

**RULES FOR SETTING DISTRIBUTION
WHEELING RATES
for
PRIVATELY OWNED DISTRIBUTION
UTILITIES
ENTERING PERFORMANCE BASED
REGULATION
(FIRST ENTRY POINT)**

[Final Draft]

[June 26, 2006]

[THIS PAGE LEFT BLANK INTENTIONALLY]

Republic of the Philippines
Energy Regulatory Commission
Pacific Center, San Miguel Avenue, Pasig City

RULES FOR SETTING
DISTRIBUTION WHEELING RATES
for
PRIVATELY OWNED DISTRIBUTION UTILITIES
ENTERING PERFORMANCE BASED REGULATION
(FIRST ENTRY POINT)

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 distribution wheeling rates for privately owned distribution utilities entering performance based regulation at the first entry point, based on Annex B of ERC Resolution No. 12-02 Series of 2004 “Adopting a Methodology for Setting Distribution Wheeling Rates”, dated December 10, 2004. These Rules are an amendment of the Guidelines on the Methodology for Setting Distribution Wheeling Rates, published by the ERC on December 10, 2004.

Further sets of Rules for setting Distribution Wheeling Rates will be issued for each of the next four entry points for privately owned distribution utilities entering performance based regulation, where the entry points are defined in the afore-mentioned Annex B. With the exception of revising the dates throughout each document in accordance with each entry point date, identifying the different utilities for each entry point, and allowing for the fact that there will be no First Regulatory Period associated with future entry points, the further sets of Rules will in all respects correspond with these Rules for the first entry point.

Note to reviewers of this final draft document :

All changes made in this document from the draft Rules for Setting Distribution Wheeling Rates are in italics, to assist with easy review and ensure comments are made on the changed sections only.

**RULES FOR SETTING
DISTRIBUTION WHEELING RATES
for
PRIVATELY OWNED DISTRIBUTION UTILITIES
ENTERING PERFORMANCE BASED REGULATION
(FIRST ENTRY POINT)**

TABLE OF CONTENTS

ARTICLE I	1
GENERAL PROVISIONS	1
1.1 PURPOSE.....	1
1.2 CONTENT OF THE RULES	1
1.3 DEFINITIONS	2
1.4 INTERPRETATION	13
1.5 RIGHTS AND OBLIGATIONS OF REGULATED ENTITY	14
1.6 SERVICES OTHER THAN REGULATED DISTRIBUTION SERVICES	14
1.7 SUBTRANSMISSION ASSETS.....	16
1.8 PROVISION OF INFORMATION	16
1.9 AMENDMENT	16
1.10 SEPARABILITY.....	18
1.11 EFFECTIVITY.....	18
TIMING FOR REGULATORY PERIODS.....	19
2.1 STEPS TO INCENTIVE BASED RATE REGULATION	19
2.2 FIRST REGULATORY PERIOD	19
2.3 SECOND REGULATORY PERIOD	19
2.4 SUBSEQUENT REGULATORY PERIODS	19
ARTICLE III	20
FIRST REGULATORY PERIOD	20
3.1 GENERAL PRICE CONTROL PRINCIPLES	20
3.2 PRICE CONTROL FORMULA.....	20
3.3 CHANGE IN WEIGHTED INDEX	21
3.4 OVER / UNDER RECOVERY FORMULA	24
3.5 MAP _{BI}	26
ARTICLE IV	27
SECOND REGULATORY PERIOD	27
4.1 GENERAL PRICE CONTROL PRINCIPLES.....	27
4.2 PRICE CONTROL FORMULA.....	27

4.3	OVER / UNDER RECOVERY FORMULA	29
4.4	TAX ADJUSTMENT	34
4.5	MAP _{BS}	35
4.6	GENERAL BUILDING BLOCK PRINCIPLES	36
4.7	PRIMARY BUILDING BLOCKS	38
4.8	ASSET VALUATION	40
4.9	REGULATORY ASSET BASE	47
4.10	REGULATORY DEPRECIATION	50
4.11	WEIGHTED AVERAGE COST OF CAPITAL DETERMINATION	53
4.12	CAPITAL EXPENDITURE FORECAST	57
4.13	OPERATING AND MAINTENANCE EXPENDITURE.....	60
4.14	CALCULATION OF CORPORATE INCOME TAX.....	65
4.15	SMOOTHING.....	67
4.16	REVENUE PATH TRANSITION	70
4.17	FORCE MAJEURE AND TAX EVENT PASS THROUGHES	70
4.18	SERVICE QUALITY MEASURES AND TARGETS.....	70
4.19	EFFICIENCY ADJUSTMENTS.....	71
4.20	CHANGE IN WEIGHTED INDEX	71
4.21	SIDE CONSTRAINT.....	71
4.22	FINANCIAL RATIO ANALYSIS	71
4.23	QUANTITY FORECASTS	73
ARTICLE V		75
SUBSEQUENT REGULATORY PERIODS.....		75
5.1	GENERAL PRICE CONTROL PRINCIPLES	75
5.2	PRICE CONTROL FORMULA.....	76
5.3	GENERAL BUILDING BLOCK PRINCIPLES	77
5.4	PRIMARY BUILDING BLOCKS	77
5.5	ASSET VALUATION	77
5.6	ROLLED FORWARD REGULATORY ASSET BASE.....	78
5.7	REGULATORY DEPRECIATION	79
5.8	WEIGHTED AVERAGE COST OF CAPITAL DETERMINATION	79
5.9	CAPITAL EXPENDITURE FORECAST	80
5.10	OPERATING AND MAINTENANCE EXPENDITURE.....	80
5.11	CALCULATION OF CORPORATE INCOME TAX.....	80
5.12	SMOOTHING.....	80
5.13	REVENUE PATH TRANSITION	81
5.14	FORCE MAJEURE AND TAX EVENT PASS THROUGHES	81
5.15	SERVICE QUALITY MEASURES AND TARGETS.....	82
5.16	EFFICIENCY ADJUSTMENTS.....	82
5.17	SIDE CONSTRAINT.....	82

5.18	FINANCIAL RATIO ANALYSIS	83
5.19	RE-OPENING EVENTS	83
5.20	QUANTITY FORECASTS	83
ARTICLE VI		84
ANNUAL VERIFICATION AND ADJUSTMENT OF TARIFF RATES		84
6.1	ANNUAL DISTRIBUTION RATE SETTING	84
6.2	ANNUAL RATE SETTING TIMETABLE.....	84
6.3	ANNUAL ACTUAL AND FORECAST DATA REQUIREMENTS	87
6.4	SIDE CONSTRAINTS ON PROPOSED MAXIMUM DISTRIBUTION WHEELING RATES.....	88
6.5	OTHER PARAMETERS.....	90
ARTICLE VII.....		91
REGULATORY RESET PROCESS.....		91
7.1	REGULATORY RESET PROCESS TIMELINES	91
ARTICLE VIII		94
SERVICE QUALITY MEASURES AND TARGETS.....		94
8.1	ESTABLISHMENT OF DISTRIBUTION PERFORMANCE STANDARDS.....	94
8.2	PERFORMANCE INCENTIVE SCHEME	95
ARTICLE IX		98
OPEX AND CAPEX EFFICIENCY ADJUSTMENTS.....		98
9.1	GENERAL EFFICIENCY ADJUSTMENT PRINCIPLES	98
9.2	DEFINITION OF NET EFFICIENCY ADJUSTMENT	98
9.3	MECHANISM FOR CARRYING OVER NET EFFICIENCY ADJUSTMENTS.....	101
ARTICLE X.....		102
FORCE MAJEURE EVENT REGULATED PASS THROUGH.....		102
10.1	FORCE MAJEURE EVENT PASS THROUGH.....	102
10.2	CLAIM FOR A FORCE MAJEURE EVENT	102
10.3	APPROVAL BY ERC	104
10.4	RELEVANT FACTORS FOR ERC CONSIDERATION.....	105
10.5	APPLICATION OF APPROVED FM PASS THROUGH AMOUNT.....	106
10.6	RELEVANCE OF APPROVED FM PASS THROUGH AMOUNT	106
ARTICLE XI		107
TAX EVENT REGULATED PASS THROUGH.....		107
11.1	TAX EVENT PASS THROUGH.....	107
11.2	CLAIM FOR A POSITIVE TAX PASS THROUGH	107
11.3	REQUIRED NEGATIVE TAX PASS THROUGH	109
11.4	RELEVANT FACTORS.....	109
11.5	APPLICATION OF APPROVED TAX PASS THROUGH AMOUNT OR NEGATIVE TAX PASS THROUGH AMOUNT	110

11.6	RELEVANCE OF APPROVED TAX PASS THROUGH AMOUNT	111
ARTICLE XII	.....	112
	RE-OPENING AND ADJUSTMENT EVENTS	112
12.1	INCREASE IN CPI – MAXIMUM ANNUAL PRICE CAP RE-OPENING	112
12.2	DEFERRED CAPITAL EXPENDITURE ON SIGNIFICANT PROJECTS – X FACTOR ADJUSTMENT FOR SECOND REGULATORY PERIOD	113
12.3	MAJOR UNFORECASTED ACQUISITIONS – X FACTOR ADJUSTMENT FOR FIRST REGULATORY PERIOD	115
12.4	MAJOR UNFORECASTED ACQUISITIONS – X FACTOR ADJUSTMENT FOR SECOND REGULATORY PERIOD	116
12.5	PHP/\$US EXCHANGE RATE ADJUSTMENT	118
12.6	PROCEDURE FOR EVENTS LEADING TO AN ADJUSTMENT OF RATES	120
ARTICLE XIII	.....	121
	DECISION REVOCATION AND NOTICES	121
13.1	LIMITED DECISION REVOCATION ARRANGEMENTS	121
13.2	MODIFICATION OF TIME PERIODS	122
ARTICLE XIV	.....	123
	EXPERTS AND CONSULTANTS	123
14.1	ENGAGEMENT OF EXPERTS AND CONSULTANTS	123
14.2	COOPERATION WITH EXPERTS AND CONSULTANTS	123
14.3	REPORT OF EXPERT OR CONSULTANT	124
14.4	PAYMENT OF FEES OF REGULATORY RESET EXPERTS	124
APPENDIX A	.....	128
	QUALIFIED FRANCHISE AREAS	128
APPENDIX B	.....	129
	PERFORMANCE INCENTIVE SCHEME	129
APPENDIX C	.....	140
	CRITERIA FOR REGULATORY RESET EXPERTS	140
APPENDIX D	.....	144
	OPTIMIZATION PRINCIPLES	144

1.

