, co-incident peak demand and energy delivered and is sufficient to allow the Regulated Entity to achieve or exceed the applicable target levels of performance specified under Article VIII;
 - (b) whether the forecasts for bad debts reflect a responsible approach to collections and are consistent with a reasonable strategy for improving collections; and
 - (c) whether the PhP/\$US exchange rate and CPI forecasts referred to in Section 4.11.6 are reasonable.
- 4.11.5 Once the independent expert or experts referred to in Section 4.11.4 have presented their written reports to the ERC as required by Section 14.2.7, the ERC must decide, following a consideration of the recommendations of the independent expert or experts as provided in their written reports:
 - (a) whether the forecast operating and maintenance expenditure is reasonably efficient, is likely to support the forecast growth in customer connections,

co-incident peak demand and energy delivered and is sufficient to allow the Regulated Entity to achieve or exceed the applicable target levels of performance specified under Article VIII;

- (b) whether the forecasts for bad debts reflect a responsible approach to collections and are consistent with a reasonable strategy for improving collections; and
- (c) whether the PhP/\$US exchange rate and CPI forecasts referred to in Section 4.11.6 are reasonable.

If the ERC decides these conditions have been met it must approve:

- (d) the forecast operating and maintenance expenditure (and forecast payments of taxes, levies and duties referred to in Section 4.11.2 (b)) proposed by the Regulated Entity; and
- (e) the PhP/\$US exchange rate and CPI forecasts used by the Regulated Entity.

If the ERC decides these conditions have not been met it must, after consulting with the Regulated Entity, approve such forecasts with such amendments as it considers necessary for those conditions to be met.

4.11.6 The operating and maintenance expenditure forecasts, and forecast payments of taxes, levies and duties referred to in Section 4.11.2 (b), provided by the Regulated Entity must be provided in nominal terms and must be supported by detailed documentation which clearly and comprehensively substantiates those forecasts, including details of the PhP/\$US exchange rate, PhP/Yen exchange rate and CPI forecasts, for each Quarter of the Second Regulatory Period, which have been used by the Regulated Entity to generate those forecasts.

4.11.7 The ERC must determine the operating and maintenance expenditure forecasts to be included in the Building Block analysis based on consideration of the information available to it including any reports of an independent expert or experts referred to in Section 4.11.4.

4.12 Calculation of Corporate Income Tax

4.12.1 The estimated corporate income tax payable by the Regulated Entity in Regulatory Year t ($Tax_{p,t}$) must be calculated by the ERC in accordance with the following formula:

$$Tax_{p,t} = NTIncome_{t-1} \times T_c$$

Where:

$NTIncome_{t-1}$ = the Net Taxable Income of the Regulated Entity for Regulatory Year $t-1$ as determined by the ERC on the basis of the methodology for its determination as set out in Section 4.12.2; and

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T_c = the corporate tax rate applicable in respect of the Regulated Entity pursuant to the laws of the Philippines.

4.12.2 For the purposes of Section 4.12.1, $NTIncome_{t-1}$ is calculated as the greater of zero and:

- (a) where Regulatory Year t is the first Regulatory Year in the Second Regulatory Period – the estimated taxable income of the Regulated Entity, for Regulatory Year t-1, arising from the provision of Regulated Transmission Services by the Regulated Entity (whether or not such taxable income arises in Regulatory Year t-1), reduced by any related accumulated tax loss carryover, as determined by the ERC; or
- (b) where Regulatory Year t is a Regulatory Year (other than the first Regulatory Year) in the Second Regulatory Period:

$$TIncome_{t-1} + AT_{t-2}$$

Where:

$TIncome_{t-1}$ = the taxable income of the Regulated Entity for Regulatory Year t-1 as calculated on the basis of the methodology for its determination set out in Section 4.12.3; and

AT_{t-2} = the sum of:

- (i) the estimated taxable income or tax loss of the Regulated Entity, for the last Regulatory Year in the First Regulatory Period, arising from the provision of Regulated Transmission Services by the Regulated Entity; and
- (ii) the estimated taxable income or tax loss of the Regulated Entity, for each of the Regulatory Years (if any) in the Second Regulatory Period which precede Regulatory Year t-1, arising from the provision of Regulated Transmission Services by the Regulated Entity,

to the extent that such sum is negative (ie. to the extent that such sum represents accumulated tax losses). For these purposes, taxable income will be treated as a positive amount and tax losses will be treated as a negative amount.

4.12.3 For the purposes of Section 4.12.2, $TIncome_{t-1}$ is calculated as:

$$TIncome_{t-1} = SMAR_{t-1} - Opex_{t-1} - HCDepr_{t-1} - RegInt_{t-1}$$

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Where:

- SMAR_{t-1} = the Smoothed Maximum Annual Revenue for Regulatory Year t-1 as calculated in accordance with Section 4.13.4;
- Opex_{t-1} = the nominal operating and maintenance expenditure, and the payments of taxes, levies and duties (other than corporate income taxes), which are forecast for Regulatory Year t-1 and which are approved by the ERC in accordance with Section 4.11;
- HCDepn_{t-1} = the regulatory historical cost depreciation of the Regulatory Asset Base for Regulatory Year t-1 (see Sections 4.6.11 and 4.7) in real terms as determined by the ERC on the basis of the methodology for the determination of RegDepn_{t-1} as set out in Sections 4.8.1 and 4.8.2, with the substitution of historical cost valuations for replacement cost valuations in the depreciation calculation (as per Philippines accounting practice); and
- RegInt_{t-1} = the interest payments on outstanding debt for Regulatory Year t-1 as determined by the ERC in accordance with the following formula:

$$\text{RegInt}_{t-1} = \text{RAB}_{t-1} \times D / V \times r_d$$

Where:

RAB_{t-1} = the Regulatory Asset Base for Regulatory Year t-1 as determined under Section 4.7.1;

D and V are as defined in Section 4.9.3; and

r_d = the cost of debt as calculated in accordance with Section 4.9.10.

4.12.4 The income tax adjustment amount for Regulatory Year t (ITA_t) must be calculated by the ERC in accordance with the following formula:

$$\text{ITA}_t = \frac{\sum_{n=1}^r [\text{ActTax}_{p,n} \times (1 + \text{WACC})^{y-1}]}{\{1 - [1 / (1 + \text{WACC})^5]\} / \text{WACC}}$$

Where:

Act Tax_{p,n} = The corporate income tax actually paid by the Regulated Entity for Regulatory Year n to the extent

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such tax relates to taxable income of the Regulated Entity (net of any related accumulated tax losses) which arises from the provision of Regulated Transmission Services by the Regulated Entity (whether or not such taxable income arises in Regulatory Year n);

n=1 ... r

where:

- (a) n = 1 for the First Regulatory Year; and
- (b) r is the second last Regulatory Year in the First Regulatory Period (ie. if the First Regulatory Period expires on 31 December 2005 r=2, but r = 1 if the First Regulatory Period ends on 31 December 2004 in accordance with Section 2.2.1(a) and r=3 if the First Regulatory Period ends on 31 December 2006 in accordance with Section 2.3.1);

WACC = The classical weighted average cost of capital as determined by the ERC in accordance with Section 4.9; and

y = The number of Regulatory Years in the period that commences at the beginning of Regulatory Year n and expires at the end of the last Regulatory Year in the First Regulatory Period (both dates inclusive).

4.12.5 For the purposes of Section 4.12.4:

- (a) the corporate income tax that is actually paid by the Regulated Entity for a Regulatory Year must be verified by returns received by the Bureau of Internal Revenue and evidence of payment by Authorized Agent Banks; and
- (b) the extent to which the tax referred to in paragraph (a) relates to taxable income of the Regulated Entity (net of any related accumulated tax losses) which arises from the provision of Regulated Transmission Services by the Regulated Entity must be certified by an auditor who:
 - (i) is registered as a certified public accountant under the Revised Accountancy Law (Presidential Decree No.692);
 - (ii) possesses the independence as defined in Part II Section 14 of the Code of Professional Ethics for Certified Public Accountants as promulgated by the Board of Accountancy and approved by the Professional Regulation Commission; and
 - (iii) is one of the five largest auditing firms in the Philippines (as measured by annual revenue derived in the Philippines) or is

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- ARR_{t+3} = the annual revenue requirement for the fourth Regulatory Year in the Second Regulatory Period as calculated in accordance with Section 4.5.7;
- ARR_{t+4} = the annual revenue requirement for the fifth Regulatory Year in the Second Regulatory Period as calculated in accordance with Section 4.5.7; and
- WACC = the classical weighted average cost of capital as determined by the ERC in accordance with Section 4.9.

4.13.3 The Efficiency Factor (X) must then be calculated for the Second Regulatory Period from the solution of the following equation (where only X is unknown) using the results of the calculation in Section 4.13.2:

$$\begin{aligned}
 PV_{t-1} = & (MAR_{t-1} - P_o) \times [1 + \\
 & (1 + \text{Inflation}_t - X) / (1 + \text{WACC}) + \\
 & (1 + \text{Inflation}_t - X) (1 + \text{Inflation}_{t+1} - X) / (1 + \text{WACC})^2 + \\
 & (1 + \text{Inflation}_t - X) (1 + \text{Inflation}_{t+1} - X) (1 + \text{Inflation}_{t+2} - X) / (1 + \\
 & \text{WACC})^3 + \\
 & (1 + \text{Inflation}_t - X) (1 + \text{Inflation}_{t+1} - X) (1 + \text{Inflation}_{t+2} - X) \\
 & (1 + \text{Inflation}_{t+3} - X) / (1 + \text{WACC})^4 + \\
 & (1 + \text{Inflation}_t - X) (1 + \text{Inflation}_{t+1} - X) (1 + \text{Inflation}_{t+2} - X) \\
 & (1 + \text{Inflation}_{t+3} - X) (1 + \text{Inflation}_{t+4} - X) / (1 + \text{WACC})^5]
 \end{aligned}$$

Where:

P_o is such amount (expressed in PhP) as the ERC determines to represent windfall gains and windfall losses in revenue resulting from exogenous factors, and to reduce price shocks during the transition from the First Regulatory Period to the Second Regulatory Period and from the Second Regulatory Period to the Third Regulatory Period, provided only that such amount must be:

- (a) less than or equal to $MAR_{t-1} - [ARR_t / (1 + \text{WACC})]$ (but must not be a negative amount) where $MAR_{t-1} \geq [ARR_t / (1 + \text{WACC})]$ (\geq meaning greater than or equal to); or
- (b) greater than or equal to $MAR_{t-1} - [ARR_t / (1 + \text{WACC})]$ (but must not be a positive amount) where $MAR_{t-1} \leq [ARR_t / (1 + \text{WACC})]$ (\leq meaning less than or equal to);

MAR_{t-1}, ARR_t and WACC are the same values as defined in Section 4.13.2, where t is the first Regulatory Year in the relevant Regulatory Period and the WACC is that applying at reset to the relevant Regulatory Period;

PV_{t-1} is as calculated pursuant to Section 4.13.2; and

Inflation_{t through to t+4} is the forecast inflation for Regulatory Year t, t+1, t+2, t+3 or t+4 (as the case may be), expressed in decimal (as opposed to percentage) terms, which is used by the ERC for the purpose of the Regulatory Reset Process for the Second Regulatory Period under Article VII.

4.13.4 The Smoothed Maximum Annual Revenue Requirement for each Regulatory Year in the Second Regulatory Period (SMAR_t) is calculated during the regulatory reset process as follows:

- (a) where the relevant Regulatory Year is the first Regulatory Year in the Second Regulatory Period, the Smoothed Maximum Annual Revenue for that Regulatory Year (SMAR_t) is:

$$SMAR_t = MAR_{t-1} \times (1 + Inflation_t - X);$$

- (b) where the relevant Regulatory Year is the second Regulatory Year in the Second Regulatory Period, the Smoothed Maximum Annual Revenue for that Regulatory Year (SMAR_{t+1}) is:

$$SMAR_{t+1} = SMAR_t \times (1 + Inflation_{t+1} - X);$$

- (c) where the relevant Regulatory Year is the third Regulatory Year in the Second Regulatory Period, the Smoothed Maximum Annual Revenue for that Regulatory Year (SMAR_{t+2}) is:

$$SMAR_{t+2} = SMAR_{t+1} \times (1 + Inflation_{t+2} - X);$$

- (d) where the relevant Regulatory Year is the fourth Regulatory Year in the Second Regulatory Period, the Smoothed Maximum Annual Revenue for that Regulatory Year (SMAR_{t+3}) is:

$$SMAR_{t+3} = SMAR_{t+2} \times (1 + Inflation_{t+3} - X); \text{ and}$$

- (e) where the relevant Regulatory Year is the last Regulatory Year in the Second Regulatory Period, the Smoothed Maximum Annual Revenue for that Regulatory Year (SMAR_{t+4}) is:

$$SMAR_{t+4} = SMAR_{t+3} \times (1 + Inflation_{t+4} - X),$$

Where:

MAR_{t-1} = the maximum allowed revenue for the last Regulatory Year in the First Regulatory Period as calculated in accordance with Section 3.2.1 but as if the Correction Factor for that year (K_t) were zero;

Inflation_{t ... t+4} = the forecast inflation for Regulatory Year t, t+1, t+2, t+3 or t+4 (as the case may be), expressed in decimal (as opposed to percentage) terms, which is used by the ERC for the purpose of the Regulatory Reset Process for the Second Regulatory Period under Article VII; and

X is as calculated pursuant to Section 4.13.3.

4.14 Revenue Path Transition

4.14.1 The ERC must treat any over or under recovery of revenue in respect of the last Regulatory Year of the First Regulatory Period in accordance with Section 4.3.

4.15 Force Majeure and Tax Event Pass Throughs

4.15.1 The ERC must ensure that such part of an Approved FM Pass Through Amount, an Approved Tax Pass Through Amount or a Negative Tax Pass Through Amount as has not been applied in the First Regulatory Period, and that is entitled or required to be applied after the expiry of the First Regulatory Period, is incorporated into the Building Block analysis to be applied for the Second Regulatory Period. In such a case the recovery or pass through of that amount will cease to be undertaken pursuant to Article X or XI (as the case may be) and will be deemed to have been effected instead by virtue of its incorporation into the Building Block analysis that is to be applied for the Second Regulatory Period.

4.15.2 The ERC must ensure that, in applying the Building Block analysis for the Second Regulatory Period, the Regulated Entity is neither advantaged nor disadvantaged as a result of the application of Article X or XI, in respect of a Force Majeure Event or Tax Change Event that occurs in the First Regulatory Period, resulting in an amount being recovered or passed through during the Second Regulatory Period under either of those Articles.

4.15.3 The ERC must ensure that any increase or saving in costs in the transmission of electricity to Connection Points that the Regulated Entity is likely to suffer or achieve during the Second Regulatory Period, being an increase or saving that is the result of a Tax Change Event that has occurred in the First Regulatory Period, is incorporated into the Building Block analysis to be applied for the Second Regulatory Period.

4.16 Service Quality Measures and Targets

4.16.1 The ERC must implement a performance incentive scheme that rewards the Regulated Entity for achieving specified target levels of performance, and penalises the Regulated Entity for failing to achieve specified target levels of performance, during the Second Regulatory Period in accordance with Article VIII.

4.17 Efficiency Adjustments

4.17.1 The ERC must comply with Article IX in respect of the treatment of Net Efficiency Adjustments (as defined in Article IX) which arise during the Second Regulatory Period.

4.18 Change in Weighted Index

4.18.1 During the Regulatory Reset Process for the Second Regulatory Period under Article VII, the ERC must review the values of W1 and W2 as set out in Section 3.3 to determine whether they appropriately reflect those proportions of the capital expenditure forecasts, and the operating and maintenance expenditure forecasts, for that Regulatory Period which are approved by the ERC under Sections 4.10.5

and 4.11.5 and which are to be undertaken in or are otherwise referable to a foreign currency.

- 4.18.2 If, as a result of its review under Section 4.18.1, the ERC determines that the values of W1 or W2 as set out in Section 3.3 should be altered to more appropriately reflect those proportions of the capital expenditure forecasts, and the operating and maintenance expenditure forecasts, referred to in Section 4.18.1, then the ERC must determine the altered values and those altered values must be used in applying the formula for the calculation of MAR_t as set out in Section 4.2.1. Without limiting the way in which the ERC may determine to alter the values of W1 or W2 for the purposes of this Section 4.18.2, the ERC may determine values which are constant for the whole of the Second Regulatory Period or that are different for each Regulatory Year in the Second Regulatory Period. The values of W1 and W2 as determined pursuant to this Section 4.18.2 must not be changed during the Second Regulatory Period.