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 distribution wheeling rates that may be charged for the provision of Regulated Distribution Services by Regulated Entities.
- 1.1.2 These Rules are an updated version of the original Distribution Wheeling Rate Guidelines issued by the ERC on December 10, 2004 and pertain specifically to those Regulated Entities who entered performance based regulation as Group A at the first entry point. These Regulated Entities are identified in Appendix A.
- 1.1.3 Further sets of Rules for setting Distribution Wheeling Rates will be issued for each of the next four entry points for privately owned distribution utilities entering performance based regulation, where the entry points are defined in Annex B of ERC Resolution No. 12-02 Series of 2004 “Adopting a Methodology for Setting Distribution Wheeling Rates”, dated December 10, 2004. With the exception of revising the dates throughout each document in accordance with each entry point date, identifying the different utilities for each entry point, and allowing for the fact that there will be no First Regulatory Period associated with future entry points, the further sets of Rules will in all respects correspond with these Rules for the first entry point.

1.2 Content of the Rules

- 1.2.1 These Rules set out:
 - (a) the methodology to be used in setting the maximum distribution wheeling rates that may be charged for the provision of Regulated Distribution Services by some Regulated Entities during the First Regulatory Period and by all Regulated Entities during the Second Regulatory Period;
 - (b) the pricing principles with which the ERC must comply for the purposes of regulating the maximum distribution wheeling rates that may be charged for the provision of Regulated Distribution Services by all Regulated Entities during a Subsequent Regulatory Period;
 - (c) the annual rate verification and adjustment process which the ERC must undertake in relation to the maximum distribution wheeling rates that may be charged for the provision of Regulated Distribution Services by such Regulated Entities during a Regulatory Period;
 - (d) the regulatory processes and timelines to which both Regulated Entities 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 all Regulated Entities 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 Distribution Services to consumers.

1.3 Definitions

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

Affected Regulated Entity	(a) In relation to a Force Majeure Event, a Regulated Entity which (as a result of that Force Majeure Event) incurs, or is likely to incur, an increase in costs as referred to in the definition of "Force Majeure Event"; and (b) in relation to a Tax Change Event, a Regulated Entity which (as a result of that Tax Change Event) incurs materially higher or lower costs as referred to in the definition of "Tax Change Event".
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 or a Distribution System or a Subtransmission System in accordance with good utility practice, the Grid Code and the Distribution Code.
Application Year	The Regulatory Year denoted as the Application Year in Section 6.2.1.
Approved FM Pass Through Amount	The lesser of an FM Pass Through Amount proposed by an Affected 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 an Affected 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.
Connection Point	In respect of a Regulated Distribution System, the point of connection of a User System or Equipment to the Regulated Distribution System, excluding Grid Connection Points.
CPI	The All Items Consumer Price Index published by the National Statistics Office of the Philippines.
Customer	In respect of a Regulated Distribution System: (a) a person whose User System or Equipment is directly connected to the Regulated Distribution System and who purchases or receives, or who is seeking to

purchase or receive, Regulated Distribution Services in respect of that Regulated Distribution System; and

- (b) any other person who purchases or receives, or who is seeking to purchase or receive, Regulated Distribution Services in respect of that Regulated Distribution System.

For the avoidance of doubt, this may include a person who operates an Embedded Generator, a Retail Electricity Supplier (RES) or an End-user.

Customer Segment

In relation to a Regulated Distribution System, a category of Customers of that Regulated Distribution System which is approved by the ERC. For these purposes, a category of Customers will comprise Customers of the relevant Regulated Distribution System which have similar consumption characteristics for Regulated Distribution Services in respect of that Regulated Distribution System, based on their geographic location and consumption profile, as measured by the number of connections, the energy throughput (kWh), the non-coincident peak load (kW), the co-incident peak load (kW), the time-of-day or any other physical measure as approved from time to time by the ERC. A Customer Segment in respect of a Regulated Distribution System is likely to include all of the Customers of that Regulated Distribution System who are charged the same tariff by the Regulated Entity which operates that Regulated Distribution System for the provision of Regulated Distribution Services in respect of that Regulated Distribution System.

Decision Period

In respect of a Force Majeure Event Claim, the period within which the ERC must give a notice to the relevant Affected 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).

Distribution Connection Assets

In respect of a Regulated Distribution System, the components of that Regulated Distribution System which are used to provide Distribution Connection Services in respect of that Regulated Distribution System.

Distribution Connection Services

In respect of a Regulated Distribution System:

- (a) the provision of capability at a Connection Point in respect of that Regulated Distribution System to deliver electricity to or take electricity from that Connection Point;
- (b) the conveyance of electricity:
 - (i) to a Connection Point in respect of that

	<p>Regulated Distribution System from any User System or Equipment which is directly connected to that Regulated Distribution System at that Connection Point; or</p> <p>(ii) from a Connection Point in respect of that Regulated Distribution System to any User System or Equipment which is directly connected to that Regulated Distribution System at that Connection Point;</p> <p>(c) the planning, installation, maintenance, augmentation, testing and operation of Distribution Connection Assets in respect of that Regulated Distribution System; and</p> <p>(d) the provision of services that support any of the services referred to in paragraphs (a) to (c).</p>
Distribution System	<p>In respect of a Regulated Entity, a system of wires and associated facilities extending between:</p> <p>(a) the delivery points on the Grid and any Subtransmission System operated by a person other than a Regulated Entity; and</p> <p>(b) the points of connection of Embedded Generators, on the one hand, and the points of connection of User Systems and Equipment of End-users, on the other hand.</p>
Distribution Services and Open Access Rules (DSOAR)	<p>Distribution Services and Open Access Rules, as promulgated by the ERC under Resolution No. 1, Series of 2006, dated January 18, 2006.</p>
Distribution Utility	<p>An electric cooperative, private corporation, government-owned utility, or existing local government unit, that has an exclusive franchise to operate a Distribution System <i>in accordance with the EPIRA.</i></p>
Effectivity Date	<p>The date on which these Rules take effect.</p>
Eligible FM Pass Through Amount	<p>At any time in respect of a Force Majeure Event, the increase in costs that the relevant Affected Regulated Entity has actually incurred at that time (as calculated by the Affected Regulated Entity under Section 10.1.2 or determined by the ERC under Section 10.3.1, as appropriate):</p> <p>(a) in the distribution of electricity to Connection Points in respect of the relevant Regulated Distribution System; and</p> <p>(b) in complying with the provisions of any legislation,</p>

or of any rules, regulations or guidelines made under the EPIRA, including the IRR and the Distribution Code, which must be complied with in relation to the distribution of such electricity,

as a result of the occurrence of that Force Majeure Event.

Eligible Tax Pass Through Amount	In respect of a Tax Change Event, the increase in costs in the distribution of electricity to Connection Points in respect of the relevant Regulated Distribution System that the relevant Affected 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 Affected 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	All apparatus, machines, conductors, etc. used as a part of, or in connection with, an electrical installation, as defined in the Distribution Code.
ERC	The Energy Regulatory Commission created by Section 38 of the EPIRA.
Excluded Service	A service that is provided in a Qualified Franchise Area in the ordinary course of an electricity distribution business that is conducted in that area, being a service that is neither a Regulated Distribution Service in respect of a Regulated Distribution System 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 set out in Section 2.2.
First Regulatory Period Tax Threshold	<p>In respect of a Regulated Distribution System, a tax amount (TA) calculated in accordance with the following formula:</p> $TA = PhP\ 0.020/kWh \times TE$ <p>where:</p> <p>TE is the total amount of energy (expressed in kWh) delivered through that Regulated Distribution System, during the 12 month period ending on 31 December 2004, to Connection Points in respect of that Regulated Distribution System, such amount of energy being determined in a manner that is approved for this purpose by the ERC.</p>
FM Pass Through Amount	An amount that is not greater than an Eligible FM Pass Through Amount as referred to in Section 10.1.2.