4.19 Side Constraint

- 4.19.1 During the Regulatory Reset Process for the Second Regulatory Period under Article VII, the ERC must determine the amount of the Side Constraint referred to in Section 6.4.1, which amount must be the same for each Regulatory Year in the Second Regulatory Period.

4.20 Financial Ratios Analysis

- 4.20.1 During the Regulatory Reset Process for the Second Regulatory Period under Article VII, the Regulated Entity must provide the ERC with a forecast financial ratios analysis for each Regulatory Year of the Second Regulatory Period. The financial ratios must be derived from forecasts of the following financial accounting statements:

- (a) Profit and Loss Statement;
- (b) Balance Sheet; and
- (c) Statement of Cash Flows.

- 4.20.2 The forecast financial ratios which must be provided by the Regulated Entity to the ERC are as follows:

- (a) Interest Cover Ratios:
 - (i) EBIT / Interest Expense;
 - (ii) EBITDA / Interest Expense;
- (b) Cash Flow Adequacy Ratios:
 - (i) Funds from Operations / Total Debt;
 - (ii) Free Operating Cash Flow / Total Debt;
- (c) Profitability Ratios:
 - (i) EBITDA / Sales;

- (d) Capital Structure and Leverage Ratios:
 - (i) Long-term Debt / Total Capital;
 - (ii) Total Debt / Total Capital;
 - (iii) Debt / Equity; and

- (e) Other ratios determined by the ERC,

in each case calculated in a manner that is approved by the ERC (which manner must, to the extent reasonably possible, be consistent with the manner of calculation adopted by the Grid Code or reputable financial institutions in respect of such financial ratios).

For the purposes of this Section 4.20.2, EBIT means earnings before interest and tax, and EBITDA means earnings before interest, tax, depreciation and amortisation.

4.20.3 The ERC may require the Regulated Entity to retain an independent expert or experts pursuant to Article XIV for the purpose of reviewing, remodelling or recalculating the forecast financial accounting statements and forecast financial ratios referred to in this Section 4.20.

4.20.4 In determining the Annual Revenue Requirement for each Regulatory Year in the Second Regulatory Period for the purposes of the Regulatory Reset Process for the Second Regulatory Period under Article VII, the ERC must take into account the estimated credit rating of the Regulated Entity which results from the forecast financial ratios referred to in this Section 4.20 so as to achieve the general Building Block principles in Section 4.4.1.

ARTICLE V

SUBSEQUENT REGULATORY PERIODS

5.1 General Price Control Principles

5.1.1 The ERC must continue to apply a revenue cap form of price control for the Third Regulatory Period and such revenue cap must be determined in accordance with the formula set out in Section 4.2.1 except that, as part of the Regulatory Reset Process for the Third Regulatory Period under Article VII:

- (a) the ERC may alter the values of the components of that formula; and
- (b) the ERC may amend that formula by the addition of any of the components referred to in Section 5.2.1 or by the modification or removal of the MR_{t-1} adjustment factor pursuant to Section 5.3.1.

5.1.2 During the Regulatory Reset Process under Article VII for each Subsequent Regulatory Period following the Third Regulatory Period, the ERC must review the form of price control that is to apply for that Subsequent Regulatory Period and, following that review, must apply a revenue cap, a price cap or a hybrid cap as the form of price control for that Subsequent Regulatory Period.

5.1.3 Notwithstanding anything contained in this Article V, the form of price control that is to apply for a Subsequent Regulatory Period must accommodate the requirements of the first paragraph of Section 20 of the EPIRA.

5.2 Price Control Formula

5.2.1 For the purposes of Section 5.1.1(b) the ERC may amend the formula set out in Section 4.2.1 by the addition of any of the following components:

- (a) an automatic correction to the maximum allowed revenue to account for differences between the forecast system co-incident maximum demand used to derive forecast capital expenditure and forecast operating and maintenance expenditure, on the one hand, and the actual measured system co-incident maximum demand, on the other hand;
- (b) an automatic correction to the maximum allowed revenue to account for differences between the target levels of performance (set under Section 5.16.1) and the actual levels of such performance;
- (c) a change to the general form of the revenue cap formula to allow it to better compensate the Regulated Entity in the event that there is hyper inflation; and
- (d) any other component that is consistent with internationally-accepted rate setting methodologies.

5.2.2 During the Regulatory Reset Process for the Third Regulatory Period under Article VII, the ERC must review the values of W1 and W2 as set out in Section

3.3 (as those values may have been altered pursuant to Section 4.18.2) to determine whether those values appropriately reflect the proportions of the capital expenditure forecasts, and the operating and maintenance expenditure forecasts, for that Regulatory Period which are approved by the ERC and which are to be undertaken in or are otherwise referable to a foreign currency. If, as a result of its review, the ERC determines that those values should be altered to more appropriately reflect those proportions, the ERC must determine the altered values for the purposes of the revenue cap formula that is to apply for the Third Regulatory Period. Without limiting the way in which the ERC may determine to alter those values for the purposes of this Section 5.2.2, the ERC may determine values which are constant for the whole of the Third Regulatory Period or that are different for each Regulatory Year in the Third Regulatory Period. The values of W1 and W2 as determined pursuant to this Section 5.2.2 must not be changed during the Third Regulatory Period.

- 5.2.3 Following a public consultation process, the formula in Section 4.2.1 shall be changed to the following for the Third Regulatory Period, relying upon the definitions of terms provided in that Section 4.2.1, unless further amended by the ERC following due process:

$$MAR_t = [MAR_{t-1} \times \{1 + CWI_t - X\}] - K_t$$

5.3 Over / Under Recovery Formula

- 5.3.1 During the Regulatory Reset Process for the Third Regulatory Period under Article VII, the ERC must undertake a review of the appropriateness of the use of the MR_{t-1} adjustment factor in the over/under recovery formula specified in Section 4.3. The MR_{t-1} adjustment factor mitigates the impact of the net payments payable to or by the Regulated Entity pursuant to the WESM Rules in its capacity as either a Network Service Provider or the System Operator (including such amounts, if any, as are payable to the Regulated Entity as a result of the operation of clauses 3.13.15 or 3.13.16 of the WESM Rules). It does this by effectively capping the revenues derived under the WESM Rules that the Regulated Entity may keep and by enabling the Regulated Entity to effectively recover its net losses under the WESM Rules from Customers. Following this review, the ERC may, subject to Section 5.3.2, modify or remove the MR_{t-1} adjustment mechanism for the purposes of the application of the revenue cap that is to apply for the Third Regulatory Period.
- 5.3.2 The form of price control adopted by the ERC for each Subsequent Regulatory Period must include an adjustment mechanism which:
- precludes the Regulated Entity from benefiting by keeping revenue derived as a result of it exceeding the cap that applies to the Regulated Entity under the applicable form of price control; and
 - enables the Regulated Entity to recover revenue that it fails to recover as a result of the revenue derived being less than the cap that applies to the Regulated Entity under the applicable form of price control, in which case the amount of the revenue that is to be able to be so recovered is that

amount which is determined by the ERC to be appropriate (such amount need not necessarily be the whole of the revenue that the Regulated Entity fails to recover).

- 5.3.3 Following a public consultation process, the formula for TR_{t-1} in Section 4.3.1 shall be changed to the following for the Third Regulatory Period, relying upon the definitions of terms provided in that Section 4.3.1, except as otherwise outlined below, unless further amended by the ERC following due process:

TR_{t-1} = The total qualifying revenue (expressed in PhP) of the Regulated Entity for the 12 month period ending on 30 September in Regulatory Year t-1 and is calculated as:

$$TR_{t-1} = CR_{t-1} + MR_{t-1} + RBR_t$$

Where:

RBR_t = A portion (expressed in PhP) of the net income derived, during the 12 month period ending on 30 September in Regulatory Year t-1, from each related business engaged in by the Regulated Entity or (if the Regulated Entity does not include TransCo) by TransCo, which business utilizes assets that form part of the regulatory asset base (see Section 4.6.8), being a portion that is determined by the ERC pursuant to Section 20 of the EPIRA and that may vary as between such businesses but which, for each such business, does not exceed 50% of the net income that is so derived from that business.

- 5.3.4 The definition of the interest rate adjustment in Article IV has the following form for each Subsequent Regulatory Period after the Second Regulatory Period, unless further amended by the ERC following due process:

i_t = the simple average of the monthly 180 day weighted-average Manila Reference Rate (MRR_{Sept}) in nominal percent per annum terms published by the Bangko Sentral ng Pilipinas for the period from 1 October of calendar year t-2 to 30 September of calendar year t-1; and then converted to be expressed in real percent per annum terms using the Fisher Equation as follows, and the actual CPI change for the same period (CPI_{Sept});

$$i_t = (1 + MRR_{Sept}) / (1 + CPI_{Sept})$$

- 5.3.5 During the regulatory reset process for the Third Regulatory Period, the ERC shall consider submissions on whether the factor of 0.05 in Section 4.3.2 should be retained or altered in developing the starting MAR for the First Regulatory Year of the Third Regulatory Period, and make a decision following due process. Such consideration shall focus on whether or not any systematic under or over recovery by the Regulated Entity was outside its control during the Second Regulatory Period.

5.4 General Building Block Principles

- 5.4.1 The ERC must continue to apply the general Building Block principles provided in Section 4.4.1 for each Subsequent Regulatory Period (for which purposes Section 4.4.1 (i) and (j) will be deemed to refer to that Subsequent Regulatory Period instead of the Second Regulatory Period).
- 5.4.2 The resultant annual revenue requirement for each Regulatory Year during a Subsequent Regulatory Period must include the efficiency adjustment which is carried over to that Regulatory Year from a previous Regulatory Period in accordance with Section 9.3 or Section 5.17 (as applicable).

5.5 Primary Building Blocks

- 5.5.1 Subject to Sections 5.6 to 5.12, the ERC may adopt a different Building Block analysis to that set out in Section 4.5 for any Subsequent Regulatory Period (including by altering the relevant Building Blocks).

5.6 Asset Valuation

- 5.6.1 An asset re-valuation must be undertaken prior to the commencement of the Third Regulatory Period and the provisions of Section 4.6 will apply with such modifications as are necessary in respect of that re-valuation.
- 5.6.2 Where the re-valuation undertaken pursuant to Section 5.6.1 shows that an asset that has previously been optimised out of the regulatory asset base should be included in the regulatory asset base for the Third Regulatory Period, the following principles relating to the treatment of that asset must be employed:
 - (a) the value at which that asset must be included in the regulatory asset base is its regulatory asset base value as at the date of its exclusion from the regulatory asset base; and
 - (b) that asset must be included in the regulatory asset base in the year in the Third Regulatory Period in which the asset is forecast to be required to support the provision of Regulated Transmission Services by the Regulated Entity, and the asset must be depreciated (in an accelerated manner) over its remaining economic life as if it had never been optimised out of the regulatory asset base.
- 5.6.3 As part of the Regulatory Reset Process under Article VII for Subsequent Regulatory Periods following the Third Regulatory Period, the ERC may require that either:
 - (a) the regulatory asset base is re-valued, in which case the provisions of Section 4.6 will apply with such modifications as are necessary in respect of such re-valuation, except that the re-valuation must value the material items of plant and equipment either:
 - (i) at their optimised deprival value (ie. at the lesser of their optimised depreciated replacement cost and their recoverable amount (their recoverable amount being the greater of their economic value and net realizable value)); or

- (ii) using some other method of internationally-accepted valuation methodology as determined by the ERC; or
- (b) the previous value of the regulatory asset base is rolled-forward, in which case the provisions of Sections 4.6.9 and 4.6.10 will apply with such modifications as are necessary in respect of such roll-forward.

However, any assets previously optimised out of the regulatory asset base will be included in the regulatory asset base if the ERC is satisfied that those assets are required to support the provision of Regulated Transmission Services by the Regulated Entity, in which case the principles set out in Section 5.6.2 must be employed in relation to the treatment of those assets.

5.6.4 Following a public consultation process, the list of asset categories defined in Section 4.6.5 shall be changed to the following for the Third Regulatory Period, unless further amended by the ERC following due process. The Re-valuation must be undertaken utilising more than a single weighted average asset category, the detail of the re-valuation must be reconciled back to the Regulated Entity's asset register or general ledger (as required), and such reconciliation must be fully documented in advance of the submission of the Initial Re-valuation Report to the ERC. The Initial Re-valuation Report must specify the reported re-valued asset values, the sources of the information used in calculating those values, the weighted average age of the assets, and the proposed weighted average economic life, of the following Asset Categories j (or of such other asset categories as the ERC approves):

- (a) for transmission lines, the relevant Asset Categories are as follows:
 - (i) buildings, civil works and establishment;
 - (ii) towers and associated lines;
 - (iii) poles and associated lines;
 - (iv) underground cables;
 - (v) sub-sea cables;
 - (vi) easements owned by the Regulated Entity;
 - (vii) other;
 - (viii) spares;
- (b) for transmission substation components, the relevant Asset Categories are as follows:
 - (i) buildings, civil works and establishment;
 - (ii) transformers;
 - (iii) circuit breakers;
 - (iv) instrument transformers;
 - (v) protection equipment;

- (vi) reactors;
 - (vii) buswork;
 - (viii) other;
 - (ix) spares;
- (c) for communications plant, the relevant Asset Categories are as follows:
- (i) buildings, civil works and establishment;
 - (ii) communications plant and infrastructure;
 - (iii) fibre optic cables;
 - (iv) fibre optic cable terminal equipment;
 - (v) ancillary infrastructure;
 - (vi) other;
 - (vii) spares;
- (d) for system operations, the relevant Asset Categories are as follows:
- (i) buildings, civil works and establishment;
 - (ii) control room and control infrastructure;
 - (iii) ancillary infrastructure;
 - (iv) other;
 - (v) spares;
- (e) for metering equipment assets, the relevant Asset Categories are as follows:
- (i) market meters;
 - (ii) meters which are not market meters, Connection assets or Subtransmission assets;
- (f) for non-network assets, the relevant Asset Categories are as follows:
- (i) computers and office equipment;
 - (ii) plant, tools and equipment;
 - (iii) furniture and fittings;
 - (iv) commercial buildings;
 - (v) land;
 - (vi) other;
- (g) Assets found between a Regulatory Period and the Subsequent Regulatory Period, but not related to capital expenditure, and submitted to the ERC during a regulatory reset process for approval and inclusion in the RAB.

5.7 Rolled Forward Regulatory Asset Base

- 5.7.1 The ERC must continue to apply the approach to rolling forward the regulatory asset base as provided in Section 4.7 for the Third Regulatory Period, subject to changes which may be required to accommodate a different Building Block analysis adopted by the ERC under Section 5.5.
- 5.7.2 The ERC may, for any Subsequent Regulatory Period following the Third Regulatory Period, change its approach to rolling forward the regulatory asset base from the approach provided in Section 4.7, provided that the approach used is consistent with the approach adopted by the ERC under Sections 5.5 and 5.6 in relation to the Building Block analysis and the valuation of the regulatory asset base.

5.8 Regulatory Depreciation

- 5.8.1 The ERC may change its approach to regulatory depreciation for any Subsequent Regulatory Period provided that, if the ERC changes the regulatory lives of any asset category, it must also change the depreciation rate so that the Regulated Entity does not over or under recover the value of its regulatory asset base.

5.9 Weighted Average Cost of Capital Determination

- 5.9.1 The ERC must continue to apply the approach to the calculation of the weighted average cost of capital provided in Section 4.9 for the Third Regulatory Period where the ERC continues to use the Building Block analysis set out in Section 4.5. Where the ERC adopts a different Building Block analysis for the Third Regulatory Period it must also alter the methodology for calculating the weighted average cost of capital to that which provides the best financial consistency between the new Building Block analysis and the weighted average cost of capital methodology. Where the ERC decides to change the methodology it uses to calculate the weighted average cost of capital for the Third Regulatory Period, it must adopt an internationally-accepted methodology.
- 5.9.2 The ERC may alter its approach to the calculation of the weighted average cost of capital for any Subsequent Regulatory Period following the Third Regulatory Period (and the parameters and their values which it uses to calculate such weighted average cost of capital), provided that it uses an internationally-accepted methodology.
- 5.9.3 The ERC must require the Regulated Entity to retain an independent expert or experts pursuant to Article XIV for the purpose of assisting the ERC to determine both the method for calculating, and the value of, the weighted average cost of capital that is to apply for a Subsequent Regulatory Period.
- 5.9.4 Following submissions from stakeholders and the Regulated Entity and discussion during the public hearings during the regulatory reset process for Subsequent Regulatory Periods, the ERC may decide to move the value of E and D in Section

4.9.3 towards, or equal to, the actual or target gearing ratio for the Regulated Entity.