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 a Regulated Entity in the distribution of electricity to Connection Points in respect of a Regulated Distribution System that is operated by it, or in complying with the provisions of any legislation, or of any rules, regulations or guidelines made under the EPIRA, including the IRR and the Distribution Code, which must be complied with in relation to the distribution 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 31 December in an Application Year (see Section 6.3.3(a)).
Grid Connection Point	A "Connection Point" is the point of connection of a user system or equipment to the grid, as defined in the Transmission Wheeling Rate Guidelines.
Historical Period	A twelve month period ending on 31 December (see Section 6.2.1(a)).
Initial Regulated Entity	A Regulated Entity that is included as an Initial Regulated Entity in Appendix A.
Initial Re-valuation	In relation to a Regulated Distribution System, the asset re-valuation that is referred to in Section 4.8.1.
Initial Re-valuation Report	A report that is referred to as an Initial Re-valuation Report in Section 4.8.2(c) or (d) (as the case may be).
IRR	The Implementing Rules and Regulations issued pursuant to the EPIRA.
Issues Paper	The Regulatory Reset Issues Paper published by the ERC on September 30, 2005 to invite consultation on the ERC's views on the issues pertinent to the Regulatory Reset Process for the Second Regulatory Period.
Local	Local Government as defined in Executive Order No. 292,

Government	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 a Regulated Entity incurring materially lower costs than it would have incurred but for that event in the distribution of electricity to Connection Points in respect of a Regulated Distribution System that is operated by it.
Negative Tax Pass Through Amount	An amount that is not greater than a Required Tax Pass Through Amount as referred to in Section 11.1.3.
Non-system Assets	Those assets forming part of the Regulatory Asset Base that are required to provide Regulated Distribution Services, but are not Distribution System assets or Distribution Connection Assets.
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 a Regulated Entity incurring materially higher costs than it would have incurred but for that event in the distribution of electricity to Connection Points in respect of a Regulated Distribution System that is operated by it.
Positive Tax Pass Through Amount	An amount that is not greater than an Eligible Tax Pass Through Amount as referred to in Section 11.1.2.
Qualified Franchise Area	A Franchise Area that is included in Appendix A, as such area may be varied from time to time in accordance with the law.
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 Distribution Services	In respect of a Regulated Distribution System: <ul style="list-style-type: none">(a) the conveyance of electricity through the Regulated Distribution System and the control and monitoring of electricity as it is conveyed through the Regulated Distribution System (including any services that support such conveyance, control or monitoring or the safe operation of the Regulated Distribution System);(b) the planning, maintenance, augmentation and operation of the Regulated Distribution System;

- (c) the provision, installation, commissioning, testing, repair, maintenance and reading both of meters that are used to measure the delivery of electricity to persons whose User Systems or Equipment is directly connected to the Regulated Distribution System and of other meters that are used (for the purposes of the Wholesale Electricity Spot Market) to measure the flow of electricity into or through the Regulated Distribution System;
- (d) Distribution Connection Services in respect of the Regulated Distribution System except to the extent that such Distribution Connection Services have been determined by the ERC to be Excluded Services (in which case, for the purposes of these Rules, such Distribution Connection Services will be deemed not to be Regulated Distribution Services in respect of that Regulated Distribution System with effect from the commencement of the Regulatory Period first occurring after the making of that determination);
- (e) the provision of Ancillary Services that are provided using assets which form part of the Regulated Distribution System¹ (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); and
- (f) billing, collection and customer services that are directly related to the delivery of electricity through the Regulated Distribution System to Connection Points in respect of the Regulated Distribution System and billing, collection and customer services for persons purchasing or receiving (or seeking to purchase or receive) any Distribution Connection Services in respect of the Regulated Distribution System,

but do not include such of these services as are determined by the ERC to be contestable.

Note: These Rules do not extend to inset networks, i.e. networks operated by third parties that are connected to a distribution system and that serve, for example, free port areas (see the definition of Connection Point).

**Regulated
Distribution
System**

A Distribution System which is located in a Qualified Franchise Area and that is operated under an exclusive franchise, together with such Subtransmission Systems as are connected to that Distribution System and ...

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

	are connected to that Distribution System and as are operated only by the Regulated Entity that operates that Distribution System.
Regulated Entity	Collectively, any entity or entities who provide any Regulated Distribution Services in respect of a Regulated Distribution System, but excluding such persons as the ERC from time to time determines (such exclusion may identify the relevant persons specifically or by description and may be made subject to such conditions as the ERC considers appropriate). The entity or entities that comprise Regulated Entities for the purposes of these Rules and their respective Qualified Franchise Areas are such entities as are included in Appendix A.
Regulatory Asset Base	Those assets employed by a Regulated Entity to provide efficient Regulated Distribution Services. It covers the Regulated Distribution System assets as well as the Non-system Assets required to support the delivery of Regulated Distribution Services.
Regulatory Depreciation	The depreciation calculated in respect of the Regulatory Asset Base as described in Section 4.10, being one of the building blocks which forms the basis for calculating the annual revenue requirement for a Regulated Distribution System.
Regulatory Period	The First Regulatory Period, the Second Regulatory Period or a Subsequent Regulatory Period (as the case may be).
Regulatory Reset Expert	An expert referred to in Section 14.1.1.
Regulatory Reset Process	The regulatory reset process before the start of the Second Regulatory Period or subsequent regulatory periods. A regulatory reset process is the actions prior to the start of any Regulatory Period, through which the price control arrangements are established that will apply to a Regulated Entity with regard to the provision of Regulated Distribution Services in each Regulated Distribution System for the next Regulatory Period. This process relies on submissions by Regulated Entities, decisions by the ERC and consultation with the Regulated Entities and the public in general, as described in the DWRG.
Regulatory Year	Any 12 month period that commences on 1 July and ends on the following 30 June (both dates inclusive) and that occurs during a Regulatory Period.
Regulatory WACC	The weighted average cost of capital established for the purposes of the performance based regulation of Regulated Entities in accordance with section 4.11.

Relevant Tax	<p>Any Tax payable by a 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 franchise tax or 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); or(k) any franchise fee, or other amount payable under an instrument granting a franchise, in relation to the operation of a Regulated Distribution System.
Required Tax Pass Through Amount	<p>In respect of a Tax Change Event, the costs in the distribution of electricity to Connection Points in respect of the relevant Regulated Distribution System that the relevant Affected 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 11.1.3).</p>
Revenue Potential	<p>In respect of any Transferred Subtransmission Assets, the consideration for the transfer of those Transferred Subtransmission Assets from National Transmission Corporation (TRANSCO) to the Regulated Entity, which consideration is required (by Section 8 of the EPIRA and Rule 22, Section 13(b) of the IRR) to be:</p> <ul style="list-style-type: none">(a) determined by TRANSCO based on the revenue potential of those Transferred Subtransmission Assets; or(b) in case of disagreement, determined by, or in accordance with directions given by, the ERC.

Rolled-forward Depreciated Regulatory Asset Base	The regulatory asset base for a Regulated Distribution System as determined by the ERC under Section 4.8.12 or as calculated in accordance with Section 4.9.2 (see also Section 4.9.1) (as the case may be).
Second Regulatory Period	The period set out in Section 2.3.
Significant Project	A capital expenditure project: <ul style="list-style-type: none">(a) which is contained in the capital expenditure program that is approved by the ERC under Section 4.12.5 for a Regulated Distribution System; and(b) for which the capital expenditure forecasted in any Regulatory Year for that project (as contained in that program) is greater than PhP 50 million or 30% of the total capital expenditure forecasted for that Regulatory Year under that program, whichever is lower.
Subsequent Regulated Entity	A Regulated Entity that is included as a Subsequent Regulated Entity in Appendix A.
Subsequent Regulatory Period	A Regulatory Period other than the First Regulatory Period or the Second Regulatory Period, the duration of which is set out in Section 2.4.
System Operator	The party identified as the System Operator pursuant to the Grid code which is the party responsible for generation dispatch; the provision of ancillary Services, and operation and control to ensure safety, power quality, stability, reliability and the security of the grid.
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, which results in a Regulated Entity incurring materially higher or lower costs than it would have incurred but for that event in the distribution of electricity to Connection Points in respect of a Regulated Distribution System that is operated by it. For these purposes:

- (i) if the Tax Change Event occurs in the First Regulatory Period, an Initial Regulated Entity will only be deemed to incur materially higher or lower costs where the change in the relevant costs that the Initial 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 the First Regulatory Period Tax Threshold in respect of the relevant Regulated Distribution System; and
- (ii) if the Tax Change Event occurs in a Regulatory Period other than the First Regulatory Period, a Regulated Entity will only be deemed to incur materially higher or lower costs where the change in the relevant 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 relation to the relevant Regulated Distribution System (expressed in nominal terms and 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.
Transferred Subtransmission Assets	Subtransmission Assets that are transferred from TRANSCO to the Regulated Entity as contemplated by Section 8 of the EPIRA and Rule 22, Section 13(b) of the IRR.
Transition Regulatory Period	In respect of Distribution Connection Services that the ERC has determined to be Excluded Services, the Regulatory Period first occurring after that determination is made (see Section 1.6.5).
Transmission Wheeling Rate Guidelines	The Guidelines on the Methodology for Setting Transmission Wheeling Rates for 2003 to around 2027 promulgated by the ERC under Section 43(f) of the EPIRA and Rule 15, Section 5(a) of the IRR.
Uniform Rate Filing Requirements	The Uniform Rate Filing Requirements dated 13 January 2001 resulting from ERC Case No. 2001-873 docketed on 31 October 2001.
User System	A system owned or operated by a user of the grid or distribution system, as defined in the Distribution 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;
- (d) mentioning anything after include, includes or including does not limit what else might be included; and
- (e) a reference to any period includes both the day on which that period commences and the day on which it expires.

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 (e.g. the significant digits of 0.01230 are 1, 2, 3 and the final 0, which signifies accuracy to five places).²

1.4.3 A reference in these Rules to Regulatory Year "t" or year "t" is to the 12 month period ending on 30 June in calendar year t (e.g. a reference to Regulatory Year 2005 or to year 2005 is a reference to the 12 month period ending on 30 June 2005).

1.4.4 When a calculation is required under these Rules:

- (a) Regulatory Year "t" or year "t" is the Regulatory Year or 12 month period ending on 30 June (as the case may be) in respect of which the calculation is being made;
- (b) Regulatory Year "t-1" or year "t-1" is the Regulatory Year or 12 month period ending on 30 June (as the case may be) immediately preceding Regulatory Year "t" or year "t";
- (c) Regulatory Year "t-2" or year "t-2" is the Regulatory Year or 12 month period ending on 30 June (as the case may be) immediately preceding Regulatory Year "t-1" or year "t-1"; and

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

- (d) Regulatory Year “t-3” or year “t-3” is the Regulatory Year or 12 month period ending on 30 June (as the case may be) immediately preceding Regulatory Year “t-2” or year “t-2”.