5.10 Capital Expenditure Forecast

5.10.1 The ERC must continue to apply the approach to capital expenditure forecasts as provided in Section 4.10 for the Third Regulatory Period, subject to changes which may be required to accommodate a different Building Block analysis adopted by the ERC under Section 5.5.

5.10.2 The ERC may change its approach to capital expenditure forecasts for Subsequent Regulatory Periods following the Third Regulatory Period.

5.10.3 Sections 4.10.9 and 4.10.10 will continue to apply in respect of each Subsequent Regulatory Period as if the reference in Section 4.10.9 to the Second Regulatory Period were instead a reference to the relevant Subsequent Regulatory Period.

5.11 Operating and Maintenance Expenditure

5.11.1 The ERC must continue to apply the approach to operating and maintenance expenditure forecasts as provided in Section 4.11 for the Third Regulatory Period, subject to changes which may be required to accommodate a different Building Block analysis adopted by the ERC under Section 5.5.

5.11.2 The ERC may change its approach to operating and maintenance expenditure forecasts for Subsequent Regulatory Periods following the Third Regulatory Period.

5.12 Calculation of Corporate Income Tax

5.12.1 Subject to changes which may be required to accommodate a different Building Block analysis adopted by the ERC under Section 5.5:

- (a) the ERC must continue to apply the approach to estimating corporate income tax as provided in Sections 4.12.1 to 4.12.3 for the Third Regulatory Period; and
- (b) the ERC must adjust the annual revenue requirement (calculated in accordance with the other provisions of this Article V) for each of the Regulatory Years in the Third Regulatory Period in accordance with Section 5.12.2, such adjustment being the income tax adjustment amount for those Regulatory Years in place of that which is calculated pursuant to Section 4.12.4.

5.12.2 The income tax adjustment amount for a Regulatory Year t in the Third Regulatory Period as referred to in Section 5.12.1(b) (ITA_t) must be calculated by the ERC in accordance with the following formula:

$$ITA_t = \frac{\sum_{n=1}^r [(ActTax_{p, n-1} - Tax_{p,n}) \times (1 + WACC_{srp})^y]}{n=1}$$

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$$\{1 - [1 / (1 + WACC_{trp})^5]\} / WACC_{trp}$$

Where:

$ActTax_{p,n-1}$ = The corporate income tax actually paid by the Regulated Entity for Regulatory Year n-1 to the extent such tax relates to taxable income of the Regulated Entity (net of any related accumulated tax losses) which arises from the provision of Regulated Transmission Services by the Regulated Entity (whether or not such taxable income arises in Regulatory Year n-1);

$Tax_{p,n}$ = The estimated corporate income tax payable by the Regulated Entity in Regulatory Year n as calculated by the ERC in accordance with Sections 4.12.1 to 4.12.3;

$n=1 \dots r$

where:

- (a) $n=1$ for the first Regulatory Year in the Second Regulatory Period; and
- (b) r is the last Regulatory Year in the Second Regulatory Period (ie. $r = 5$);

$WACC_{srp}$ = The classical weighted average cost of capital as determined by the ERC in accordance with Section 4.9;

y = The number of Regulatory Years in the period that commences at the beginning of Regulatory Year n and expires at the end of the last Regulatory Year in the Second Regulatory Period (both dates inclusive); and

$WACC_{trp}$ = The weighted average cost of capital determined by the ERC for the Third Regulatory Period.

For the avoidance of doubt, ITA_t may be positive (in which case the annual revenue requirement for Regulatory Year t will be increased by the addition of that amount) or negative (in which case the annual revenue requirement for Regulatory Year t will be reduced by the subtraction of that amount).

5.12.3 For the purposes of Section 5.12.2:

- (a) the corporate income tax that is actually paid by the Regulated Entity for a Regulatory Year must be verified by returns received by the Bureau of Internal Revenue and evidence of payment by Authorized Agent Banks; and

- (b) the extent to which the tax referred to in paragraph (a) relates to taxable income of the Regulated Entity (net of any related accumulated tax losses) which arises from the provision of Regulated Transmission Services by the Regulated Entity must be certified by an auditor who:
 - (i) is registered as a certified public accountant under the Revised Accountancy Law (Presidential Decree No.692);
 - (ii) possesses the independence as defined in Part II Section 14 of the Code of Professional Ethics for Certified Public Accountants as promulgated by the Board of Accountancy and approved by the Professional Regulation Commission; and
 - (iii) is one of the five largest auditing firms in the Philippines (as measured by annual revenue derived in the Philippines) or is approved by the ERC for the purposes of giving the certification referred to in this paragraph (b).

5.12.4 The ERC may change its approach to the treatment of corporate income tax for the purposes of calculating the annual revenue requirement for Subsequent Regulatory Periods following the Third Regulatory Period.

5.13 Revenue Smoothing

5.13.1 The ERC must continue to apply the approach to revenue smoothing as provided in Section 4.13 for the Third Regulatory Period, subject to changes which may be required to accommodate a different Building Block analysis adopted by the ERC under Section 5.5.

5.13.2 The ERC may alter its approach to revenue smoothing for Subsequent Regulatory Periods following the Third Regulatory Period.

5.13.3 The formula in Section 4.13.2 shall change to the following for the Third Regulatory Period, relying upon the definitions of terms provided in that Section 4.13.2 and for P_0 the definition in Section 4.13.3, unless further amended by the ERC following due process. In order to calculate the Efficiency Factor (X) for the Third Regulatory Period, the first step for revenue smoothing is to calculate the present value of the reset from the allowed revenues for the last Regulatory Year in the Second Regulatory Period and each of the Regulatory Years in the Third Regulatory Period (PV_{Raw}) as follows:

$$\begin{aligned} PV_{Raw} = & (MAR_{t-1} - P_0) + \\ & ARR_t / (1 + WACC) + \\ & ARR_{t+1} / (1 + WACC)^2 + \\ & ARR_{t+2} / (1 + WACC)^3 + \\ & ARR_{t+3} / (1 + WACC)^4 + \\ & ARR_{t+4} / (1 + WACC)^5 \end{aligned}$$

5.13.4 The formula in Section 4.13.3 shall change to the following for the Third Regulatory Period, relying upon the definitions of terms provided in that Section 4.13.3, unless further amended by the ERC following due process. The second step is to calculate the Efficiency Factor (X) for the Second Regulatory Period from the solution of the following equation (where only X is unknown) using the results for PV_{Raw} on the left hand side of the equation from the output of the calculation in Section 5.13.3:

$$\begin{aligned}
 PV_{Raw} = & (MAR_{t-1} - P_o) \times [1 + \\
 & (1 + Inflation_t - X) / (1 + WACC) + \\
 & (1 + Inflation_t - X) (1 + Inflation_{t+1} - X) / (1 + WACC)^2 + \\
 & (1 + Inflation_t - X) (1 + Inflation_{t+1} - X) (1 + Inflation_{t+2} - X) / (1 + \\
 & WACC)^3 + \\
 & (1 + Inflation_t - X) (1 + Inflation_{t+1} - X) (1 + Inflation_{t+2} - X) \\
 & (1 + Inflation_{t+3} - X) / (1 + WACC)^4 + \\
 & (1 + Inflation_t - X) (1 + Inflation_{t+1} - X) (1 + Inflation_{t+2} - X) \\
 & (1 + Inflation_{t+3} - X) (1 + Inflation_{t+4} - X) / (1 + WACC)^5]
 \end{aligned}$$

5.13.5 The Smoothed Maximum Annual Revenue Requirement for each Regulatory Year in the Second Regulatory Period ($SMAR_t$) is calculated during the regulatory reset process as follows:

- (a) where the relevant Regulatory Year is the first Regulatory Year in the Third Regulatory Period, that is 2011, the Smoothed Maximum Annual Revenue for that Regulatory Year ($SMAR_{2011}$) is:

$$SMAR_{2011} = (MAR_{2010} - P_o) \times (1 + Inflation_{2010} - X); \text{ and}$$

- (b) where the relevant Regulatory Year is any Regulatory Year in the Third Regulatory Period after the first Regulatory Year, the Smoothed Maximum Annual Revenue for that Regulatory Year ($SMAR_t$) is:

$$SMAR_t = SMAR_{t-1} \times (1 + Inflation_t - X);$$

Where:

MAR_{2010} = the maximum allowed revenue for the last Regulatory Year in the Second Regulatory Period as calculated in accordance with Section 4.2.1;

$Inflation_t$ = the forecast inflation for Regulatory Year t, , expressed in decimal (as opposed to percentage) terms, which is used by the ERC for the purpose of the Regulatory Reset Process for the Third Regulatory Period under Article VII;

P_o is such amount (expressed in PhP) as the ERC determines under Section 5.13.4; and

X is as calculated pursuant to Section 5.13.4.

5.14 Revenue Path Transition

5.14.1 The ERC must ensure that, for the transition from the Second Regulatory Period to the Third Regulatory Period, it applies the Correction Factor for the first Regulatory Year of the Third Regulatory Period (as calculated in accordance with Section 4.3) so that any over recovery of revenue in respect of the last Regulatory Year of the Second Regulatory Period is effectively returned to Customers through lower tariffs in the first Regulatory Year of the Third Regulatory Period.

5.14.2 Notwithstanding Section 5.1.1, if the Correction Factor for the first Regulatory Year of the Third Regulatory Period (as calculated in accordance with Section 4.3):

- (a) would be negative; and
- (b) the absolute value of that Correction Factor would be greater than 5% of the maximum allowed revenue for the last Regulatory Year of the Second Regulatory Period (as calculated under Section 4.2.1)

then, for the purposes of determining the revenue cap for the first Regulatory Year of the Third Regulatory Period pursuant to Section 5.1.1, the amount of that Correction Factor (which will be a negative amount) will be treated as being limited to 5% of that maximum allowed revenue (and the Regulated Entity will not be entitled to recover any more of that excess, whether in that Regulatory Year or in any subsequent Regulatory Year).

5.15 Force Majeure and Tax Event Pass Throughs

5.15.1 The ERC must ensure that such part of an Approved FM Pass Through Amount, an Approved Tax Pass Through Amount or a Negative Tax Pass Through Amount as has not been applied in a Regulatory Period, and that is entitled or required to be applied after the expiry of that Regulatory Period, is incorporated into the Building Block analysis to be applied for the Subsequent Regulatory Period that immediately follows that Regulatory Period. In such a case the recovery or pass through of that amount will cease to be undertaken pursuant to Article X or XI (as the case may be) and will be deemed to have been effected instead by virtue of its incorporation into the Building Block analysis that is to be applied for that Subsequent Regulatory Period.

5.15.2 The ERC must ensure that, in applying the Building Block analysis for a Subsequent Regulatory Period, the Regulated Entity is neither advantaged nor disadvantaged as a result of the application of Article X or XI, in respect of a Force Majeure Event or Tax Change Event that occurs in a preceding Regulatory Period, resulting in an amount being recovered or passed through during that Subsequent Regulatory Period under either of those Articles.

5.15.3 The ERC must ensure that any increase or saving in costs in the transmission of electricity to Connection Points that the Regulated Entity is likely to suffer or achieve during a Regulatory Period in respect of which the Regulatory Reset

Process is being undertaken under Article VII, being an increase or saving that is the result of a Tax Change Event that has occurred in a previous Regulatory Period, is incorporated into the Building Block analysis to be applied for that Subsequent Regulatory Period.

5.16 Service Quality Measures and Targets

5.16.1 As part of the Regulatory Reset Process for a Subsequent Regulatory Period under Article VII, the ERC must implement a performance incentive scheme that rewards the Regulated Entity for achieving specified target levels of performance and penalises the Regulated Entity for failing to achieve specified target levels of performance. Without limiting the nature of such scheme, the performance incentive scheme must include performance indicators, performance targets and reporting arrangements with which the Regulated Entity must comply during that Subsequent Period and may be a continuation of that developed under Section 8.2.

5.17 Efficiency Adjustments

5.17.1 The ERC must calculate and treat efficiency gains and losses arising during a Subsequent Regulatory Period on a similar basis to that adopted under Article IX for the Second Regulatory Period (except that the ERC may elect not to apply an efficiency adjustment for any Regulatory Year *t* during that Subsequent Regulatory Period where service delivery levels subsisting during the last Regulatory Year in the immediately preceding Regulatory Period have not been maintained for Regulatory Year *t*). In addition, as part of the Regulatory Reset Process for that Subsequent Regulatory Period under Article VII, the ERC will consider:

- (a) separately identifying those cost reductions and increases which are due to improved or reduced efficiency and those which have been caused by external factors (ie. are ‘windfall’ gains or losses), and removing those latter gains or losses from the efficiency adjustment calculation, so that better efficiency incentives are provided to the Regulated Entity;
- (b) the introduction of a mechanism to reward the Regulated Entity for advances in universal access which has the potential to benefit End-users through improved access to the Grid; and
- (c) the introduction of a mechanism to reward the Regulated Entity for the elimination of network constraints which would enhance the operation of the WESM and potentially benefit End-users through lower electricity prices.

5.18 Side Constraint

5.18.1 As part of the Regulatory Reset Process for a Subsequent Regulatory Period under Article VII, the ERC may determine a method to regulate the changes, during that Regulatory Period, in the maximum transmission wheeling rates that may be charged by the Regulated Entity. Such method may take the form of the side constraint equation referred to in Section 6.4.1 (with or without new values for any of the parameters in it) or entirely different side constraint arrangements,

provided that any such method must apply uniformly in relation to all of the maximum transmission wheeling rates that may be charged by the Regulated Entity during that Subsequent Regulatory Period.

5.19 Financial Ratios Analysis

- 5.19.1 As part of the Regulatory Reset Process for a Subsequent Regulatory Period under Article VII, the ERC may require the Regulated Entity to provide the ERC with a forecast financial ratios analysis for each Regulatory Year of that Subsequent Regulatory Period, using financial ratios of a kind and calculated in a manner specified by the ERC (which manner must, to the extent reasonably possible, be consistent with the manner of calculation adopted by the Grid Code or reputable financial institutions in respect of such financial ratios).
- 5.19.2 The ERC may require the Regulated Entity to retain an independent expert or experts pursuant to Article XIV for the purpose of reviewing, remodelling or recalculating the forecast financial ratios referred to in Section 5.19.1.
- 5.19.3 In determining the annual revenue requirement for a Regulatory Year in a Subsequent Regulatory Period for the purposes of the Regulatory Reset Process for that Subsequent Regulatory Period under Article VII, the ERC must take into account the estimated credit rating of the Regulated Entity which results from the forecast financial ratios referred to in Section 5.19.1 so as to achieve the general Building Block principles in Section 4.4.1.

5.20 Re-Opening Events

- 5.20.1 As part of the Regulatory Reset Process for a Subsequent Regulatory Period under Article VII, the ERC must determine the circumstances (if any) in which the formula for the calculation of the revenue cap, price cap or hybrid cap (as applicable) may be altered, or the value of a component of that formula may be changed, during that Subsequent Regulatory Period.

ARTICLE VI

ANNUAL VERIFICATION AND ADJUSTMENT OF TARIFF RATES

6.1 Annual Transmission Rate Setting

6.1.1 The maximum transmission wheeling rates that may be charged by the Regulated Entity for the provision of Regulated Transmission Services during a Regulatory Year may only be changed in accordance with this Article VI and the OATS Rules, following an annual review that is conducted in accordance with this Article VI and the OATS Rules.

6.2 Annual Rate Setting Timetable

6.2.1 Subject to the requirements of any applicable law, the annual review of the maximum transmission wheeling rates that may be charged by the Regulated Entity for the provision of Regulated Transmission Services during a Regulatory Year must proceed according to the following timetable and process:

- (a) During October of a Regulatory Year (such Regulatory Year being referred to for the purposes of this Article VI as the Calculation Year), the Regulated Entity must gather the data and information referred to in Section 6.3.2 in respect of the 12 month period ending on 30 September in the Calculation Year (such period being referred to as the Historical Period) and provide its calculations of the following to the ERC in both written and soft copy form:
 - (i) the amount billed to Customers for the provision by the Regulated Entity of Regulated Transmission Services during the Historical Period (adjusted as required for the purposes of Sections 3.4.1 or 4.3.1, as applicable) (CR_{t-1}) (see Sections 3.4, 4.3 and 5.3);
 - (ii) the net payments payable to or by the Regulated Entity during the Historical Period pursuant to the WESM Rules in its capacity as either a Network Service Provider or the System Operator and which are referable to the Historical Period (including such amounts, if any, as are payable to the Regulated Entity as a result of the operation of clauses 3.13.15 or 3.13.16 of the WESM Rules) (MR_{t-1}) (see Sections 3.4, 4.3 and 5.3);
 - (iii) the total qualifying revenue of the Regulated Entity for the Historical Period (TR_{t-1}) (see Sections 3.4, 4.3 and 5.3);
 - (iv) the simple average of the monthly 180 day weighted-average Manila Reference Rate in nominal percent per annum terms published by the Bangko Sentral ng Pilipinas for the Historical Period (see Sections 3.4, 4.3 and 5.3);

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- (v) the Correction Factor under the over/under recovery formula for the Regulatory Year immediately following the Calculation Year (the Application Year) (K_t) (see Sections 3.4, 4.3 and 5.3);
 - (vi) the net income derived, during the Historical Period, from each related business which is engaged in by the Regulated Entity or (if the Regulated Entity does not include TRANSCO) by TRANSCO, and which utilizes assets that form part of the regulatory asset base (see Sections 3.2, 4.2 and 5.1);
 - (vii) the change in Weighted Index for the Application Year (CWI_t) (see Sections 3.3, 4.2, 5.1 and 5.2);
 - (viii) the maximum allowed revenue (MAR_t) for the Application Year (see Sections 3.2, 4.2, 5.1 and 5.2);
 - (ix) using the forecasts for the Application Year as specified in Section 6.3.3(b), and the proposed maximum transmission wheeling rates referred to in Section 6.2.1(b), the estimated amount that will be billed to all Customers for the provision by the Regulated Entity, during the Application Year, of Regulated Transmission Services (the purpose of this calculation is to assist in demonstrating the compliance (or likely compliance) of those proposed maximum rates with the requirements of these Rules and the OATS Rules);
 - (x) using the data for the Historical Period referred to in Section 6.3.2(a) and (e) and the forecasts for the Forecast Period referred to in Section 6.3.3(c) and (d), calculations which demonstrate, for each Customer Segment, whether or not the proposed maximum transmission wheeling rates comply with Section 6.4; and
 - (xi) such other items as the ERC may specify from time to time for the purposes of these Rules (for this purpose the ERC may also specify that the Regulated Entity need not calculate one or more of the items referred to above).
- (b) On or before 31 October in the Calculation Year, the Regulated Entity must submit to the ERC, in both written and soft copy form, its proposal for the maximum transmission wheeling rates that may be charged by it for the provision of Regulated Transmission Services during the Application Year, together with a statement that demonstrates the compliance (or likely compliance) of those proposed rates with the requirements of these Rules (including, in particular, Sections 3.1.2, 4.1.2, 5.1, 6.4 and 6.5 (as applicable)) and the OATS Rules.
- (c) The submission by the Regulated Entity must clearly indicate the data used in calculating the proposed maximum transmission wheeling rates and the source of all data used, and must provide an explanation of each calculation and its outcome, so that there is no ambiguity for the ERC in

interpreting how the Regulated Entity has calculated the proposed maximum transmission wheeling rates.

- (d) Where required by the ERC, the Regulated Entity must meet with ERC staff to explain in detail its submission, and such request and meeting must occur prior to 25 November of the Calculation Year.
- (e) Where the ERC requires such by notice in writing given to the Regulated Entity by 20 November of the Calculation Year, the Regulated Entity must provide to the ERC, in both written and soft copy form, further information on the proposed maximum transmission wheeling rates set out in its submission, and such further information must be so provided prior to 25 November of the Calculation Year.
- (f) The ERC must, on or before 11 December of the Calculation Year, determine whether or not the maximum transmission wheeling rates proposed by the Regulated Entity in its submission (as such submission may be amended with the approval of the ERC) comply (or are likely to comply) with the requirements of these Rules (including, in particular, Sections 3.1.2, 4.1.2, 5.1, 6.4 and 6.5 (as applicable)) and the OATS Rules. If:
 - (i) the ERC is satisfied that such rates do comply (or are likely to comply) with the requirements of these Rules and the OATS Rules, the Regulated Entity must implement those rates with effect from 26 December of the Calculation Year;
 - (ii) the ERC is not satisfied that such rates do comply (or are likely to comply) with the requirements of these Rules and the OATS Rules:
 - (A) the Regulated Entity must amend its proposed maximum transmission wheeling rates in accordance with such directions as the ERC (after consulting with the Regulated Entity) may give for the purposes of ensuring that those rates comply (or are likely to comply) with the requirements of these Rules and the OATS Rules; and
 - (B) the Regulated Entity must implement those amended rates by 15 days after the date on which the ERC gives those directions but not earlier than 26 December of the Calculation Year (pending which the Regulated Entity must continue to apply its existing rates).
- (g) If the Regulated Entity fails to file its submission on its proposed maximum transmission wheeling rates before 31 October in the Calculation Year (as required under Section 6.2.1 (b)), the maximum transmission wheeling rates that may be charged by it for the provision of Regulated Transmission Services during the Application Year will be such rates as are determined by the ERC (being rates that the ERC is satisfied comply (or are likely to comply) with the requirements of these Rules and

the OATS Rules), pending which the Regulated Entity must continue to apply its existing rates.

- (h) A failure by the Regulated Entity to file a submission or any further information as required under Section 6.2.1 (b) or (e) is a breach of these Rules and the ERC may impose a fine or penalty under Section 43 (l) of the EPIRA for such a breach.

6.3 Annual Actual and Forecast Data Requirements

6.3.1 The data required for the purposes of the calculations referred to in Section 6.2.1(a) includes financial and operational data on actual outcomes and forecasts of that data. This data must be delivered by the Regulated Entity to the ERC, in both written and soft copy form, with its proposal for the maximum transmission wheeling rates that may be charged by it for the provision of Regulated Transmission Services during the Application Year.

6.3.2 The historical financial and operational data that must be provided to the ERC will depend on the form of price control and associated parameters which are determined by the ERC to apply for the Application Year. However, until the ERC determines otherwise, the Regulated Entity must provide the ERC, during October of the Calculation Year, with at least the following historical financial and operational data (such data being provided in both written and soft copy form):

- (a) the total amount billed to all Customers in each Customer Segment for the provision by the Regulated Entity, during the Historical Period, of Regulated Transmission Services ($CR_{k, t-1}$) (see Section 6.4);
- (b) the maximum transmission wheeling rates it has applied to each Customer Segment during the Historical Period;
- (c) the actual transmission wheeling rates it has applied to each Customer Segment during the Historical Period;
- (d) the separate components of payments payable to or by the Regulated Entity during the Historical Period pursuant to the WESM Rules in its capacity as either a Network Service Provider or the System Operator and which are referable to the Historical Period (including such amounts, if any, as are payable to the Regulated Entity as a result of the operation of clauses 3.13.15 or 3.13.16 of the WESM Rules); and
- (e) the sum of the monthly non-coincident peak demands (expressed in MW) at each Connection Point of each of the Customers in each Customer Segment for the Historical Period ($AQ_{k, t-1}$) (see Section 6.4).

6.3.3 The forecast financial and operational data that must be provided to the ERC will depend on the form of price control and associated parameters which are determined by the ERC to apply for the Application Year. However, until the ERC determines otherwise, the Regulated Entity must provide the ERC, during

October of the Calculation Year, with at least the following forecast financial and operational data (such data being provided in both written and soft copy form):

- (a) the total amount forecast to be billed to all Customers, and to all Customers in each Customer Segment, for the provision by the Regulated Entity, during the Application Year, of Regulated Transmission Services;
- (b) the sum of the forecast monthly non-coincident peak demands (expressed in MW) at each Connection Point of all Customers, and of all Customers in each Customer Segment, for the Application Year;
- (c) the total amount forecast to be billed to all Customers in each Customer Segment for the provision by the Regulated Entity, during the 12 month period ending on 30 September in the Application Year (the Forecast Period), of Regulated Transmission Services ($FCR_{k,t}$) (see Section 6.4); and
- (d) the sum of the forecast monthly non-coincident peak demands (expressed in MW) at each Connection Point of each of the Customers in each Customer Segment for the Forecast Period ($FQ_{k,t}$) (see Section 6.4).

6.4 Side Constraints on Proposed Maximum Transmission Wheeling Rates

6.4.1 Subject to Section 6.5, the maximum transmission wheeling rates that may be charged by the Regulated Entity for the provision of Regulated Transmission Services during an Application Year to a Customer Segment (k) must comply with the following condition:

$$FCR_{k,t} / CR_{k,t-1} \leq (1 + CWI_t + SC_t) \times FQ_{k,t} / AQ_{k,t-1}$$

Where:

- $FCR_{k,t}$ = the total amount forecast to be billed to all Customers in Customer Segment k for the provision by the Regulated Entity, during the Forecast Period, of Regulated Transmission Services, as provided under Section 6.3.3 (c);
- $CR_{k,t-1}$ = the total amount billed to all Customers in Customer Segment k for the provision by the Regulated Entity, during the Historical Period, of Regulated Transmission Services, as provided under Section 6.3.2(a);
- “ \leq ” = less than or equal to;
- SC_t = the Side Constraint for Regulatory Year t, which:
 - (a) where Regulatory Year t occurs during the First Regulatory Period, is 0.02; and
 - (b) where Regulatory Year t occurs during the Second Regulatory Period, is such amount as the ERC determines for that Regulatory Period, during the Regulatory Reset Process

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for the Second Regulatory Period under Article VII, having regard to the needs of End-users; and

- (c) For the Third and Subsequent Regulatory Periods, following consideration on submissions from stakeholders and the Regulated Entity and discussions during the public hearings during the regulatory reset process, and having regard to the needs of End-users, may substitute the parameter $SC_{k,t}$ for the parameter SC_t appearing in the above equation to the effect that side constraint values can be separately determined by the ERC for each Customer Segment k , in each Regulatory Year t , of the relevant Regulatory Period;

Where:

- $SC_{k,t}$ = the Side Constraint for Customer Segment k for Regulatory Year t , as determined by the ERC in the regulatory reset process.
- CWI_t = the change in Weighted Index for Regulatory Year t as calculated in accordance with Section 3.3;
- $FQ_{k,t}$ = where the Customers in Customer Segment k take electricity from the Grid, the sum of the forecast monthly non-coincident peak demands (expressed in MW) at each Connection Point of each of those Customers in Customer Segment k , for the Forecast Period, as provided under Section 6.3.3(d);
- = where the Customers in Customer Segment k deliver electricity to the Grid, the sum of the forecast monthly non-coincident peak demands (expressed in MW) at each Connection Point of each of those Customers in Customer Segment k , for the Forecast Period, as provided under Section 6.3.3(d); and
- $AQ_{k,t-1}$ = where the Customers in Customer Segment k take electricity from the Grid, the sum of the monthly non-coincident peak demands (expressed in MW) at each Connection Point of each of those Customers in Customer Segment k , for the Historical Period, as provided under Section 6.3.2(e);

= where the Customers in Customer Segment k deliver electricity to the Grid, the sum of the monthly non-coincident peak demands (expressed in MW) at each Connection Point of each of those Customers in Customer Segment k, for the Historical Period, as provided under Section 6.3.2(e).

6.5 Other parameters

6.5.1 The maximum transmission wheeling rates that may be charged by the Regulated Entity for the provision of Regulated Transmission Services must:

- (a) comply with the requirements of any applicable law (including the EPIRA and the IRR);
- (b) comply with applicable requirements that apply to such rates as set out in the ERC Order on the Matter of the Application for the Approval for the Revised Unbundled Power Rates (ERC Case No. 2001-901) by National Power Corporation dated 20 September 2002 and 27 September 2002 or any superseding decision should there be a reconsideration of that order;
- (c) be such as to result in the removal of cross subsidies in accordance with the applicable requirements of any law or of any previous order by the ERC¹³;
- (d) comply with the applicable requirements of any law or order made by the ERC relating to the treatment of system losses; and
- (e) For the Third and Subsequent Regulatory Periods, and following consideration on submissions from stakeholders and the Regulated Entity, and discussions during the public hearings during the regulatory reset process, may substitute the parameter $SC_{k,t}$ for the parameter SC_t appearing in the equation in Section 6.4.1 to the effect that side constraint values can be separately determined by the ERC for each Customer Segment k, in each Regulatory Year t, of the relevant Regulatory Period;

Where:

$SC_{k,t}$ = the Side Constraint for Customer Segment k for Regulatory Year t, as determined by the ERC in the regulatory reset process.

6.6 Initial Maximum Allowed Revenue

6.6.1 During October 2003 the Regulated Entity must provide to the ERC such information as the ERC requires to enable the ERC to determine MAR_{t-1} where Regulatory Year t commences on 1 January 2004.

¹³ The cross-subsidy charges that result from the order referred to in Section 6.5.1(b) or any superseding decision are not payments for Regulated Transmission Services and so are not included in the revenue cap.

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- 6.6.2 Subject to Section 6.6.3, the ERC may determine a value of MAR_{t-1} , as referred to in Section 6.6.1, which differs from PhP24,591 million (as referred to in Section 3.2.1) if the ERC is satisfied, based on the information provided to it pursuant to Section 6.6.1, that retaining such a value of MAR_{t-1} as PhP24,591 million would be materially incorrect.
- 6.6.3 Any determination made by the ERC pursuant to Section 6.6.2 must be made by 7 November 2003.

ARTICLE VII

REGULATORY RESET PROCESS

7.1 Regulatory Reset Process Timelines

- 7.1.1 Prior to each Regulatory Period the ERC will undertake a Regulatory Reset Process pursuant to this Article VII. This process will, in accordance with this Article VII, entail consultation in respect of the ERC's proposals for the price control arrangements that are to apply for that Regulatory Period.
- 7.1.2 The ERC must publish a Regulatory Reset Issues Paper not less than 21 months prior to the end of each Regulatory Period. The Regulatory Reset Issues Paper must:
- (a) provide the ERC's initial views on the issues raised by the pending Regulatory Reset Process; and
 - (b) specify the information to be provided by the Regulated Entity for the purposes of the Regulatory Reset Process and the time by which that information must be provided.

The Regulated Entity must provide the information specified pursuant to paragraph (b) within the time specified under that paragraph.

- 7.1.3 The ERC must call for written submissions on the issues raised in the Regulatory Reset Issues Paper and must require that such submissions be delivered not later than two months after the publication of the Regulatory Reset Issues Paper. When all such written submissions have been received, the ERC must, within two weeks of the closing date for written submissions and subject to Section 7.1.4, publish all such submissions on its web site (subject to normal internet service provider performance), or through such other electronic medium as is generally accepted and in use at that time, and have hard copies of them available for purchase from its offices.
- 7.1.4 Where a written submission identifies information in it which is confidential, the ERC may only publish or otherwise disclose that information if the ERC has given written notification to the person who has made that submission of the ERC's intention to publish or otherwise disclose that information and either:
- (a) that person has not made a written submission to the ERC objecting to the publication or disclosure of that information (including reasons as to why publication or disclosure of the information would cause substantial commercial damage or harm to it) within two weeks of receiving the written notification; or
 - (b) that person has made a written submission to the ERC objecting to the publication or disclosure of that information (including reasons as to why publication or disclosure of the information would cause substantial commercial damage or harm to it) but the ERC, after considering that

submission, nevertheless decides that publication or disclosure of the information will not cause substantial commercial damage or harm to that person (in which case the ERC must not publish or otherwise disclose that information unless it has first given the person not less than one week's notice of its decision).