1.5 Rights and Obligations of Regulated Entity

- 1.5.1 Where more than one entity provides any Regulated Distribution Services in respect of a Regulated Distribution System, with the result that the relevant Regulated Entity comprises more than one entity, the rights of that 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 purposes of these Rules, to irrevocably and unconditionally bind each of those entities.
- 1.5.2 Where more than one entity provides any Regulated Distribution Services in respect of a Regulated Distribution System, with the result that the relevant 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 relevant 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 Distribution Services in respect of a Regulated Distribution System, with the result that the relevant 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 Distribution Services in respect of a Regulated Distribution System, with the result that the relevant 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 that 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 Distribution Services in respect of a Regulated Distribution System. 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 Distribution Services

- 1.6.1 This Section 1.6 only applies in relation to:
 - (a) where the Regulated Entity included opposite the relevant Qualified Franchise Area in Appendix A is an Initial Regulated Entity – Excluded Services that are provided on or after 1 July 2005; and
 - (b) where the Regulated Entity included (pursuant to an order of the ERC) opposite the relevant Qualified Franchise Area in Appendix A is a

Subsequent Regulated Entity – Excluded Services that are provided on or after 1 July 2007.

- 1.6.2 Except as otherwise provided in the DSOAR, a person may only be charged a fair and reasonable charge for an Excluded Service.
- 1.6.3 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.
- 1.6.4 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;
 - (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 an appropriate weighted average cost of capital as calculated pursuant to Section 4.11 or Section 5.8); 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 receiving (or seeking to purchase or receive) 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 receiving (or seeking to purchase or receive) 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).

- 1.6.5 Without in any way limiting the services that may constitute an Excluded Service, any Distribution Connection Services in respect of a Regulated Distribution System which may have been determined by the ERC to be Excluded Services will, with effect from the commencement of the Regulatory Period first occurring after the making of that determination (the **Transition 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 Distribution Connection Services, both where a charge for such Distribution 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 1.6.4 must be taken into account; and
 - (b) to the extent any assets used to provide such Distribution Connection Services as at the commencement of the Transition Regulatory Period were, immediately prior to the commencement of the Transition Regulatory Period, included in the regulatory asset base for the relevant Regulated Distribution System (see Section 4.8.8), those assets will be valued at the value that was then attributed to them as part of that regulatory asset base (to the extent such assets are used to provide Distribution Connection Services in respect of the relevant Regulated Distribution System after the commencement of the Transition Regulatory Period, those assets will cease to form part of the regulatory asset base for that Regulated Distribution System: see Section 4.8.8(a)).

1.7 Subtransmission Assets

- 1.7.1 Each Regulated Entity must maintain an asset register which clearly identifies each asset owned by it that is a Subtransmission Asset and which separately identifies those assets which are Transferred Subtransmission Assets.

1.8 Provision of Information

- 1.8.1 A 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 Subject to Sections 1.9.2 and 1.9.3, these Rules may from time to time be amended by the ERC:
- (a) in respect of their application in relation to all Regulated Entities and all Regulated Distribution Systems; or
 - (b) in respect of their application in relation to particular Regulated Entities and particular Regulated Distribution Systems,
- but only if such amendments are:
- (c) for the purposes of giving effect to a decision made by the ERC in accordance with these Rules; or

- (d) made with the agreement of the affected Regulated Entity or Regulated Entities; or
 - (e) required pursuant to an order that is made by a court with appropriate jurisdiction.
- 1.9.2 The ERC may amend Appendix A to remove a Qualified Franchise Area (with the result that the charges that may be made for the provision of services in respect of the relevant Distribution System that is located in that Qualified Franchise Area, or in respect of any Subtransmission System that is connected to it and that is operated only by the Regulated Entity that operates the Distribution System, cease to be regulated under these Rules) where:
- (a) the charges that may be made for the provision of services in respect of that Distribution System, and in respect of any Subtransmission System that is connected to it and that is operated only by the Regulated Entity that operates the Distribution System, become regulated under other guidelines promulgated for that purpose by the ERC pursuant to Section 43(f) of the EPIRA and Rule 15, Section 5(a) of the IRR; and
 - (b) the Regulated Entity that operates that Distribution System agrees to that amendment.

Such an amendment may be made, for example, where the Regulated Entity and the ERC agree that the form of price control that is to apply in respect of such charges is to be a hybrid cap.

- 1.9.3 The ERC may amend these Rules so that they apply to regulate the charges that may be made for the provision of services in respect of a Subtransmission System that is operated by more than one Distribution Utility where:
- (a) at least one of those Distribution Utilities is a Regulated Entity and operates a Regulated Distribution System that is connected to that Subtransmission System;
 - (b) such of those Distribution Utilities as are Regulated Entities agree to those amendments;
 - (c) those amendments are necessary to enable these Rules to apply to those charges in substantially the same way as they apply to the charges that may be made for the provision of Regulated Distribution Services in respect of a Regulated Distribution System; and
 - (d) those amendments would not have a materially adverse effect on the rights or obligations of any other Regulated Entity under these Rules (if such amendments would have that effect, they must not be made without the agreement of all the Regulated Entities).
- 1.9.4 Nothing in these Rules is to be construed as precluding the ERC from promulgating other guidelines pursuant to Section 43(f) of the EPIRA and Rule 15, Section 5(a) of the IRR for the purpose of regulating the charges that may be made for the provision of services in respect of Distribution Systems and Subtransmission Systems that are not subject to these Rules.

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 These Rules take effect 15 days following their publication in a newspaper of general circulation.

2.

**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 Price cap for a Regulated Distribution System (MAP_t) as calculated in accordance with the formula set out in Section 3.2.1 will apply to regulate the maximum average price that an Initial Regulated Entity is permitted to charge for the provision by it, during the First Regulatory Period, of Regulated Distribution Services in respect of that Regulated Distribution System.
- 2.1.2 Subject to Articles VIII, X, XI and XII, the Maximum Annual Price cap for a Regulated Distribution System (MAP_t) as calculated in accordance with the formula set out in Section 4.2.1 will apply to regulate the maximum average price that a Regulated Entity is permitted to charge for the provision by it, during the Second Regulatory Period, of Regulated Distribution Services in respect of that Regulated Distribution System.
- 2.1.3 Subject to Articles V, X and XI, the price cap that is calculated in a manner determined by the ERC in accordance with the provisions of Article V will apply to regulate the maximum average price that a Regulated Entity is permitted to charge for the provision by it, during a Subsequent Regulatory Period, of Regulated Distribution Services in respect of a Regulated Distribution System.

2.2 First Regulatory Period

- 2.2.1 The First Regulatory Period will commence on 1 July 2005 and end on 30 June 2007 (both dates inclusive).

2.3 Second Regulatory Period

- 2.3.1 The Second Regulatory Period will commence on 1 July 2007 and end on 30 June 2011 (both dates inclusive).

2.4 Subsequent Regulatory Periods

- 2.4.1 Each Subsequent Regulatory Period will:
 - (a) commence on the day that immediately follows the day on which the immediately preceding Regulatory Period ends; and
 - (b) end on the fourth anniversary of the day on which the immediately preceding Regulatory Period ends,
 - (c) both dates inclusive.

3.

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 distribution wheeling rates that an Initial Regulated Entity is permitted to charge for the provision by it, during each Regulatory Year that occurs in the First Regulatory Period, of Regulated Distribution Services in respect of a Regulated Distribution System will be set under a Maximum Annual Price cap for that Regulated Distribution System that is determined in accordance with this Article III.
- 3.1.2 An Initial Regulated Entity must ensure that the maximum average price that it charges for the provision by it, during a Regulatory Year *t* that occurs in the First Regulatory Period, of Regulated Distribution Services in respect of a Regulated Distribution System does not exceed the Maximum Annual Price cap for that Regulated Distribution System for 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 is derived as a result of that Maximum Annual Price cap being exceeded will effectively be returned to Customers of that Regulated Distribution System by way of a reduction in the Maximum Annual Price cap for that Regulated Distribution System for the following Regulatory Year *t+1* to an amount that is lower than that which would otherwise have applied).³

3.2 Price Control Formula

- 3.2.1 Subject to Articles X, XI and XII, the maximum average price (expressed in PhP/kWh) that an Initial Regulated Entity is permitted to charge for the provision by it, during a Regulatory Year *t* that occurs in the First Regulatory Period, of Regulated Distribution Services in respect of a Regulated Distribution System (the Maximum Annual Price cap for that Regulated Distribution System for Regulatory Year *t* or MAP_{*t*}) is calculated in accordance with the following formula⁴:

$$\text{MAP}_t = [\text{MAP}_{t-1} \times \{1 + \text{CWI}_t - X\}] - K_t$$

Where:

MAP_{*t-1*} = Where Regulatory Year *t* is Regulatory Year 2006, the initial maximum average price in respect of that Regulated Distribution System (MAP_{*b_i*}), as calculated in accordance with Section 3.5;

= Where Regulatory Year *t* is Regulatory Year 2007, the maximum average price (expressed in PhP/kWh) that the Initial Regulated Entity is permitted to charge for the

³ No monthly determination of tariffs by the ERC is required under these Guidelines.

⁴ Within the formulas provided in these Guidelines, "x" means multiply, "/" means divide, "+" means add, "-" means subtract, and "^" means "raised to the power of". Normal mathematical concepts apply.

provision by it, during Regulatory Year 2006, of Regulated Distribution Services in respect of that Regulated Distribution System, as calculated in accordance with this Section 3.2.1.