- 7.1.5 Following the publication of the Regulatory Reset Issues Paper, the ERC must require the Regulated Entity to retain an independent expert or experts pursuant to Article XIV for the purpose of undertaking and preparing a written report in respect of each of the following:
- (a) the asset re-valuation referred to in Section 4.6 or Section 5.6 (as applicable) (see Section 4.6.2);
 - (b) for the purposes of the Regulatory Reset Process for the Second Regulatory Period, the condition of certain assets that are used to provide Regulated Transmission Services and the regulatory life which should be attributed to such assets (see Section 4.8.3);
 - (c) the determination of the weighted average cost of capital referred to in Section 4.9 or Section 5.9 (as applicable);
 - (d) the review of the Regulated Entity's proposed capital expenditure referred to in Section 4.10 or Section 5.10 (as applicable); and
 - (e) the review of the Regulated Entity's proposed operating and maintenance expenditure referred to in Section 4.11 or Section 5.11 (as applicable).
- 7.1.6 The independent expert(s) must be able to commence work at least 17 months prior to the end of the relevant Regulatory Period, and substantially conclude their work by 10 months prior to the end of that Regulatory Period.
- 7.1.7 Not later than nine months prior to the commencement of the relevant Regulatory Period the ERC must publish a draft determination on the price control arrangements that are to apply for the relevant Regulatory Period on the ERC's website (subject to normal internet service provider performance) or through such other electronic medium as is generally accepted and in use at that time. Copies of the draft determination must also be available for purchase at the offices of the ERC.
- 7.1.8 The ERC must invite submissions on the draft determination, such submissions to be provided in writing or at public hearings convened for that purpose.
- 7.1.9 All written submissions must be made within two months of the publication of the draft determination and only those persons who make written submissions may participate in the relevant public hearings.
- 7.1.10 The relevant public hearings must be held during the period of seven to five months prior to the commencement of the relevant Regulatory Period.
- 7.1.11 After considering all the submissions made to it in accordance with Sections 7.1.9 and 7.1.10, the ERC must publish a final determination on the price control arrangements that are to apply for the relevant Regulatory Period. Such final

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determination must be published not later than three months prior to the commencement of the relevant Regulatory Period on the ERC's website (subject to normal internet service provider performance) or through such other electronic medium as is generally accepted and in use at that time. Copies of the final determination must also be available for purchase at the offices of the ERC.

ARTICLE VIII

SERVICE QUALITY MEASURES AND TARGETS

8.1 Establishment of Transmission Performance Standards

8.1.1 Not later than eighteen months prior to the commencement of the Second Regulatory Period, the ERC must, subject to Section 8.1.3, determine:

- (a) the indices that are to be used for the purposes of these Rules to measure the performance of the Grid and the performance of the Regulated Entity in restoring Regulated Transmission Services following the outage of a component of the Grid (these indices must at least include those specified in Appendix A and may, for example, include any of the power quality standards specified in the Grid Code; they may also take into account the approach adopted by the Grid Management Committee under that Code in establishing comparable indices);
- (b) for each of the indices referred to in paragraph (a), the target level of performance of the Grid or the target level of performance of the Regulated Entity (as the case may be) for each Regulatory Year occurring during the Second Regulatory Period, as measured by that index;
- (c) the manner in which the Regulated Entity must record the actual performance of the Grid, and the actual performance of the Regulated Entity, as measured by each of the indices referred to in paragraph (a);
- (d) the manner and form in which, and the time by which, the Regulated Entity must report to the ERC on the actual performance of the Grid, and the actual performance of the Regulated Entity, for each Regulatory Year occurring during the Second Regulatory Period, as measured by each of the indices referred to in paragraph (a) (at a minimum such reports must report separately on the performance of those parts of the Grid that are specified in Appendix A); and
- (e) the circumstances in which the ERC may grant permission for a period of performance to be excluded for the purposes of measuring the performance of the Grid or the performance of the Regulated Entity in restoring Regulated Transmission Services following the outage of a component of the Grid, using the indices referred to in paragraph (a) (such circumstances must include the events provided in clause 3.3.3.2(a), (b), (d) and (e) of the Grid Code).

For the purposes of assisting the ERC to determine the matters referred to in this Section 8.1.1, the Regulated Entity must as soon as practicable after the Effectivity Date provide the ERC with such information as the ERC requires under clause 3.3 of the Grid Code.

- 8.1.2 The target levels of performance determined under Section 8.1.1(b) may vary as between Regulatory Years and as between the location of different parts of the Grid.
- 8.1.3 The ERC must determine the matters referred to in Section 8.1.1 after consultation with such persons as it thinks appropriate and after taking into account:
- (a) accepted international practices in relation to the matters referred to in Section 8.1.1;
 - (b) the measures which the Regulated Entity can reasonably be required to implement for the purposes of meeting the target levels of performance referred to in Section 8.1.1(b) and complying with the obligations regarding recording and reporting referred to in Sections 8.1.1(c) and (d);
 - (c) the capital expenditure program approved by the ERC under Section 4.10;
 - (d) the relevant provisions of the Grid Code; and
 - (e) any other factors the ERC considers relevant.

8.2 Performance Incentive Scheme

- 8.2.1 As part of the Regulatory Reset Process for the Second Regulatory Period under Article VII, the ERC must develop a performance incentive scheme that:
- (a) rewards the Regulated Entity to the extent that the actual level of performance of the Grid or of the Regulated Entity (as the case may be) for a Regulatory Year, as measured by the indices referred to in Section 8.1.1(a), exceeds the target level of performance of the Grid or of the Regulated Entity (as the case may be) for that Regulatory Year, as determined under Section 8.1.1(b);
 - (b) penalises the Regulated Entity to the extent that the actual level of performance of the Grid or of the Regulated Entity (as the case may be) for a Regulatory Year, as measured by the indices referred to in Section 8.1.1(a), is below the target level of performance of the Grid or of the Regulated Entity (as the case may be) for that Regulatory Year, as determined under Section 8.1.1(b); and
 - (c) complies with the principles set out in Section 8.2.3.
- 8.2.2 Without limiting the nature of the scheme referred to in Section 8.2.1, such scheme may take the form of:
- (a) a scheme under which the Regulated Entity is entitled to an increase in the maximum allowed revenue for a Regulatory Year (where Section 8.2.1(a) applies) or suffers a decrease in the maximum allowed revenue for a Regulatory Year (where Section 8.2.1(b) applies); or
 - (b) a scheme under which the Regulated Entity is entitled to levy a surcharge on some or all of its Customers (where Section 8.2.1(a) applies) or is required to pay a rebate to some or all of its Customers (where Section 8.2.1(b) applies).

- 8.2.3 The levels of reward referred to in Section 8.2.1(a), and the levels of penalty referred to in Section 8.2.1(b), must conform with the following principles:
- (a) the levels of reward should be reasonable, and should be set so as to provide an incentive to improve the performance of the Grid and of the Regulated Entity over time but not so as to encourage excessive investment in capacity, extension or interconnectivity of the Grid;
 - (b) the levels of penalty should be reasonable, and should be set so as to be proportional to the levels of reward (with a larger penalty being payable the greater the differential between the actual and target levels of performance); and
 - (c) the levels of reward and penalty must be set such that:
 - (i) if the scheme is a scheme described in Section 8.2.2(a), the rewards and penalties applying in respect of any Regulatory Year do not exceed 3% of the ARR_t for that Regulatory Year determined for the purposes of the Regulatory Reset Process undertaken under Article VII in respect of the Regulatory Period in which that Regulatory Year occurs; and
 - (ii) if the scheme is a scheme described in Section 8.2.2(b), the rewards and penalties applying in respect of any Regulatory Year:
 - (A) do not exceed 10% of the average monthly transmission wheeling rate tariff applicable to affected connections of the relevant Customers; and
 - (B) do not exceed 3% of the ARR_t for that Regulatory Year determined for the purposes of the Regulatory Reset Process undertaken under Article VII in respect of the Regulatory Period in which that Regulatory Year occurs.

ARTICLE IX

OPEX AND CAPEX EFFICIENCY ADJUSTMENTS

9.1 General Efficiency Adjustment Principles

- 9.1.1 The Net Efficiency Adjustment is designed to ensure that the Regulated Entity has an incentive to achieve cost reductions in controllable costs above those contained in forecasts approved by the ERC as part of the Regulatory Reset Process for a Regulatory Period under Article VII.
- 9.1.2 If, during the Regulatory Reset Process for the Third Regulatory Period under Article VII, the ERC determines that the service delivery levels subsisting during calendar year 2002 have not been maintained for any Regulatory Year during the Second Regulatory Period, the ERC may elect not to apply the Net Efficiency Adjustment for that Regulatory Year.

9.2 Definition of Net Efficiency Adjustment

- 9.2.1 The Net Efficiency Adjustment for a Regulatory Year t in the Second Regulatory Period (EA_t) is calculated as follows:

$$EA_t = CEA_t + OEA_t$$

Where:

CEA_t is the Net Capital Efficiency Adjustment for Regulatory Year t , as defined in Section 9.2.2; and

OEA_t is the Net Operating and Maintenance Efficiency Adjustment for Regulatory Year t , as defined in Section 9.2.3.

- 9.2.2 The Net Capital Efficiency Adjustment for Regulatory Year t (CEA_t) is calculated as follows:

$$CEA_t = WACC \times (\text{Capex Forecast}_t - \text{Capex Actual}_t)$$

Where:

$WACC$ = the classical weighted average cost of capital as determined by the ERC in accordance with Section 4.9; and

Capex Forecast_t = the real capital expenditure forecast for Regulatory Year t , determined by deflating the nominal capital expenditure forecast approved by the ERC for Regulatory Year t pursuant to Section 4.10.5 (as such forecast is adjusted in accordance with Section 9.2.4) to accommodate actual changes in CPI over Regulatory Year t ; and

Capex Actual_t = the actual real level of capital expenditure incurred in Regulatory Year t in respect of the Grid by the

Regulated Entity, determined by deflating that actual capital expenditure to accommodate actual changes in CPI over Regulatory Year t.

9.2.3 The Net Operating and Maintenance Efficiency Adjustment for Regulatory Year t (OEA_t) is calculated as follows:

- (a) Where Regulatory Year t is the first Regulatory Year in the Second Regulatory Period:

$$OEA_t = \text{Opex Forecast}_t - \text{Opex Actual}_t; \text{ and}$$

- (b) Where Regulatory Year t is a Regulatory Year (other than the first Regulatory Year) in the Second Regulatory Period:

$$OEA_t = (\text{Opex Forecast}_t - \text{Opex Forecast}_{t-1}) - (\text{Opex Actual}_t - \text{Opex Actual}_{t-1})$$

Where:

$\text{Opex Forecast}_t =$ the nominal operating and maintenance expenditure forecast approved by the ERC for Regulatory Year t pursuant to Section 4.11, as adjusted in accordance with Section 9.2.4;

$\text{Opex Forecast}_{t-1} =$ the nominal operating and maintenance expenditure forecast approved by the ERC for Regulatory Year t-1 pursuant to Section 4.11, as adjusted in accordance with Section 9.2.4;

$\text{Opex Actual}_t =$ the actual nominal level of operating and maintenance expenditure incurred in Regulatory Year t in respect of the Grid by the Regulated Entity; and

$\text{Opex Actual}_{t-1} =$ the actual nominal level of operating and maintenance expenditure incurred in Regulatory Year t-1 in respect of the Grid by the Regulated Entity.

9.2.4 For the purposes of calculating the Net Capital Efficiency Adjustment, or the Net Operating and Maintenance Efficiency Adjustment, for a Regulatory Year t the ERC may, at its discretion but after taking into account any submissions made by the Regulated Entity, adjust the capital expenditure forecast approved by the ERC for Regulatory Year t pursuant to Section 4.10.5 or the operating and maintenance expenditure forecast approved by the ERC for Regulatory Year t-1 or Regulatory Year t pursuant to Section 4.11.5 (as the case may be) so as to reflect:

- (a) changes in the scope of services provided and activities undertaken by the Regulated Entity from those which formed the basis of the forecasts (for example as a result of the disposal of any Subtransmission Assets to another entity); and

- (b) material differences between the forecast level of output for a Regulatory Year (as accepted by the ERC) and the level of actual output for that Regulatory Year, in each case as measured by the system co-incident maximum demand (for these purposes there will only be deemed to be such a material difference where the system co-incident maximum demand for the relevant Regulatory Year is greater than 103%, or is less than 97%, of the forecast system coincident maximum demand for that Regulatory Year (as accepted by the ERC)).

Otherwise such forecasts will remain unchanged for the purposes of this Article IX. For the avoidance of doubt, the adjustment of any forecasts pursuant to this Section 9.2.4 is only for the purposes of this Article IX and does not apply for the purposes of any other Article.

9.2.5 Where Regulatory Year t is the last Regulatory Year in the Second Regulatory Period then the actual levels of capital expenditure and operating and maintenance expenditure incurred by the Regulated Entity in that Regulatory Year in respect of the Grid will not be known at the time of the Regulatory Reset Process for the Third Regulatory Period under Article VII. In such a case:

- (a) the Regulated Entity must, during such Regulatory Reset Process, provide to the ERC its best estimate of its actual levels of capital expenditure, and its actual levels of operating and maintenance expenditure, in respect of the Grid for that Regulatory Year; and
- (b) the ERC must determine the estimates of such amounts which are to be applied for the purpose of calculating the Net Efficiency Adjustment for that Regulatory Year.

Any difference between the estimate applied by the ERC for this purpose and the actual expenditure for that Regulatory Year will be corrected for at the time of the Regulatory Reset Process for the next Regulatory Period, to the extent the Net Efficiency Adjustment provisions the subject of this Article IX continue into that subsequent Regulatory Period.

9.3 Mechanism for Carrying Over Net Efficiency Adjustments

9.3.1 The Net Efficiency Adjustment for a Regulatory Year t will be retained by the Regulated Entity for a period of 5 years (where the Net Efficiency Adjustment for that Regulatory Year is a positive amount) and will be borne by the Regulated Entity for a period of 5 years (where the Net Efficiency Adjustment for that Regulatory Year is a negative amount). Accordingly, the Net Efficiency Adjustment for Regulatory Year t must be:

- (a) where the Net Efficiency Adjustment for Regulatory Year t is a positive amount - added to; or
- (b) where the Net Efficiency Adjustment for Regulatory Year t is a negative amount – subtracted from,

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the annual revenue requirement (calculated in accordance with Article V) for each of the Regulatory Years in the Third Regulatory Period up to and including that Regulatory Year which is the fifth Regulatory Year after Regulatory Year t.¹⁴

For the avoidance of doubt, this means that the annual revenue requirement for any such Regulatory Year will be increased or decreased by the net sum of the Net Efficiency Adjustments for each of the Regulatory Years in the Second Regulatory Period that are to be added to or subtracted from the annual revenue requirement for that Regulatory Year in accordance with this Section 9.3.1.

¹⁴ For example, if Regulatory Year t is 2006, then the fifth Regulatory Year after Regulatory Year t is 2011.

ARTICLE X

FORCE MAJEURE EVENT REGULATED PASS THROUGH

10.1 Force Majeure Event Pass Through

10.1.1 If a Force Majeure Event occurs, the Regulated Entity may seek the ERC's approval to charge Customers, in addition to the maximum amounts that the Regulated Entity is otherwise permitted to charge Customers for Regulated Transmission Services pursuant to Articles III, IV or V (as applicable), an amount (FM Pass Through Amount) that is not greater than the Eligible FM Pass Through Amount (as calculated by the Regulated Entity) in respect of that Force Majeure Event as at the date of the Force Majeure Event Claim (if any) given to the ERC pursuant to Section 10.2 in respect of that Force Majeure Event.

10.2 Claim for a Force Majeure Event

10.2.1 To seek the ERC's approval to pass through an FM Pass Through Amount under Section 10.1, the Regulated Entity must give the ERC:

- (a) a Force Majeure Event Notice pursuant to Section 10.2.2 within 3 months of the relevant Force Majeure Event occurring; and
- (b) a Force Majeure Event Claim pursuant to Section 10.2.3 within 12 months of the relevant Force Majeure Event occurring.

10.2.2 A Force Majeure Event Notice must specify:

- (a) details of the Force Majeure Event concerned; and
- (b) the date the Force Majeure Event occurred.

10.2.3 A Force Majeure Event Claim must specify:

- (a) details of the Force Majeure Event concerned;
- (b) the date the Force Majeure Event occurred;
- (c) the increase in costs that the Regulated Entity has actually incurred as at the date of the Force Majeure Event Claim:
 - (i) in the transmission of electricity to Connection Points; and
 - (ii) in complying with the provisions of any legislation, or of any rules, regulations or Rules made under the EPIRA, including the IRR and the Grid Code, which must be complied with in relation to the transmission of such electricity,

as a result of the occurrence of the Force Majeure Event;

- (d) the extent (if any) to which the Regulated Entity has the benefit of any insurance against the consequences of the Force Majeure Event;

- (e) the FM Pass Through Amount the Regulated Entity proposes in relation to the Force Majeure Event;
- (f) the basis on which the Regulated Entity proposes to apply the FM Pass Through Amount to Customers, including the amount the Regulated Entity proposes to apply to Customers in each Regulatory Year; and
- (g) the date from, and the period over, which the Regulated Entity proposes to apply the FM Pass Through Amount to Customers,

and must be accompanied by evidence of the increase in costs referred to in paragraph (c), and justification that such costs are reasonable and occur as a sole consequence of the Force Majeure Event.