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

X = An Efficiency Factor in respect of that Regulated Distribution System for Regulatory Year t . Subject to Section 12.3.5, 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 is Regulatory Year 2006, K_t equals 0 (zero). Where Regulatory Year t is Regulatory Year 2007, K_t is calculated in accordance with Section 3.4.

3.3 Change in Weighted Index

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

$$CWI_t = \{(W1 \times \text{DeltaCPI}_t) + (W2 \times \text{DeltaUSER}_t)\}$$

Where:

Subject to Section 4.20:

- (a) if Section 12.5.1 applies in respect of Regulatory Year t , $W1 = 0.60$; or
- (b) if Section 12.5.1 does not apply in respect of Regulatory Year t , $W1 = 1$;

Subject to Section 4.20:

- (a) if Section 12.5.1 applies in respect of Regulatory Year t , $W2 = 0.40$; or
- (b) if Section 12.5.1 does not apply in respect of Regulatory Year t , $W2 = 0$;

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

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

Note: The ERC and an Initial Regulated Entity may agree different values of $W1$ and $W2$ before the commencement of the First Regulatory Period pursuant to Section 1.9.1(d).

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 year⁵):

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

⁵ CPI information from the National Statistics Office of the Philippines (NSO) currently uses an index base of “2000 = 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).

Where:

$$CPI_{t-1} = \{CPI_{(QJ, t-2)} + CPI_{(QS, t-1)} + CPI_{(QD, t-1)} + CPI_{(QM, t-1)}\}; \text{ and}$$

$$CPI_{t-2} = \{CPI_{(QJ, t-3)} + CPI_{(QS, t-2)} + CPI_{(QD, t-2)} + CPI_{(QM, t-2)}\}$$

where:

$CPI_{(QJ, t-2)}$ is the CPI for the Quarter ending on 30 June in year t-2;

$CPI_{(QS, t-1)}$ is the CPI for the Quarter ending on 30 September in year t-1;⁶

$CPI_{(QD, t-1)}$ is the CPI for the Quarter ending on 31 December in year t-1;

$CPI_{(QM, t-1)}$ is the CPI for the Quarter ending on 31 March in year t-1;

$CPI_{(QJ, t-3)}$ is the CPI for the Quarter ending on 30 June in year t-3;

$CPI_{(QS, t-2)}$ is the CPI for the Quarter ending on 30 September in year t-2;

$CPI_{(QD, t-2)}$ is the CPI for the Quarter ending on 31 December in year t-2;
and

$CPI_{(QM, t-2)}$ is the CPI for the Quarter ending on 31 March in year t-2.

As an example, using National Statistics Office data from 2005, where 2000 was the base year with index of 100:

$$CPI_{(QJ, 2003)} = 114.1, CPI_{(QS, 2004)} = 114.7, CPI_{(QD, 2004)} = 115.5, CPI_{(QM, 2004)} = 117.1, CPI_{(QJ, 2004)} = 120.3, CPI_{(QS, 2005)} = 123.0, CPI_{(QD, 2005)} = 125.4 \text{ and } CPI_{(QM, 2005)} = 127.0.$$

Consequently:

$$\Delta CPI_{2006} = 0.0743 \text{ (Note this escalation is not required under Section 3.2 or 3.3, but is provided only as an example of the calculation of } \Delta CPI_t \text{).}$$

- 3.3.3 The change in the PHP/\$US exchange rate for Regulatory Year t ($\Delta USER_t$) is calculated as follows (assuming all US consumer price index data is derived from, or adjusted to, the same base year⁷):

$$\Delta USER_t = \{(USER_{t-1} / USER_{t-2}) \times (USCPI_{t-1} / USCPI_{t-2})\} - 1$$

Where:

$$USER_{t-1} = \{USER_{(QJ, t-2)} + USER_{(QS, t-1)} + USER_{(QD, t-1)} + USER_{(QM, t-1)}\};$$

and

$$USER_{t-2} = \{USER_{(QJ, t-3)} + USER_{(QS, t-2)} + USER_{(QD, t-2)} + USER_{(QM, t-2)}\}$$

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

⁶ Note that the reference to year refers to Regulatory Year. For example, if the Regulatory Year is 2006 (i.e. that ending on June 30, 2007) the term $CPI_{(QS, t-1)}$ refers to the CPI index for the end of the September Quarter of Regulatory Year 2005. That is the Quarter ending on September 30, 2004.

⁷ 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).

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);

$USER_{(QJ, t-2)}$ is the USER for the Quarter ending on 30 June in year t-2;

$USER_{(QS, t-1)}$ is the USER for the Quarter ending on 30 September in year t-1;

$USER_{(QD, t-1)}$ is the USER for the Quarter ending on 31 December in year t-1;

$USER_{(QM, t-1)}$ is the USER for the Quarter ending on 31 March in year t-1;

$USER_{(QJ, t-3)}$ is the USER for the Quarter ending on 30 June in year t-3;

$USER_{(QS, t-2)}$ is the USER for the Quarter ending on 30 September in year t-2;

$USER_{(QD, t-2)}$ is the USER for the Quarter ending on 31 December in year t-2;
and

$USER_{(QM, t-2)}$ is the USER for the Quarter ending on 31 March in year t-2; and

$USCPI_{t-1} = \{USCPI_{(QJ, t-2)} + USCPI_{(QS, t-1)} + USCPI_{(QD, t-1)} + USCPI_{(QM, t-1)}\};$
and

$USCPI_{t-2} = \{USCPI_{(QJ, t-3)} + USCPI_{(QS, t-2)} + USCPI_{(QD, t-2)} + USCPI_{(QM, t-2)}\}$

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;

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

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

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

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

$USCPI_{(QJ, t-3)}$ is the USCPI for the Quarter ending on 30 June in year t-3;

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

$USCPI_{(QD, t-2)}$ is the USCPI for the Quarter ending on 31 December in year t-2; and

$USCPI_{(QM, t-2)}$ is the USCPI for the Quarter ending on 31 March in 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 each Regulated Entity, will be substituted.

3.4 Over / Under Recovery Formula

3.4.1 The Correction Factor for Regulatory Year 2007 (K_{2007}) is calculated in accordance with Section 3.4.2. For the purposes of this Section 3.4:

- (a) The actual weighted average tariff (expressed in PhP/kWh) for Regulatory Year 2007 ($AWAT_{2007}$) is calculated as follows:

$$AWAT_{2007} = \frac{CR_{2006} + RBR_{2006}}{CQ_{2006}}$$

Where:

CR_{2006} = The amount (expressed in PhP) billed to Customers of the relevant Regulated Distribution System for the provision of Regulated Distribution Services by the Regulated Entity that operates that Regulated Distribution System, during the 12 month period ending on 31 December 2005, the amount:

- (i) so billed being determined in a manner that is approved for this purpose by the ERC and 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

- (ii) as so determined and adjusted being audited to the satisfaction of the ERC by a person that is approved for this purpose by the ERC;

RBR_{2006} = Such portion (expressed in PhP) of the net income derived, during the 12 month period ending on 31 December 2005, from each related business undertaking which is engaged in directly or indirectly by the Regulated Entity that operates the relevant Regulated Distribution System and which utilizes assets that form part of the regulatory asset base for that Regulated Distribution System (see Section 4.8.8), being a portion that is determined by the ERC pursuant to Section 26 of the EPIRA and that may vary as between such business undertakings but which, for each such business undertaking, does not exceed 50% of the net income that is so derived from that business undertaking; and

CQ_{2006} = The total amount of energy (expressed in kWh) delivered through the relevant Regulated Distribution System, during the 12 month period ending on 31 December 2005, to Connection Points in respect of that Regulated Distribution System, such amount of energy:

- (iii) being determined in a manner that is approved for this purpose by the ERC; and

- (iv) as so determined being audited to the satisfaction of the ERC by a person that is approved for this purpose by the ERC.
- (b) The differential amount (expressed in PhP/kWh) for Regulatory Year 2007 (DA_{2007}) is calculated as follows:

$$DA_{2007} = AWAT_{2007} - [(0.50 \times MAP_{bi}) + (0.50 \times MAP_{2006})]$$

Where:

MAP_{2006} = The maximum average price (expressed in PhP/kWh) that the Initial Regulated Entity is permitted to charge for the provision by it, during Regulatory Year 2006, of Regulated Distribution Services in respect of the relevant Regulated Distribution System, as calculated in accordance with Section 3.2.1; and

MAP_{bi} = The initial maximum average price in respect of the relevant Regulated Distribution System, as calculated in accordance with Section 3.5.

3.4.2 The Correction Factor for Regulatory Year 2007 (K_{2007}), being the last Regulatory Year of the First Regulatory Period, is calculated as follows:

- (a) if $DA_{2007} < 0$, then

$K_{2007} = DA_{2007} \times (1 + i_{2007}/100)$ (in such a case K_{2007} will be a negative amount because DA_{2007} is a negative amount);

- (b) if $DA_{2007} > 0$

and $AWAT_{2007} / [(0.50 \times MAP_{bi}) + (0.50 \times MAP_{2006})] < 1.07$, then

$K_{2007} = DA_{2007} \times (1 + i_{2007}/100)$;

- (c) if $DA_{2007} > 0$

and $AWAT_{2007} / [(0.50 \times MAP_{bi}) + (0.50 \times MAP_{2006})] \geq 1.07$ (where \geq means greater than or equal to), then

$K_{2007} = 0.07 \times [(0.50 \times MAP_{bi}) + (0.50 \times MAP_{2006})] \times (1 + i_{2007}/100)$

+ $\{DA_{2007} - [0.07 \times ((0.50 \times MAP_{bi}) + (0.50 \times MAP_{2006}))]\} \times$

$[1 + (i_{2007} + 4\%) / 100]$

- (d) if $DA_{2007} = 0$, then

$K_{2007} = 0$

Where:

MAP_{bi} , MAP_{2006} and DA_{2007} are as defined in Section 3.4.1(b); and

i_{2007} = 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 January 2005 to 31 December 2005.