10.2.4 If the amount which the Regulated Entity proposes to apply to any Customer in any Regulatory Year, as specified in a Force Majeure Event Claim pursuant to Section 10.2.3(f), might result in the price for electricity paid by any End-user increasing in that Regulatory Year by more than the FM Threshold Amount in respect of that Regulatory Year, the ERC must publish a notice in a newspaper of general circulation in the area in which such End-users are located which:

- (a) sets out the details of the claimed Force Majeure Event and the date that Force Majeure Event was claimed to have occurred;
- (b) specifies the FM Pass Through Amount the Regulated Entity proposes in relation to that Force Majeure Event and the basis on, date from and period over which the Regulated Entity proposes to apply that FM Pass Through Amount to Customers (including the amount the Regulated Entity proposes to apply to Customers in each Regulatory Year), in each case as set out in the Force Majeure Event Claim;
- (c) states that, if the Regulated Entity's proposal is approved by the ERC, it might result in an increase in the price of electricity; and
- (d) invites interested persons to make submissions in relation to:
 - (i) whether the claimed Force Majeure Event has occurred;
 - (ii) the amount that the ERC should determine as the Eligible FM Pass Through Amount in respect of the claimed Force Majeure Event;
 - (iii) the basis on, date from and period over which any Approved FM Pass Through Amount should be applied to Customers; and
 - (iv) the effect of the claimed Force Majeure Event on the delivery of electricity to End-users.

10.2.5 For the purposes of Section 10.2.4, the FM Threshold Amount in respect of a Regulatory Year t ($FMTA_t$) is calculated as:

$$FMTA_t = 0.02 \text{ PhP / kWh} \times (CPI_{t-1} / CPI_{2002})$$

Where:

CPI_{t-1} has the same meaning as in Section 3.3.2; and

CPI₂₀₀₂ is the sum of the CPIs for the Quarters ending on 31 December 2001, 31 March 2002, 30 June 2002 and 30 September 2002 (namely, 663.7¹⁵).

10.2.6 The submissions referred to in Section 10.2.4 must be provided in writing or at such public consultations as the ERC may decide to convene for that purpose, but only those persons who make written submissions may participate in any such public consultations.

10.3 Approval by ERC

10.3.1 If the ERC receives a Force Majeure Event Claim under Section 10.2.1(b) in relation to a Force Majeure Event, the ERC must decide whether the relevant Force Majeure Event occurred and, if the ERC decides the Force Majeure Event occurred, the ERC must decide:

- (a) the Eligible FM Pass Through Amount in respect of the Force Majeure Event;
- (b) the basis on which the FM Pass Through Amount proposed by the Regulated Entity in relation to the Force Majeure Event or the Eligible FM Pass Through Amount in respect of the Force Majeure Event as determined by the ERC (whichever is the lesser) (the Approved FM Pass Through Amount) may be applied to Customers; and
- (c) the date from, and period over, which the Approved FM Pass Through Amount in respect of the Force Majeure Event may be applied to Customers,

and notify the Regulated Entity in writing of the ERC's decision and the reasons for the ERC's decision.

10.3.2 If the ERC does not give a notice to the Regulated Entity under Section 10.3.1 prior to the expiry of the Decision Period in respect of the Force Majeure Event Claim then, on the first Business Day after the expiry of that Decision Period, the ERC is deemed to have notified the Regulated Entity of its decision that:

- (a) the FM Pass Through Amount proposed by the Regulated Entity in relation to the relevant Force Majeure Event in the Force Majeure Event Claim is the Approved FM Pass Through Amount in respect of that Force Majeure Event; and
- (b) the basis on, date from and period over which that Approved FM Pass Through Amount may be applied to Customers are as specified in the Force Majeure Event Claim.

10.3.3 For the purposes of Section 10.3.2, the Decision Period in respect of a Force Majeure Event Claim is:

- (a) unless the ERC determines otherwise pursuant to paragraph (b), 90 Business Days after the ERC receives:

¹⁵ This figure is calculated using National Statistics Office data dated 2 December 2002.

- (i) the Force Majeure Event Claim from the Regulated Entity; and
 - (ii) such evidence of the increase in costs referred to in Section 10.2.3(c) as is required by the ERC;
- (b) if the ERC convenes a public consultation or public consultations for the purpose of taking submissions in response to a notice published by the ERC pursuant to Section 10.2.4, such longer period as the ERC determines to be reasonable in the circumstances (in which case the ERC must give notice of that longer period to the Regulated Entity within 5 Business Days after the last such public consultation).

10.4 Relevant Factors for ERC Consideration

10.4.1 In making a decision under Section 10.3.1, the ERC must take into account:

- (a) the matters and proposals set out in the Force Majeure Event Claim;
- (b) any submissions made to the ERC pursuant to Section 10.2.4;
- (c) the extent to which it would have been reasonable for the Regulated Entity to have procured insurance against the consequences of the Force Majeure Event; and
- (d) any amount recoverable by the Regulated Entity under insurances against the consequences of the Force Majeure Event and of which the Regulated Entity has the benefit,

and, subject to the requirement that the Regulated Entity is not to be compensated for losses against which it would have been reasonable for the Regulated Entity to have been insured, or for losses to the extent they are able to be compensated for by claiming under insurances of which the Regulated Entity has the benefit, the ERC must seek to ensure that the Regulated Entity is fully (but not over) compensated for the increase in costs referred to in Section 10.2.3(c) to the extent that it was reasonable for the Regulated Entity to incur those costs (or for such lesser amount as is proposed by the Regulated Entity), taking into account:

- (e) the relative amounts of electricity transmitted by the Regulated Entity to each Customer;
- (f) the time cost of money based on the weighted average cost of capital determined by the ERC which applies for the purposes of these Rules in respect of the period over which the Approved FM Pass Through Amount is to be applied;
- (g) the basis on and period over which the Approved FM Pass Through Amount is to be applied;
- (h) any previous application of this Article X which has resulted in the Regulated Entity recovering an amount either more or less than the amount required to fully (but not over) compensate it in respect of a previous Force Majeure Event in accordance with this Article X; and
- (i) any other factors the ERC considers relevant.

10.4.2 The ERC may require the Regulated Entity to retain an independent expert or experts pursuant to Article XIV for the purpose of preparing a written report in respect of any of the matters that the ERC is required to decide pursuant to Section 10.3.1.

10.5 Application of Approved FM Pass Through Amount

10.5.1 The Regulated Entity may, after:

- (a) receipt or deemed receipt of a notice under Section 10.3.1 or 10.3.2 allowing the Regulated Entity to pass through an Approved FM Pass Through Amount; and
- (b) publishing a notice in a newspaper of general circulation that sets out:
 - (i) the Approved FM Pass Through Amount which the ERC has approved or is deemed to have approved;
 - (ii) the circumstances giving rise to the Approved FM Pass Through Amount; and
 - (iii) the basis on, date from and period over which the Regulated Entity will apply the Approved FM Pass Through Amount to Customers,apply the Approved FM Pass Through Amount on the basis, from the date and over the period specified or deemed to be specified in the notice from the ERC.

10.5.2 The effect of an Approved FM Pass Through Amount must be:

- (a) shown on the bills of each affected Customer which are rendered in respect of any part of the period until the next Regulatory Period commences; or
- (b) otherwise notified to such Customers in a manner approved by the ERC.

10.6 Relevance of Approved FM Pass Through Amount

10.6.1 Subject to Sections 4.15.1, 4.15.2, 5.15.1 and 5.15.2, the Regulated Entity may recover an Approved FM Pass Through Amount in accordance with this Article X notwithstanding that such recovery might otherwise result in a breach of the relevant cap under the applicable form of price control as calculated in accordance with Article III, IV or V.

ARTICLE XI

TAX EVENT REGULATED PASS THROUGH

11.1 Tax Event Pass Through

11.1.1 If a Positive Tax Change Event occurs, the Regulated Entity may seek the ERC's approval to charge Customers, in addition to the maximum amounts that the Regulated Entity is otherwise permitted to charge Customers for Regulated Transmission Services pursuant to Articles III, IV or V (as applicable), an amount (Positive Tax Pass Through Amount) that is not greater than the Eligible Tax Pass Through Amount (as calculated by the Regulated Entity) in respect of that Tax Change Event.

11.1.2 If a Negative Tax Change Event occurs, the ERC may require the Regulated Entity to pass through to Customers, as a reduction in the maximum amounts that the Regulated Entity is otherwise permitted to charge Customers for Regulated Transmission Services pursuant to Articles III, IV or V (as applicable), an amount (Negative Tax Pass Through Amount) that is not greater than the Required Tax Pass Through Amount (as determined by the ERC) in respect of that Tax Change Event.

11.2 Claim for a Positive Tax Pass Through

11.2.1 To seek the ERC's approval to pass through a Positive Tax Pass Through Amount under Section 11.1.1, the Regulated Entity must give the ERC, within 3 months of the relevant Tax Change Event occurring, a written statement which specifies:

- (a) details of the Tax Change Event concerned;
- (b) the date the Tax Change Event took effect;
- (c) the increase in costs in the transmission of electricity to Connection Points that the Regulated Entity has incurred and is likely to incur, until the end of the Regulatory Period in which the Tax Change Event occurs, as a result of the Tax Change Event;
- (d) the Positive Tax Pass Through Amount the Regulated Entity proposes in relation to the Tax Change Event;
- (e) the basis on which the Regulated Entity proposes to apply the Positive Tax Pass Through Amount to Customers, including the amount the Regulated Entity proposes to apply to Customers in each Regulatory Year; and
- (f) the date from, and period over, which the Regulated Entity proposes to apply the Positive Tax Pass Through Amount to Customers,

and which is accompanied by evidence of the actual and likely increase in costs referred to in paragraph (c).

11.2.2 If the ERC receives a statement under Section 11.2.1 in relation to a Positive Tax Change Event, the ERC must decide whether that Tax Change Event occurred and, if the ERC decides the Tax Change Event occurred, the ERC must decide:

- (a) the Eligible Tax Pass Through Amount in respect of that Tax Change Event;
- (b) the basis on which the Positive Tax Pass Through Amount proposed by the Regulated Entity in relation to that Tax Change Event or the Eligible Tax Pass Through Amount in respect of that Tax Change Event as determined by the ERC (whichever is the lesser) (the Approved Tax Pass Through Amount), may be applied to Customers; and
- (c) the date from, and period over, which the Approved Tax Pass Through Amount in respect of that Tax Change Event may be applied to Customers,

and notify the Regulated Entity in writing of the ERC's decision and the reasons for the ERC's decision.

11.2.3 If the ERC does not give a notice to the Regulated Entity under Section 11.2.2 within 90 Business Days of receiving:

- (a) a statement from the Regulated Entity under Section 11.2.1; and
- (b) such evidence of the increase in costs referred to in Section 11.2.1(c) as is required by the ERC,

then, on the 91st Business Day after receiving the Regulated Entity's statement and that evidence, the ERC is deemed to have notified the Regulated Entity of its decision that:

- (c) the Positive Tax Pass Through Amount proposed by the Regulated Entity in relation to the Tax Change Event in the Regulated Entity's statement is the Approved Tax Pass Through Amount in respect of that Tax Change Event; and
- (d) the basis on, date from and period over which that Approved Tax Pass Through Amount may be applied to Customers are as specified in the Regulated Entity's statement.

11.3 Required Negative Tax Pass Through

11.3.1 If a Negative Tax Change Event occurs and the ERC decides to impose a requirement on the Regulated Entity in relation to that Negative Tax Change Event as described in Section 11.1.2, the ERC must decide:

- (a) the Negative Tax Pass Through Amount in respect of that Tax Change Event;
- (b) the basis on which that Negative Tax Pass Through Amount must be applied to Customers; and

- (c) the date from, and period over, which the Negative Tax Pass Through Amount in respect of that Tax Change Event must be applied to Customers,

and notify the Regulated Entity in writing of the ERC's decision and the reasons for the ERC's decision.

11.3.2 The Regulated Entity must provide the ERC with such information as the ERC requires for the purpose of making a decision under Section 11.3.1 within the time specified by the ERC in a notice provided to the Regulated Entity by the ERC for that purpose.

11.4 Relevant Factors

11.4.1 In making a decision under Sections 11.2.2 or 11.3.1, the ERC must (in the case of a decision under Section 11.2.2) take into account the matters and proposals set out in the Regulated Entity's statement and:

- (a) in the case of a decision under Section 11.2.2 - the ERC must ensure that the Regulated Entity is fully (but not over) compensated for the actual and likely increase in costs referred to in Section 11.2.1(c) (or for such lesser amount as is proposed by the Regulated Entity); and
- (b) in the case of a decision under Section 11.3.1 – the ERC must ensure that the aggregate amount that the Regulated Entity is required to pass through to Customers is an amount that is not more than the costs that the Regulated Entity has saved and is likely to save, until the end of the Regulatory Period in which the Negative Tax Change Event occurs, in the transmission of electricity to Connection Points as a result of the Negative Tax Change Event,

taking into account:

- (c) the relative amounts of electricity transmitted by the Regulated Entity to each Customer;
- (d) the time cost of money based on the weighted average cost of capital determined by the ERC which applies for the purposes of these Rules in respect of the period over which the Approved Tax Pass Through Amount or the Negative Tax Pass Through Amount (as the case may be) is to be applied;
- (e) the basis on and period over which the Approved Tax Pass Through Amount or the Negative Tax Pass Through Amount (as the case may be) is to be applied;
- (f) any previous application of this Article XI which has resulted in an Approved Tax Pass Through Amount or a Negative Tax Pass Through Amount in respect of a previous Tax Change Event being more or less than the amount which it should have been for the purposes of this Article XI;

- (g) any change in the way or rate at which another Tax is calculated, or the removal or imposition of another Tax, which, in the ERC's opinion, is complementary to the Tax Change Event concerned;
- (h) the effect of any other previous Tax Change Event that has occurred since the later of the Effectivity Date and the last decision made under this Article XI in relation to a Tax Change Event; and
- (i) any other factors the ERC considers relevant.

11.5 Application of Approved Tax Pass Through Amount or Negative Tax Pass Through Amount

11.5.1 The Regulated Entity may, after:

- (a) receipt or deemed receipt of a notice under Section 11.2.2 or 11.2.3 allowing the Regulated Entity to pass through an Approved Tax Pass Through Amount; and
- (b) publishing a notice in a newspaper of general circulation that sets out:
 - (i) the Approved Tax Pass Through Amount which the ERC has approved or is deemed to have approved;
 - (ii) the circumstances giving rise to the Approved Tax Pass Through Amount; and
 - (iii) the basis on, date from and period over which the Regulated Entity will apply the Approved Tax Pass Through Amount to Customers, apply the Approved Tax Pass Through Amount on the basis, from the date and over the period specified or deemed to be specified in the notice from the ERC.

11.5.2 The Regulated Entity must, after receipt of a notice under Section 11.3.1 requiring the Regulated Entity to pass through a Negative Tax Pass Through Amount to Customers, apply the Negative Tax Pass Through Amount on the basis, from the date and over the period specified in the notice from the ERC.

11.5.3 The effect of an Approved Tax Pass Through Amount or a Negative Tax Pass Through Amount must be:

- (a) shown on the bills of each affected Customer which are rendered in respect of any part of the period until the next Regulatory Period commences; or
- (b) otherwise notified to such Customers in a manner approved by the ERC.

11.6 Relevance of Approved Tax Pass Through Amount

11.6.1 Subject to Sections 4.15.1, 4.15.2, 5.15.1 and 5.15.2, the Regulated Entity may recover an Approved Tax Pass Through Amount in accordance with this Article XI notwithstanding that such recovery might otherwise result in a breach of the relevant cap under the applicable form of price control as calculated in accordance with Article III, IV or V.

ARTICLE XII

RE-OPENING AND ADJUSTMENT EVENTS

12.1 Preconditions for Maximum Annual Revenue cap Re-Opening

12.1.1 The Regulated Entity may apply to the ERC in writing for a change in the method used to calculate the Maximum Annual Revenue cap (MAR_i) as set out in Section 3.2.1 or Section 4.2.1 if any of the following conditions (each a Trigger Condition) has occurred:

- (a) the absolute value of the change in CPI between two consecutive Quarters within the then current Regulatory Period, as calculated pursuant to Section 12.5.1, is greater than 0.07; or
- (b) a major prescribed change in the PhP/\$US exchange rate during the First Regulatory Period, as defined in Section 12.5.2; or
- (c) the PhP/\$US exchange rate for a Quarter within the Second Regulatory Period is more than 120% of the PhP/\$US exchange rate for that Quarter which is approved by the ERC for the purposes of the capital expenditure program that is approved by the ERC under Section 4.10.5 (see also Section 12.5.3); or
- (d) the absolute value of the change in the three-month average of non-coincident peak demands between two consecutive Regulatory Years (each of which occurs in the then current Regulatory Period), as calculated pursuant to Section 12.6, is greater than 0.50.

12.2 Information to Accompany Application for Maximum Annual Revenue cap Re-Opening

12.2.1 Where the Regulated Entity makes an application pursuant to Section 12.1, it must include with that application the following information:

- (a) the raw data relied upon to demonstrate that the relevant Trigger Condition has occurred;
- (b) the calculations relied upon to demonstrate that the relevant Trigger Condition has occurred; and
- (c) in the case where the Trigger Condition relied upon is that referred to in Section 12.1.1(d), a statement from an independent audit and/or engineering firm as the case may require, which firm is approved by the ERC, on whether or not the relevant raw data is accurate (including whether or not the physical metering systems are operating correctly at the time the relevant measurements are made) and whether or not that raw data fairly and reasonably represents the peak demand at each Connection Point.

12.3 Process and Timing for Decision on Application for Maximum Annual Revenue cap Re-Opening

12.3.1 Upon receiving an application under Section 12.1.1, the ERC must:

- (a) decide whether or not the Trigger Condition the subject of the application has occurred; or
- (b) in the case where the Trigger Condition relied upon is that referred to in Section 12.1.1(d), request additional clarification on the raw data, its accuracy, its representative nature, its source, its veracity or its authenticity, or on the calculation made to demonstrate that the Trigger Condition has occurred, in order to assist the ERC to determine whether that Trigger Condition has occurred.

12.3.2 Where the ERC requests clarification from the Regulated Entity under Section 12.3.1(b), the ERC must clearly state its clarification requirements and a time frame within which the Regulated Entity must respond.

12.3.3 The ERC must notify the Regulated Entity in writing of the ERC's decision under Section 12.3.1 (a), and the reasons for that decision, within 30 Business Days after the date of:

- (a) the day after the date the ERC receives the application from the Regulated Entity under Section 12.1.1; or
- (b) the day after the date the ERC receives the additional clarification requested from the Regulated Entity under Section 12.3.1(b); or
- (c) the day after the date the ERC notifies the Regulated Entity it intends to extend the time for making its decision (the ERC may only extend such time once and for a maximum of an additional 30 Business Days),

as the case may be.

12.4 Maximum Annual Revenue cap Re-Opening – determination of new cap

12.4.1 Where the ERC decides that a Trigger Condition has occurred it must determine a new method for the purpose of calculating the Maximum Annual Revenue cap that is to apply for the relevant Regulatory Period by applying, to the extent reasonably practicable, the principles specified under Articles IV and V. The new method so determined applies for each succeeding Regulatory Year in the then current Regulatory Period, commencing with the Regulatory Year that commences after the ERC determines that new method.

12.5 Maximum Annual Revenue cap Re-Opening – Definitions: change in CPI, PhP/\$US exchange rate

12.5.1 For the purposes of Section 12.1.1(a), the change in CPI between two consecutive Quarters within a Regulatory Period ($\Delta\text{CPI}_{\text{rp}}$) is calculated as follows:

$$\Delta\text{CPI}_{\text{rp}} = [\text{CPI}_{(\text{Qj})} / \text{CPI}_{(\text{Qj-1})}] - 1$$

Where:

$CPI_{(Qj)}$ is the CPI for the second of the consecutive Quarters within the relevant Regulatory Period; and

$CPI_{(Qj-1)}$ is the CPI for the first of the consecutive Quarters within the relevant Regulatory Period.

12.5.2 For the purposes of Section 12.1.1(b) a major prescribed change in the PhP/\$US exchange rate during the First Regulatory Period occurs where:

- (a) $\Delta USER_{Q1/Q2} > 0.15$ and $\Delta USER_{Q2/Q3} > 0.15$; or
- (b) $\Delta USER_{Q1/Q2} < \text{minus } 0.15$ and $\Delta USER_{Q2/Q3} < \text{minus } 0.15$.

For the purposes of Section 12.9.1(a), a minor prescribed change in the PhP/\$US exchange rate during the First Regulatory Period occurs where:

- (a) $\Delta USER_{Q1/Q2} > 0.08$ and $\Delta USER_{Q2/Q3} > 0.08$; or
- (b) $\Delta USER_{Q1/Q2} < \text{minus } 0.08$ and $\Delta USER_{Q2/Q3} < \text{minus } 0.08$.

For the purposes of this Section 12.5.2:

$\Delta USER_{Q1/Q2} = [USER_{Q2} / USER_{Q1}] - 1$; and

$\Delta USER_{Q2/Q3} = [USER_{Q3} / USER_{Q2}] - 1$,

where:

USER has the same meaning as in Section 3.3.3;

$USER_{Q1}$ is the USER for a Quarter within the First Regulatory Period;

$USER_{Q2}$ is the USER for the Quarter (if any) within the First Regulatory Period that immediately follows the Quarter which is denoted as Q1 for the purposes of this Section 12.5.2; and

$USER_{Q3}$ is the USER for the Quarter (if any) within the First Regulatory Period that immediately follows the Quarter which is denoted as Q2 for the purposes of this Section 12.5.2.

12.5.3 For the purposes of Sections 12.1.1(c) and 12.9.1(b):

- (a) both the first-mentioned and the second-mentioned PhP/\$US exchange rates must be expressed as PhP/US\$1 (for example, if PhP50 can purchase US\$1, then the relevant PhP/\$US exchange rate is 50); and
- (b) the first-mentioned PhP/\$US exchange rate must be calculated in a manner, and be of a kind, that is substantially comparable to the manner of calculation, and kind, of the second-mentioned PhP/\$US exchange rate.

12.6 Maximum Annual Revenue cap Re-Opening - Change in Three-Month Average of Non-Coincident Peak Demand

12.6.1 For the purposes of Section 12.1.1(d), the change in the three-month average of non-coincident peak demands between two consecutive Regulatory Years ($\Delta NCPD$) is calculated as follows:

$$\Delta NCPD = [NCPD_t / NCPD_{t-1}] - 1$$

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Where:

$$\text{NCPD}_t = \{ \text{NCPD}_{(Mi)} + \text{NCPD}_{(Mi-1)} + \text{NCPD}_{(Mi-2)} \} ; \text{and}$$

$$\text{NCPD}_{t-1} = \{ \text{NCPD}_{(Mi-12)} + \text{NCPD}_{(Mi-13)} + \text{NCPD}_{(Mi-14)} \}$$

Where:

$\text{NCPD}_{(Mi)}$ = the average of the non-coincident peak demands from all Connection Points for calendar month “i” in the second of the consecutive Regulatory Years (Regulatory Year t), being Connection Points in existence as at the commencement of that calendar month;

$\text{NCPD}_{(Mi-1)}$ = the average of the non-coincident peak demands from all Connection Points for the calendar month immediately preceding calendar month “i”, being Connection Points in existence as at the commencement of calendar month “i”;

$\text{NCPD}_{(Mi-2)}$ = the average of the non-coincident peak demands from all Connection Points for the calendar month immediately preceding calendar month “i-1”, being Connection Points in existence as at the commencement of calendar month “i”;

$\text{NCPD}_{(Mi-12)}$ = the average of the non-coincident peak demands from all Connection Points for the calendar month in the first of the consecutive Regulatory Years (Regulatory Year t-1) which corresponds to calendar month “i” (eg. if calendar month “i” is February 2005 then calendar month “i-12” is February 2004), being Connection Points in existence as at the commencement of calendar month “i-12”;

$\text{NCPD}_{(Mi-13)}$ = the average of the non-coincident peak demands from all Connection Points for the calendar month immediately preceding calendar month “i-12”, being Connection Points in existence as at the commencement of calendar month “i-12”; and

$\text{NCPD}_{(Mi-14)}$ = the average of the non-coincident peak demands from all Connection Points for the calendar month immediately preceding calendar month “i-13”, being Connection Points in existence as at the commencement of calendar month “i-12”.

12.6.2 For the purposes of Section 12.6.1, the average of the non-coincident peak demands from relevant Connection Points for a calendar month is to be measured by meters located at each of those Connection Points which are operative.

12.7 Deferred Capital Expenditure on Significant Projects – X factor adjustment

- 12.7.1 The Regulated Entity must promptly notify the ERC in writing if any capital expenditure for a Significant Project, which is forecast to be undertaken in the capital expenditure program that is approved by the ERC under Section 4.10.5, has not been substantially undertaken within 18 months of the time it was so forecast to be undertaken.
- 12.7.2 If at any time the ERC determines that any capital expenditure for a Significant Project, which is forecast to be undertaken in the capital expenditure program that is approved by the ERC under Section 4.10.5, has not been substantially undertaken within 18 months of the time it was so forecast to be undertaken:
- (a) the ERC must promptly notify the Regulated Entity in writing of its determination; and
 - (b) after taking into account any submissions made by the Regulated Entity, the ERC may determine a new value for the X factor in the formula for the calculation of the Maximum Annual Revenue cap as set out in Section 4.2.1 by recalculating the X factor:
 - (i) based on the exclusion from that capital expenditure program of all of the capital expenditure which is forecast to be undertaken in that program for the Significant Project; and
 - (ii) so as to recognise the extent to which the previous X factor was set on the basis of the capital expenditure that is excluded under paragraph (i).

Any X factor which is recalculated under this Section 12.7.2 applies for each succeeding Regulatory Year in the then current Regulatory Period, commencing with the Regulatory Year that commences after the ERC recalculates that X factor, unless the ERC (acting pursuant to this Article XII) subsequently determines a new X factor, or a new method for the purpose of calculating the Maximum Annual Revenue cap, that is to apply for such Regulatory Years.

12.8 Major Unforecast Disposals – X factor adjustment

- 12.8.1 The Regulated Entity must promptly notify the ERC after it has disposed of assets which form, or would but for that disposal form, part of the Grid where:
- (a) that disposal (referred to in this Section 12.8.1 as the "relevant disposal") occurs during the First Regulatory Period; and
 - (b) the value of the assets so disposed of, together with the aggregate value of all other assets which form part of the Grid and which have previously been disposed of by the Regulated Entity during the First Regulatory Period, is greater than 0.1% of the value of all the assets that, at the time of the relevant disposal, are used by the Regulated Entity to provide Regulated Transmission Services.

12.8.2 If at any time the ERC determines that:

- (a) the Regulated Entity has disposed of assets which form, or would but for that disposal form, part of the Grid and which have an aggregate value of greater than 0.1% of the value of all the assets that, at the time of the ERC's determination, are used by the Regulated Entity to provide Regulated Transmission Services; and
- (b) such disposal or disposals occur during the First Regulatory Period,
then:
- (c) the ERC must promptly notify the Regulated Entity in writing of its determination; and
- (d) after taking into account any submissions made by the Regulated Entity, the ERC may determine a new value for the X factor in the formula for the calculation of the Maximum Annual Revenue cap as set out in Section 3.2.1 by recalculating the X factor:
 - (i) based on the exclusion of the value of the assets which have been so disposed of; and
 - (ii) so as to recognise the extent to which the previous X factor was set on the basis of those assets not being so disposed of.

Any X factor which is recalculated under this Section 12.8.2 applies for each succeeding Regulatory Year in the then current Regulatory Period, commencing with the Regulatory Year that commences after the ERC recalculates that X factor, unless the ERC (acting pursuant to this Article XII) subsequently determines a new X factor, or a new method for the purpose of calculating the Maximum Annual Revenue cap, that is to apply for such Regulatory Years.

12.8.3 The Regulated Entity must promptly notify the ERC after it has disposed of assets which form, or would but for that disposal form, part of the Grid where:

- (a) that disposal (referred to in this Section 12.8.3 as the "relevant disposal") occurs during the Second Regulatory Period;
- (b) the value of the assets so disposed of, together with the aggregate value of all other assets which formed part of the Grid and which have previously been disposed of by the Regulated Entity during the Second Regulatory Period, is greater than 0.1% of the value of all the assets that, at the time of the relevant disposal, are used by the Regulated Entity to provide Regulated Transmission Services; and
- (c) the disposal of the assets referred to in paragraph (b) (ie. the assets the subject of the relevant disposal as well as those which have previously been disposed of by the Regulated Entity during the Second Regulatory Period):
 - (i) is not included by the ERC in the calculation of the Regulatory Asset Base for any Regulatory Year in the Second Regulatory Period, pursuant to Section 4.7.1, for the purposes of the

Regulatory Reset Process for the Second Regulatory Period under Article VII; or

- (ii) is included by the ERC in the calculation of the Regulatory Asset Base for any Regulatory Year in the Second Regulatory Period, pursuant to Section 4.7.1, for the purposes of the Regulatory Reset Process for the Second Regulatory Period under Article VII, but is for an amount that is greater than 105% or less than 95% of the forecast amount included for that purpose by the ERC in the calculation of that Regulatory Asset Base.

12.8.4 If at any time the ERC determines that:

- (a) the Regulated Entity has disposed of assets which form, or would but for that disposal form, part of the Grid and which have an aggregate value of greater than 0.1% of the value of all the assets that, at the time of the ERC's determination, are used by the Regulated Entity to provide Regulated Transmission Services;
- (b) such disposal or disposals occur during the Second Regulatory Period; and
- (c) the disposal of such assets during the Second Regulatory Period:
 - (i) is not included by the ERC in the calculation of the Regulatory Asset Base for any Regulatory Year in the Second Regulatory Period, pursuant to Section 4.7.1, for the purposes of the Regulatory Reset Process for the Second Regulatory Period under Article VII; or
 - (ii) is included by the ERC in the calculation of the Regulatory Asset Base for any Regulatory Year in the Second Regulatory Period, pursuant to Section 4.7.1, for the purposes of the Regulatory Reset Process for the Second Regulatory Period under Article VII, but is for an amount that is greater than 105% or less than 95% of the forecast amount included for that purpose by the ERC in the calculation of that Regulatory Asset Base,

then:

- (d) the ERC must promptly notify the Regulated Entity in writing of its determination; and
- (e) after taking into account any submissions made by the Regulated Entity, the ERC may determine a new value for the X factor in the formula for the calculation of the Maximum Annual Revenue cap as set out in Section 4.2.1 by recalculating the X factor:
 - (i) based on:
 - (A) in the case of paragraph (c)(i), the exclusion of the value of the assets which have been so disposed of; and

- (B) in the case of paragraph (c)(ii), the amount for which the assets were disposed of; and
- (ii) so as to recognise the extent to which the previous X factor was set on the basis of:
 - (A) in the case of paragraph (c)(i), those assets not being so disposed of; and
 - (B) in the case of paragraph (c)(ii), those assets being disposed of for a different amount.

Any X factor which is recalculated under this Section 12.8.4 applies for each succeeding Regulatory Year in the then current Regulatory Period, commencing with the Regulatory Year that commences after the ERC recalculates that X factor, unless the ERC (acting pursuant to this Article XII) subsequently determines a new X factor, or a new method for the purpose of calculating the Maximum Annual Revenue cap, that is to apply for such Regulatory Years.

12.9 PhP/\$US exchange rate adjustment

12.9.1 If:

- (a) a minor prescribed change in the PhP/\$US exchange rate during the First Regulatory Period (as defined in Section 12.5.2) occurs, then this Section 12.9.1 applies:
 - (i) where the Quarter which is denoted as Q3 for the purposes of Section 12.5.2 is a Quarter that does not end on 31 December - in respect of the Regulatory Year that immediately follows the Regulatory Year in which that Quarter occurs; and
 - (ii) where the Quarter which is denoted as Q3 for the purposes of Section 12.5.2 is a Quarter that ends on 31 December – in respect of the second Regulatory Year after the Regulatory Year in which that Quarter occurs

(Section 3.3.1 specifies the consequences of Section 12.9.1 so applying);
or
- (b) the PhP/\$US exchange rate for a Quarter within the Second Regulatory Period is less than 90%, or more than 110%, of the PhP/\$US exchange rate for that Quarter which is approved by the ERC for the purposes of the capital expenditure program that is approved by the ERC under Section 4.10.5 (see also Section 12.5.3), then this Section 12.9.1 applies in respect of the Regulatory Year that immediately follows the Regulatory Year in which that Quarter occurs (Section 3.3.1 specifies the consequences of Section 12.9.1 so applying).