3.5 MAP_{bi}

The initial maximum average price in respect of a Regulated Distribution System (MAP_{bi}), expressed in PhP/kWh, is to be used as MAP_{t-1} for Regulatory Year 2006 and is calculated as follows:

$$\text{MAP}_{bi} = (\text{CR}_{bi} - \text{RBR}_{bi}) / \text{CQ}_{bi}$$

Where:

CR_{bi} = The amount (expressed in PhP) billed to Customers of that Regulated Distribution System, or other persons, for the provision of either Regulated Distribution Services, or unregulated services which utilize assets that form part of the regulatory asset base for that Regulated Distribution System, by the Regulated Entity that operates that Regulated Distribution System, during the 12 month period ending on 31 December 2004, the amount:

- (a) so billed being determined in a manner that is approved for this purpose by the ERC; and
- (b) as so determined being audited to the satisfaction of the ERC by a person that is approved for this purpose by the ERC;

RBR_{bi} = Such portion (expressed in PhP) of the net income derived, during the 12 month period ending on 31 December 2004, from each related business undertaking which is engaged in directly or indirectly by the Regulated Entity that operates the relevant Regulated Distribution System and which utilizes assets that form part of the regulatory asset base for that Regulated Distribution System (see Section 4.8.8), being a portion that is determined by the ERC pursuant to Section 26 of the EPIRA and that may vary as between such business undertakings but which, for each such business undertaking, does not exceed 50% of the net income that is so derived from that business undertaking; and

CQ_{bi} = The total amount of energy (expressed in kWh) delivered through the relevant Regulated Distribution System, during the 12 month period ending on 31 December 2004, to Connection Points in respect of that Regulated Distribution System, such amount of energy:

- (c) being determined in a manner that is approved for this purpose by the ERC; and
- (d) as so determined being audited to the satisfaction of the ERC by a person that is approved for this purpose by the ERC.

Note: Where, by the commencement of the Regulatory Year 2006, the ERC has yet to determine an amount for, or the approach to determine the amount for, RBR_{bi}, this shall be taken as zero for the purposes of the application of this Section.3.5.

4.

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 distribution wheeling rates that a Regulated Entity is permitted to charge for the provision by it, during each Regulatory Year that occurs in the Second Regulatory Period, of Regulated Distribution Services in respect of a Regulated Distribution System will be set under a Maximum Annual Price cap for that Regulated Distribution System that is determined in accordance with this Article IV and the Regulatory Reset Process for the Second Regulatory Period under Article VII.
- 4.1.2 A Regulated Entity must ensure that the maximum average price that it charges for the provision by it, during a Regulatory Year *t* that occurs in the Second Regulatory Period, of Regulated Distribution Services in respect of a Regulated Distribution System does not exceed the Maximum Annual Price cap for that Regulated Distribution System for 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 is derived as a result of that Maximum Annual Price cap being exceeded will effectively be returned to Customers of that Regulated Distribution System by way of a reduction in the Maximum Annual Price cap for that Regulated Distribution System for the following Regulatory Year *t*+1 to an amount that is lower than that which would otherwise have applied).⁸

4.2 Price Control Formula

- 4.2.1 Subject to Articles VIII, X, XI and XII, the maximum average price (expressed in PHP/kWh) that a Regulated Entity is permitted to charge for the provision by it, during a Regulatory Year *t* that occurs in the Second Regulatory Period, of Regulated Distribution Services in respect of a Regulated Distribution System (the Maximum Annual Price cap for that Regulated Distribution System for Regulatory Year *t* or MAP_{*t*}) is calculated in accordance with the following formula:

*(a) Where Regulatory Year *t* is Regulatory Year 2008,*

$$MAP_{2008} = SMAP_{2008} - K_t \quad ; \text{ and}$$

[Note to reviewers : This calculation of MAP₂₀₀₈ is new to this final draft of the RDWR.]

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

$$MAP_t = [MAP_{t-1} \times \{1 + CWI_t - X_t\}] + S_t - K_t + ITA_t$$

Where:

⁸ No monthly determination of tariffs by the ERC is required under these Guidelines.

SMAP₂₀₀₈ is as calculated under Section 4.15.4;

- CWI_t = Change in Weighted Index for Regulatory Year t as calculated in accordance with Section 3.3;
- X = An Efficiency Factor in respect of that Regulated Distribution System for Regulatory Year t . X equals the value calculated by the ERC for the Second Regulatory Period under Section 4.15.3, or recalculated (and, if applicable, increased) under Sections 12.2.2 or 12.4.6 (as the case may be) (subject to any recalculation under Sections 12.2.2 or 12.4.6, it is constant for the whole of the Second Regulatory Period). For the avoidance of doubt, X may be a positive or negative value or may be zero;
- S_t = A performance incentive factor calculated in accordance with Section 4.18.2 to reward each Regulated Entity for achieving specified target levels of performance and penalize each Regulated Entity for failing to achieve specified target levels of performance during the calendar year ending on December 31 of Regulatory Year $t-1$;
- K_t = Correction Factor to adjust for over or under recovery of revenue in Regulatory Year $t-1$.

Where the Regulated Entity is an Initial Regulated Entity and:

- (a) Regulatory Year t is Regulatory Year 2008, K_t is calculated in accordance with Sections 4.3.1 and 4.3.2; and
- (b) Regulatory Year t is a Regulatory Year (other than the first Regulatory Year) in the Second Regulatory Period, K_t is calculated in accordance with Sections 4.3.1 and 4.3.3.

Where the Regulated Entity is a Subsequent Regulated Entity and:

- (c) Regulatory Year t is Regulatory Year 2008, K_t equals 0 (zero);
- (d) Regulatory Year t is a Regulatory Year (other than the first Regulatory Year) in the Second Regulatory Period, K_t is calculated in accordance with Sections 4.3.1 and 4.3.3; and

- $ITAt$ = Tax Adjustment to adjust for over or under recovery of corporate income tax in Regulatory Year $t-1$. Where Regulatory Year t is the first or second Regulatory Year in the Second Regulatory Period, $ITAt$ equals 0 (zero). Where Regulatory Year t is a Regulatory Year (other than the first or second Regulatory Year) in the Second Regulatory Period, $ITAt$ is calculated in accordance with Section 4.4.

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 Except as otherwise provided in Section 4.2.1, the Correction Factor for Regulatory Year t (K_t), where Regulatory Year t is a Regulatory Year that occurs in the Second Regulatory Period, is calculated in accordance with Section 4.3.2. For the purposes of this Section 4.3:

(a) The actual weighted average tariff (expressed in PhP/kWh) for Regulatory Year t ($AWAT_t$) is calculated as follows:

$$AWAT_t = \frac{CR_{t-1} + RBR_{t-1} + AISDA_{t-1} - FISDA_{t-1}}{CQ_{t-1}}$$

Where:

CR_{t-1} = The amount (expressed in PhP) billed to Customers of the relevant Regulated Distribution System for the provision of Regulated Distribution Services by the Regulated Entity that operates that Regulated Distribution System, during the 12 month period ending on 31 December in Regulatory Year $t-1$, the amount:

- (i) so billed being determined in a manner that is approved for this purpose by the ERC and adjusted to:
 - (A) 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);
 - (B) 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
- (ii) as so determined and adjusted being audited to the satisfaction of the ERC by a person that is approved for this purpose by the ERC;

RBR_{t-1} = Such portion (expressed in PhP) of the net income derived, during the 12 month period ending on 31 December in Regulatory Year $t-1$, from each related business undertaking, examples of which are provided in Section 4.3.4, which is engaged in directly or indirectly by the Regulated Entity that operates the relevant Regulated Distribution System and which utilizes assets that form part of the regulatory asset base for that Regulated Distribution System (see Section 4.8.8), being a portion that is determined by the ERC pursuant to Section 26 of the EPIRA and that may vary as between such business undertakings but which, for each such business undertaking, will be set at 50% of the net income that is so derived from that business undertaking;

$AISDA_{t-1}$ = The actual income (expressed in PhP) derived by a Regulated Entity from the sale of disposed assets that were previously

part of the rolled forward regulatory asset base for a Regulated Distribution System during the 12 month period ending on December 31 in Regulatory Year t-1, after deducting any expenses associated with the sale but excluding the value at which the disposed assets were removed from the rolled forward regulatory asset base. This includes any income derived from the disposal of assets that were previously used beyond their Regulatory Lives, as described in Section 4.8.14;

$FISDA_{t-1}$ = The estimated income (expressed in PhP) to a Regulated Entity that would arise from the sale of disposed assets that were previously part of the rolled forward regulatory asset base for a Regulated Distribution System during the 12-month period ending on December 31 in Regulatory Year t-1, calculated as follows:

$$FISDA_{t-1} = \frac{\sum FISDA_{j,t-1} + \sum FISDA_{j,t-2}}{2}$$

Where

$\sum FISDA_{j,t-1}$ = The sum of the estimated income (expressed in PhP) to a Regulated Entity that would arise during Regulatory Year t-1 from the sale of disposed assets in each asset category j (see Section 4.10.1 (a)), that were previously part of the rolled forward regulatory asset base for a Regulated Distribution System, as determined by the ERC as part of the Regulatory Reset Process for the Second Regulatory Period under Article VII, after deducting any forecast expenses associated with the sale but excluding the value at which the disposed assets were forecast to be removed from the rolled forward regulatory asset base;