ARTICLE XIII

DECISION REVOCATION AND NOTICES

13.1 Limited Decision Revocation Arrangements

13.1.1 If the ERC has made a decision under these Rules and later concludes that the decision was made on the basis of information provided to the ERC that was false or misleading in a material particular, or on the basis of analysis provided to the ERC by the Regulated Entity which incorporated a material calculation error, then, subject to Section 13.1.2, the ERC may revoke the decision and make a new decision in substitution for the revoked decision.

13.1.2 Before the ERC revokes and substitutes a decision pursuant to Section 13.1.1, the ERC must first:

- (a) notify the Regulated Entity in writing of:
 - (i) the proposed revocation;
 - (ii) the false or misleading information or the calculation error;
 - (iii) the information required from the Regulated Entity to assist the ERC in making a new decision (if necessary); and
 - (iv) the proposed process and time frame for making any new decision (including the proposed date of effect of the revocation and new decision);
- (b) allow the Regulated Entity a reasonable period to make submissions to the ERC, not exceeding 30 Business Days, regarding the proposals referred to in paragraph (a) (including submissions as to whether the original decision was based on information that was false or misleading in a material particular or on a material calculation error); and
- (c) take into account any matters contained in a submission made by the Regulated Entity pursuant to paragraph (b).

13.1.3 A new decision made under Section 13.1.1 must only differ from the revoked decision to the extent necessary to correct for:

- (a) the false or misleading information (if any) on which the revoked decision was based;
- (b) the calculation error (if any) on which the revoked decision was based; and
- (c) the application of the revoked decision during the period in respect of which that decision was in effect.

13.1.4 The provision of false or misleading information to the ERC is a breach of these Rules and the ERC may impose a fine or penalty under Section 43 (l) of the EPIRA for such a breach.

13.2 Modification of Time Periods

13.2.1 The ERC may, by written notice to the Regulated Entity and upon a request for such extension being made in writing by the Regulated Entity, extend:

- (a) any time prescribed by these Rules as the time by which a thing required to be done by the Regulated Entity must be done; or
- (b) any period prescribed by these Rules as the period within which a thing required to be done by the Regulated Entity must be done.

ARTICLE XIV
INDEPENDENT EXPERTS

14.1 Accreditation of independent expert

14.1.1 Where these Rules confer on the ERC the right or obligation to require the Regulated Entity to retain an independent expert pursuant to this Article XIV, that independent expert must have expertise in one or more of the following areas:

- (a) asset valuation;
- (b) transmission system design, construction, maintenance and operation;
- (c) load flow modelling of electricity transmission networks;
- (d) transmission network benchmark service performance;
- (e) accounting;
- (f) corporate finance, financial modelling and pricing;
- (g) economic analysis and economic modelling;
- (h) fire inspection;
- (i) insurance and claims risk adjustment;
- (j) such other areas as the ERC notifies in writing to the Regulated Entity.

14.1.2 The Regulated Entity must, within 90 Business Days after the Effectivity Date and at all times thereafter, establish and maintain a list of experts that:

- (a) have expertise in one or more of the areas referred to in Section 14.1.1 and, in respect of each such area, satisfy the applicable criteria that are specified in Appendix B or that are otherwise notified in writing by the ERC to the Regulated Entity from time to time; and
- (b) have no commercial or pecuniary relationship with the Regulated Entity at a financial, management or board level,

(such experts being referred to in this Article XIV as Accredited Experts).

14.1.3 The ERC may, from time to time, direct the Regulated Entity:

- (a) to include a particular person or persons on the list referred to in Section 14.1.2, provided that person or those persons satisfy the requirements set out in Section 14.1.2; or
 - (b) to remove a particular person or persons from that list,
- and the Regulated Entity must immediately comply with that direction.

14.1.4 The Regulated Entity must, upon the direction of the ERC, promptly provide the ERC with:

- (a) a copy of the up to date list referred to in Section 14.1.2; and
- (b) such information relating to experts included on that list as the ERC may reasonably require.

14.2 Use of independent expert or other external consultant to undertake particular work

14.2.1 Where the ERC (having the right or obligation to do so pursuant to these Rules) decides to require the Regulated Entity to retain an independent expert pursuant to this Article XIV, the ERC must give a written notice to the Regulated Entity which:

- (a) identifies the area or areas of expertise described in Section 14.1.1 which that independent expert must have;
- (b) sets out the scope of the work that is to be undertaken by that independent expert;
- (c) specifies the criteria against which tenders to undertake that scope of work are to be evaluated (such criteria may include, among other things, international or local experience or a combination of such experience); and
- (d) specifies the time by which the independent expert must provide the ERC with its written report on the work the subject of the scope of work.

14.2.2 Within one week of receiving the written notice referred to in Section 14.2.1, the Regulated Entity must, in an open tender process, seek Expressions of Interest (EOIs) from all of the Accredited Experts who have the area or areas of expertise identified in that notice pursuant to Section 14.2.1(a), such EOIs to be due on the 15th Business Day after the Regulated Entity receives that notice (or such other time as the ERC specifies in that notice).

14.2.3 Within one week of receipt of the EOIs by the Regulated Entity from the Accredited Experts in accordance with Section 14.2.2:

- (a) the Regulated Entity must evaluate such EOIs against the criteria specified, pursuant to Section 14.2.1(c), in the notice referred to in Section 14.2.1 and must provide the details of such evaluation to the ERC; and
- (b) the Regulated Entity must request not less than three of those Accredited Experts who have lodged such EOIs and who, in the Regulated Entity's opinion, best satisfy the criteria specified, pursuant to Section 14.2.1(c), in the notice referred to in Section 14.2.1 (or, if there are less than three such Accredited Experts, all of the Accredited Experts who have lodged an EOI in accordance with Section 14.2.2) to provide directly to the ERC (to the exclusion of the Regulated Entity) detailed tenders against the scope of work identified in that notice pursuant to Section 14.2.1(b), such tenders to be due on the 15th Business Day after the request for tenders (or such other time as the ERC notifies in writing to the Regulated Entity).

14.2.4 Until the ERC has selected its preferred Accredited Expert under Section 14.2.5, all communications between the Regulated Entity and any Accredited Expert who

has lodged an EOI pursuant to Section 14.2.2 or a tender pursuant to Section 14.2.3 or 14.2.5:

- (a) must be in writing (a copy of which must be promptly provided to the ERC by the Regulated Entity); or
- (b) may be by telephone or personal contact, but only if a duly authorised representative of the ERC is present at that time (unless the ERC has expressly waived its right to be so present).

14.2.5 Within three weeks of receiving all of the tenders in accordance with Section 14.2.3, the ERC must:

- (a) select from those tenders the Accredited Expert which it prefers, in which case the ERC must notify the Regulated Entity accordingly; or
- (b) require the Regulated Entity to request such other Accredited Expert or Accredited Experts as are nominated by the ERC, who have the area or areas of expertise identified in the notice referred to in Section 14.2.1, to provide directly to the ERC (to the exclusion of the Regulated Entity) detailed tenders against the scope of work identified in that notice pursuant to Section 14.2.1(b), such tenders to be due at such time as the ERC notifies in writing to the Regulated Entity, in which case the Regulated Entity must promptly comply with that request and the ERC must, within three weeks of receiving those tenders:
 - (i) select from those tenders (and the tenders previously provided to it under Section 14.2.3) the Accredited Expert which it prefers; and
 - (ii) notify the Regulated Entity accordingly.

Upon being notified of the ERC's preferred Accredited Expert under this Section 14.2.5, the Regulated Entity must thereupon retain the services of that Accredited Expert to undertake the scope of work identified, pursuant to Section 14.2.1(b), in the notice referred to in Section 14.2.1.

14.2.6 The costs of any independent expert retained pursuant to this Article XIV must be borne by the Regulated Entity.

14.2.7 The Regulated Entity must ensure that the terms of engagement of an independent expert who is retained pursuant to this Article XIV:

- (a) require that independent expert to provide the ERC (to the exclusion of the Regulated Entity) with a written report on the work undertaken by it pursuant to its scope of work by the time specified, pursuant to Section 14.2.1(d), in the notice referred to in Section 14.2.1; and
- (b) contain such other terms as may reasonably be required by the ERC (including that the ERC may terminate the retainer of the independent expert at any time if the ERC has reasonable grounds for believing that the expert is not sufficiently independent in undertaking the work or that the expert has an actual or potential conflict of interest in undertaking, or continuing to undertake, the work).

14.2.8 Notwithstanding the foregoing, where these Rules confer on the ERC the right or obligation to require the Regulated Entity to retain an independent expert pursuant to this Article XIV, the ERC may instead decide that:

- (a) the work that would otherwise be undertaken by that independent expert may be undertaken by an entity engaged by the Regulated Entity; and
- (b) any report prepared by such an entity may be utilised by the ERC for the purposes of these Rules in place of a report that would otherwise be prepared by that independent expert.

14.2.9 Nothing in this Article XIV precludes the ERC from directly engaging an external consultant for the purposes of assisting it in connection with any matter arising under these Rules (other than in circumstances where these Rules oblige the ERC to require the Regulated Entity to retain an independent expert or experts pursuant to this Article XIV) and, if the ERC engages such a consultant, or requires the Regulated Entity to engage such a consultant to undertake work on the ERC's behalf, the reasonable costs of that consultant must, be borne by the Regulated Entity, if so required by the ERC, and be either reimbursed to the ERC by the Regulated Entity, or paid directly to the consultant, as the contract may require.

14.3 Cooperation with independent experts and external consultants

14.3.1 The Regulated Entity must provide any independent expert who is retained pursuant to this Article XIV and any external consultant referred to in Section 14.2.9 with such access to the Regulated Entity's systems, records, infrastructure and personnel as the independent expert or consultant requires to enable it to successfully complete its work for the ERC and must otherwise fully cooperate with the independent expert or consultant for that purpose.

14.4 Report of independent expert or external consultant

14.4.1 Where a report is provided to the ERC by an independent expert who is retained pursuant to this Article XIV, by an entity referred to in Section 14.2.8, or by an external consultant referred to in Section 14.2.9, and that report contains information which is provided by the Regulated Entity, the ERC may only disclose the contents of that report:

- (a) to the Regulated Entity; or
- (b) to a person other than the Regulated Entity if:
 - (i) the ERC has first given the Regulated Entity 10 days' written notice of its intention to disclose those contents, together with a copy of the intended disclosure; and
 - (ii) the ERC has taken such steps as it considers to be appropriate (after considering any submissions that the Regulated Entity has made to the ERC during that 10 day period) to mask, excise or otherwise modify the intended disclosure for the purpose of protecting the confidentiality of any information contained in the intended

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disclosure which is properly regarded as being confidential in nature.

Pasig City, Philippines, July __ , 2009

ZENAIDA G. CRUZ-DUCUT

Chairperson

RAUF A. TAN

Commissioner

ALEJANDRO Z. BARIN

Commissioner

MARIA TERESA A.R. CATAÑEDA

Commissioner

JOSE C. REYES

Commissioner

APPENDIX A
PERFORMANCE INDICES AND METRICS

For the purposes of Section 8.1.1(a), at least the following indices must be determined by the ERC as the indices that are to be used to measure the performance of the Grid and the performance of the Regulated Entity in restoring Regulated Transmission Services following the outage of a component of the Grid:

- number of interruption events, ie. number of times service is lost to a Customer or group of Customers;
- sustained average interruption frequency index, ie. connected MVA impacted by outages in excess of 10 minutes divided by total connected MVA;
- momentary average interruption frequency index, ie. connected MVA impacted by outages of less than or equal to 10 minutes divided by total connected MVA;
- sustained average interruption duration index, ie. the product of connected MVA impacted by outages and the total number of minutes of such outages, divided by total connected MVA;
- system interruption severity index, ie. the product of MW not supplied due to outages and the total number of minutes of such outages (otherwise known as “unserved energy”), divided by system peak load (measured in MW);
- frequency of tripping, ie. the total number of tripping events divided by length per 100 circuit-km;
- average forced outage duration, ie. the total duration of forced outages (measured in minutes) divided by the total number of such outages;
- accumulated time error, ie. the deviation of electric time from standard time (expressed using a binary point system);
- number of frequency limit violations, ie. the number of times system frequency exceeds $\pm 0.3\text{Hz}$ from the nominal frequency of 60Hz (expressed using a binary point system);
- number of voltage limit violations, ie. the number of times the root mean square of the voltages in high-voltage substation buses nominated by the ERC differs from the nominal voltage (expressed using a binary point system); and
- system losses as defined in clause 3.4 of the Grid Code.

For the purposes of Section 8.1.1(d), those parts of the Grid in respect of which separate performance reports must be made are, at a minimum:

- such part of the Grid as is located in Luzon;
- such part of the Grid as is located in Visayas;

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- such part of the Grid as is located in Mindanao;
- where technically relevant, each interconnection link between those parts of the Grid referred to above; and
- where technically relevant, each interconnection link between each island which provides service for those parts of the Grid referred to above.

APPENDIX B
CRITERIA FOR INDEPENDENT EXPERTS

Asset valuation

Have experience in:

- Appraising electricity network plant and equipment, and land and buildings, within the Philippines using a fair value methodology;
- Valuing electricity transmission network assets, in an overseas jurisdiction, using an optimised replacement cost valuation methodology; and
- Assisting regulated entities and/or regulators in overseas jurisdictions in reviewing or determining regulatory asset bases used for the purposes of incentive or performance based regulatory arrangements.

Have qualifications in (see below):

- Engineering;
- Accounting; and
- Business or Commerce.

Transmission system design, construction, maintenance and operation, load flow modelling and transmission network benchmark service performance

Have experience in:

- Electricity network load flow modelling;
- Design, construction and maintenance of electricity transmission networks, including project cost estimation, project planning, cost control and network constraint elimination;
- Measuring and monitoring electricity network performance;
- Design and/or augmentation of electricity networks for reduced line losses; and
- Electricity network performance monitoring and benchmarking against overseas transmission entities.

Have:

- Qualifications in Engineering (see below); or
- Other qualifications relevant to the matters referred to above.

Accounting

Have experience in:

- Administering, reviewing or developing financial accounting, asset register or operational systems;

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- Auditing, accounting, asset register and operational systems, leading to the issuance of an audit opinion on statutory financial reports; and
- Assisting with asset valuation assignments.

Have qualifications in:

- Accounting (see below).

Corporate finance, financial modelling and pricing

Have experience in:

- Principles of asset valuation of electricity networks to optimised replacement cost and/or deprival value;
- Estimation of weighted average cost of capital for regulatory and commercial purposes;
- Cash flow and financial modelling and financial forecasting;
- Credit rating analysis and estimation;
- Analysis and/or development of operating and maintenance expenditure, and capital expenditure, forecasts in the electricity sector;
- Developing submissions to electricity regulators or as a regulator/regulator's advisor in examining such submissions;
- Regulation of electricity network prices or tariffs;
- Analysis of service and financial performance against local and overseas benchmarks; and
- Analysis of discounted cash flow or similar financial modelling.

Have qualifications in (see below):

- Business or Commerce;
- Economics;
- Accounting; and
- Engineering.

Economic analysis and economic modelling

Have experience in:

- Economic forecasting of economic growth and/or electricity demand.

Have qualifications in:

- Economics (see below).

Fire Inspection

Have experience in:

- Investigation of the causes of fires in buildings or plant and equipment; and
- Assessing the risks of fire and effectiveness of fire prevention and control systems.

Have qualifications in:

- Engineering (see below); or
- Fire investigation.

Insurance and claims risk adjustment

Have experience in:

- Investigation and assessment of force majeure events; and
- Estimation or examination of the costs resulting from force majeure events, including direct replacement costs and the opportunity costs associated with continuation of electricity supply.

Have qualifications in (see below):

- Engineering; or
- Business or Commerce; or
- as an Actuary.

Professional qualifications

Where a person is required to have qualifications in Accounting, that person must be registered as a certified public accountant under the Revised Accountancy Law (Presidential Decree No.692) who possesses the independence as defined in Part II Section 14 of the Code of Professional Ethics for Certified Public Accountants as promulgated by the Board of Accountancy and approved by the Professional Regulation Commission.

Where a person is required to have qualifications in Engineering, Economics or Business or Commerce, or as an Actuary, that person must have:

- graduate or post graduate qualifications in that discipline from a reputable Philippines or overseas university; and
- be a member of a professional institute in the Philippines or an overseas jurisdiction which represents that discipline.