$\sum FISDA_{j,t-2}$ = The sum of the estimated income (expressed in PhP) to a Regulated Entity that would arise during Regulatory Year t-2 from the sale of disposed assets in each asset category j (see Section 4.10.1(a)), that were previously part of the rolled forward regulatory asset base for a Regulated Distribution System, as determined by the ERC as part of the Regulatory Reset Process for the Second Regulatory Period under Article VII, after deducting any forecast expenses associated with the sale but excluding the value at which

the disposed assets were forecast to be removed from the rolled forward regulatory asset base; and

- CQ_{t-1} = The total amount of energy (expressed in kWh) delivered through the relevant Regulated Distribution System, during the 12 month period ending on 31 December in Regulatory Year t-1, to Connection Points in respect of that Regulated Distribution System, such amount of energy:
- (iii) being determined in a manner that is approved for this purpose by the ERC; and
 - (iv) as so determined being audited to the satisfaction of the ERC by a person that is approved for this purpose by the ERC.
- (b) The differential amount (expressed in PhP/kWh) for Regulatory Year t (DA_t) is calculated as follows:

$$DA_t = AWAT_t - [(0.50 \times MAP_{t-2}) + (0.50 \times MAP_{t-1})]$$

Where:

MAP_{t-1} = The maximum average price (expressed in PhP/kWh) that the Regulated Entity is permitted to charge for the provision by it, during Regulatory Year t-1, of Regulated Distribution Services in respect of the relevant Regulated Distribution System, as calculated in accordance with Section 4.2.1 or 3.2.1 as the case may be (Section 3.2.1 only applies if the Regulated Entity is an Initial Regulated Entity); and

MAP_{t-2} = Except as provided below, the maximum average price (expressed in PhP/kWh) that the Regulated Entity is permitted to charge for the provision by it, during Regulatory Year t-2, of Regulated Distribution Services in respect of the relevant Regulated Distribution System, as calculated in accordance with Section 4.2.1 or 3.2.1 as the case may be (Section 3.2.1 only applies if the Regulated Entity is an Initial Regulated Entity);

= Where Regulatory Year t is Regulatory Year 2009 and the Regulated Entity is a Subsequent Regulated Entity, $MAP_{t-2} = MAP_{bs}$ and is as calculated in accordance with Section 4.5.

4.3.2 The Correction Factor for Regulatory Year 2008 (K_{2008}), being the first Regulatory Year of the Second Regulatory Period, is calculated as follows:

- (a) if $DA_{2008} < 0$ and $AWAT_{2008} / [(0.50 \times MAP_{2006}) + (0.50 \times MAP_{2007})] > 0.93$,
then

$K_{2008} = DA_{2008} \times (1 + i_{2008} / 100)$ (in such a case K_{2008} will be a negative amount because DA_{2008} is a negative amount);

(b) if $DA_{2008} < 0$ and

$$AWAT_{2008} / [(0.50 \times MAP_{2006}) + (0.50 \times MAP_{2007})] \leq 0.93$$

(where \leq means less than or equal to),

then

$$K_{2008} = -0.07 \times [(0.50 \times MAP_{2006}) + (0.50 \times MAP_{2007})]$$

$$\times (1 + i_{2008} / 100);$$

(c) if $DA_{2008} > 0$ and

$$[(AWAT_{2008} - (RBR_{2007} / CQ_{2007})) / [(0.5MAP_{2006}) + (0.5MAP_{2007})] < 1.07$$

then

$$K_{2008} = DA_{2008} [(1 + (i_{2008}) / 100)];$$

(d) if $DA_{2008} > 0$ and

$$[(AWAT_{2008} - (RBR_{2007} / CQ_{2007})) / [(0.5MAP_{2006}) + (0.5MAP_{2007})] \geq 1.07$$

(where \geq means greater than or equal to)

then

$$K_{2008} = DA_{2008} [(1 + (i_{2008} + 4) / 100)] -$$

$$0.04 [(RBR_{2007} / CQ_{2007}) + 0.07 (0.5MAP_{2006} + 0.5 MAP_{2007})];$$

(e) if $DA_{2008} = 0$, then

$$K_{2008} = 0$$

Where:

MAP_{2006} = The maximum average price (expressed in PhP/kWh) that the Regulated Entity is permitted to charge for the provision by it, during Regulatory Year 2006, of Regulated Distribution Services in respect of the relevant Regulated Distribution System, as calculated in accordance with Section 3.2.1;

MAP_{2007} = The maximum average price (expressed in PhP/kWh) that the Regulated Entity is permitted to charge for the provision by it, during Regulatory Year 2007, of Regulated Distribution Services in respect of the relevant Regulated Distribution System, as calculated in accordance with Section 3.2.1; and

i_{2008} = 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 January 2006 to 31 December 2006.

Note: this Section 4.3.2 only applies in respect of Initial Regulated Entities as the Correction Factor for Regulatory Year 2008 for Subsequent Regulated Entities is 0 (zero): see Section 4.2.1.

4.3.3 The Correction Factor for each of the Regulatory Years in the Second Regulatory Period (other than the first Regulatory Year of the Second Regulatory Period) (K_t) is calculated as follows:

(a) if $DA_t < 0$, then

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

(b) if $DA_t > 0$

and $[(AWAT_t - (RBR_{t-1}/CQ_{t-1})) / ((0.5MAP_{t-1}) + (0.5MAP_{t-2}))] < 1.07$

then

$K_t = DA_t [(1 + (i_t)/100)]$;

(c) if $DA_t > 0$

and $[(AWAT_t - (RBR_{t-1}/CQ_{t-1})) / ((0.5MAP_{t-1}) + (0.5MAP_{t-2}))] \geq 1.07$

(where \geq means greater than or equal to)

then

$K_t = DA_t [(1 + (i_t + 4)/100)] - 0.04 [(RBR_{t-1}/CQ_{t-1}) + 0.07 (0.5MAP_{t-1} + 0.5MAP_{t-2})]$;

and

(d) if $DA_t = 0$, then

$K_t = 0$

Where:

MAP_{t-2} = Except as provided below, the maximum average price (expressed in PhP/kWh) that the Regulated Entity is permitted to charge for the provision by it, during Regulatory Year t-2, of Regulated Distribution Services in respect of the relevant Regulated Distribution System, as calculated in accordance with Section 4.2.1 or 3.2.1 as the case may be (Section 3.2.1 only applies if the Regulated Entity is an Initial Regulated Entity);

= Where Regulatory Year t is Regulatory Year 2009 and the Regulated Entity is a Subsequent Regulated Entity, $MAP_{t-2} = MAP_{bs}$ and is as calculated in accordance with Section 4.5;

MAP_{t-1} = The maximum average price (expressed in PhP/kWh) that the Regulated Entity is permitted to charge for the provision by it, during Regulatory Year t-1, of Regulated Distribution Services in respect of the relevant Regulated Distribution System, as calculated in accordance with Section 4.2.1; and

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 January of Regulatory Year t-2 to 31 December of Regulatory Year t-1.

- 4.3.4 Related business undertakings that utilize Regulated Distribution System assets include, but are not limited to, the following:
- (a) service fees (for service connection or re-connection);
 - (b) rental for distribution transformers;
 - (c) rental for poles, boom and truck crane;
 - (d) testing and calibration fees;
 - (e) relocation and transfer fees;
 - (f) inspection and installation fees;
 - (g) illegal connection surcharge;
 - (h) jobbing and contract fees;
 - (i) engineering design on special projects;
 - (j) rental of other utility property;
 - (k) revenue from miscellaneous operations;
 - (l) dividend income from investments made by Regulated Entities related to or using assets of the Regulated Distribution System; and
 - (m) bad debts recovery.

4.4 Tax Adjustment

- 4.4.1 Except as otherwise provided in Section 4.2.1, the Tax Adjustment for Regulatory Year t (ITA_t) is calculated as follows:

$$ITA_t = \frac{(\text{ActTax}_{p, t-2} - \text{Tax}_{p, t-2}) \times (1 + \text{WACC}_t)^2}{\text{CQ}_{t-1}}$$

Where:

$\text{ActTax}_{p,t-2}$ = The amount of corporate income tax (expressed in PhP) that is actually paid, by the Regulated Entity that operates the relevant Regulated Distribution System, for Regulatory Year t-2 to the extent such tax relates to taxable income of that Regulated Entity (net of any related accumulated tax losses) which arises from the provision of Regulated Distribution Services in respect of that Regulated Distribution System by the Regulated Entity (whether or not such taxable income arises in Regulatory Year t-2);

$\text{Tax}_{p,n}$ = The estimated corporate income tax payable by that Regulated Entity in respect of the relevant Regulated Distribution System in Regulatory Year t-2 as calculated by the ERC in accordance with Sections 4.14.1 to 4.14.3;

WACC_t = The weighted average cost of capital as determined by the ERC which applies for the purposes of these Rules in respect of Regulatory Year t; and

CQ_t = The total amount of energy (expressed in kWh) delivered through the relevant Regulated Distribution System, during the 12 month period ending on 31 December in Regulatory Year t-1,

to Connection Points in respect of that Regulated Distribution System, such amount of energy:

- (a) being determined in a manner that is approved for this purpose by the ERC; and
- (b) as so determined being audited to the satisfaction of the ERC by a person that is approved for this purpose by the ERC.

4.4.2 For the purposes of Section 4.4.1:

- (a) the amount of corporate income tax that is actually paid by a 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 a Regulated Entity (net of any related accumulated tax losses) which arises from the provision of Regulated Distribution Services in respect of a Regulated Distribution System 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).

4.5 **MAP_{bs}**

For the purposes of Section 4.2.1 the value of MAP_{bs} which is to be used as MAP_{t-1} for Regulatory Year 2008 where the Regulated Entity is a Subsequent Regulated Entity, is the amount (expressed in PhP/kWh) calculated as follows:

$$\text{MAP}_{\text{bs}} = (\text{CR}_{\text{bs}} - \text{RBR}_{\text{bs}}) / \text{CQ}_{\text{bs}}$$

Where:

CR_{bs} = The amount (expressed in PhP) billed to Customers of the relevant Regulated Distribution System, or other persons, for the provision of either Regulated Distribution Services, or unregulated services which utilize assets that form part of the regulatory asset base for that Regulated Distribution System, by the Regulated Entity that operates that Regulated Distribution System, during the 12 month period ending on 31 December 2006, the amount:

- (a) so billed being determined in a manner that is approved for this purpose by the ERC; and

(b) as so determined being audited to the satisfaction of the ERC by a person that is approved for this purpose by the ERC;

RBR_{bs} = Such portion (expressed in PhP) of the net income derived, during the 12 month period ending on 31 December 2006, from each related business undertaking, examples of which are provided in Section 4.3.4, which is engaged in directly or indirectly by the Regulated Entity that operates the relevant Regulated Distribution System and which utilizes assets that form part of the regulatory asset base for that Regulated Distribution System (see Section 4.8.8), being a portion that is determined by the ERC pursuant to Section 26 of the EPIRA and will be set at 50% of the net income that is so derived from that business undertaking; and

CQ_{bs} = The total amount of energy (expressed in kWh) delivered through the relevant Regulated Distribution System, during the 12 month period ending on 31 December 2006, to Connection Points in respect of that Regulated Distribution System, such amount of energy:

- (a) being determined in a manner that is approved for this purpose by the ERC; and
- (b) as so determined being audited to the satisfaction of the ERC by a person that is approved for this purpose by the ERC.

Note: Where, by the commencement of Regulatory Year 2008, the ERC has yet to determine an amount for, or the approach to determine the amount for, RBR_{bs} , this shall be taken as zero for the purposes of the application of this Section 4.5.

4.6 General Building Block Principles

4.6.1 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 Regulated Distribution System for each Regulatory Year t in the Second Regulatory Period (ARR_t). The ARR_t must be based on a forward-looking analysis of forecast cash flow requirements and must represent the optimal forecast revenue requirement, in relation to that Regulated Distribution System and for each Regulatory Year of the Second Regulatory Period, of the Regulated Entity that operates that Regulated Distribution System. The ARR_t must reasonably compensate the Regulated Entity for the economically efficient costs and risks it incurs in providing Regulated Distribution Services in respect of that Regulated Distribution System in order to encourage:

- (a) a commercial environment which is transparent and stable, and which does not discriminate between the users of those Regulated Distribution Services;
- (b) the same outcomes in the market for those Regulated Distribution Services as would be achieved if that market were competitive;

- (c) competition in the provision of those Regulated Distribution Services wherever practicable;
 - (d) the commercial viability of the Regulated Entity through allowing it to recover its efficient costs associated with the provision of those Regulated Distribution Services, together with a reasonable return on the Regulated Entity's approved capital invested in that Regulated Distribution System, as determined by the ERC;
 - (e) competition in upstream and downstream markets;
 - (f) stability in the distribution wheeling rates charged for those Regulated Distribution Services;
 - (g) recovery of only those costs which are related to the provision of those Regulated Distribution Services;
 - (h) fairness in the charges made for those Regulated Distribution 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 that Regulated Distribution System such that, at the end of the term of the Second Regulatory Period, that Regulated Distribution System is able to continue to provide sustainable electricity distribution 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.
- 4.6.2 The ARR_t for a Regulated Distribution System must result from an economic and financial analysis of the forecast cash flow requirements, in relation to that Regulated Distribution System, of the Regulated Entity that operates that Regulated Distribution System, such forecast cash flow requirements being based on a Building Block analysis pursuant to Section 4.7 which uses a 'classical' weighted average cost of capital as defined in Section 4.11.
- 4.6.3 For financial analysis integrity and for transparency purposes, the corporate income tax cash flow requirements of the relevant Regulated Entity must be included as a specific line item in the Building Blocks, thus ensuring the ARR_t for the relevant Regulated Distribution System includes the estimated cash flows in relation to that Regulated Distribution System which are necessary for the Regulated Entity to meet its expected corporate income tax payment obligations each Regulatory Year as and when they fall due.
- 4.6.4 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.
- 4.6.5 When undertaking the economic and financial analysis to determine the ARR_t for a Regulated Distribution System, the ERC will adequately compensate the relevant Regulated Entity for all identified and justifiable risks inherent in an electricity distribution business in the Philippines, it being recognized that the

over compensation for such risks will be to the disadvantage of Customers of that Regulated Distribution System 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 of that Regulated Distribution System) because it will adversely affect the viability of the Regulated Entity.

4.7 Primary Building Blocks

4.7.1 The financial Building Blocks which will form the basis of calculating the ARR_t for a Regulated Distribution System are as follows:

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

4.7.2 The operating and maintenance expenditure for Regulatory Year t is constituted by the forecasts of such expenditure in relation to the relevant Regulated Distribution System for that Regulatory Year, as approved by the ERC in accordance with Section 4.13.

4.7.3 The taxes, other than corporate income tax, for Regulatory Year t are constituted by the forecasts of payments of such taxes as are expected to be incurred in relation to the relevant Regulated Distribution System for that Regulatory Year, as approved by the ERC in accordance with Section 4.13.

4.7.4 The Regulatory Depreciation for Regulatory Year t is that which is determined by the ERC in respect of the relevant Regulated Distribution System on the basis of the methodology for its determination set out in Section 4.10.2.

4.7.5 The return ‘on’ capital for Regulatory Year t is the Regulatory Asset Base for the relevant Regulated Distribution System for that Regulatory Year (RAB_t), as determined by the ERC on the basis of the methodology for its determination set out in Section 4.9, increased by an allowance for working capital in accordance with Section 4.7.7, multiplied by the classical weighted average cost of capital (WACC), as determined by the ERC in accordance with Section 4.11.

4.7.6 The corporate income tax for Regulatory Year t is the estimated corporate income tax payable by the Regulated Entity in respect of the relevant Regulated Distribution System in that Regulatory Year as determined by the ERC in accordance with Sections 4.14.1 to 4.14.3.

4.7.7 The Building Block formula to be used in calculating the ARR_t for a Regulated Distribution System is as follows:

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

Where:

$Opex_t$ = The nominal⁹ operating and maintenance expenditure in relation to the relevant Regulated Distribution System for Regulatory Year t which is forecasted for that Regulatory Year and approved by the ERC in accordance with Section 4.13;

$Tax_{m,t}$ = The payment of taxes, other than corporate income tax, for Regulatory Year t in nominal terms which are forecasted to be incurred in relation to the relevant Regulated Distribution System for that Regulatory Year and which are approved by the ERC in accordance with Section 4.13;

$RegDepn_t$ = The Regulatory Depreciation for Regulatory Year t in real¹⁰ terms as determined by the ERC in respect of the relevant Regulated Distribution System on the basis of the methodology for its determination set out in Section 4.10.2;

RAB_t = The Regulatory Asset Base for the relevant Regulated Distribution System 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 4.9;

WC_t = The working capital allowance for Regulatory Year t, which is set at a proportion of the difference between:

(a) the real operating and maintenance expenditure in relation to the relevant Regulated Distribution System which is forecasted for that Regulatory Year and approved by the ERC in accordance with Section 4.13; and

(b) the real amount of the bad debts in relation to the relevant Regulated Distribution System which are forecasted for that Regulatory Year and approved by the ERC in accordance with Section 4.13,

such proportion being determined by the ERC, as part of the Regulatory Reset Process for the Second Regulatory Period under Article VII, after an analysis of the relevant payables and receivables (which analysis could take the form of a lead/lag study, a benchmark study, or an industry average study focused on private utilities);

$WACC$ = The weighted average cost of capital calculated using a 'classical' formula and as determined by the ERC in

⁹ In these Guidelines 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 30 June year end figures unless stated otherwise.

¹⁰ In these Guidelines the word 'real' is used with its financial meaning, such that real peso numbers are represented without inflation applied. Notionally these are 30 June year end figures unless stated otherwise.

accordance with Section 4.11. 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; and

$Tax_{p,t}$ = The estimated corporate income tax payable by the relevant Regulated Entity in respect of the relevant Regulated Distribution System in Regulatory Year t in nominal terms as determined by the ERC in accordance with Sections 4.14.1 to 4.14.3.

4.8 Asset Valuation

4.8.1 Prior to the commencement of the Second Regulatory Period an asset re-valuation must be undertaken in relation to each Regulated Distribution System in accordance with this Section 4.8 (the "Initial Re-valuation").

4.8.2 The asset re-valuation referred to in Section 4.8.1 must be undertaken by either:

- (a) an independent appraisal company engaged by the Regulated Entity that operates the relevant Regulated Distribution System, in which case the ERC must also retain a Regulatory Reset Expert or Regulatory Reset Experts pursuant to Article XIV for the purposes of reviewing that re-valuation; or
- (b) a Regulatory Reset Expert or Regulatory Reset Experts retained by the ERC 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 relevant Regulated Entity. Where:

- (c) paragraph (a) applies - both the independent appraisal company and the Regulatory Reset Expert or Regulatory Reset 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 4.8, 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 Regulatory Reset Expert or Regulatory Reset 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 4.8, the report of the independent appraisal company as modified by the report of the Regulatory Reset Expert or Regulatory Reset Experts is referred to as the "Initial Re-valuation Report" for the relevant Regulated Distribution System);
- (d) paragraph (b) applies – the Regulatory Reset Expert or Regulatory Reset 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 4.8, and they 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 4.8, the report of the Regulatory Reset Expert or Regulatory Reset Experts is referred to as the "Initial Re-valuation Report" for the relevant Regulated Distribution System).
- 4.8.3 Subject to Section 4.8.13, the Initial Re-valuation in relation to a Regulated Distribution System must be undertaken using an optimized 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 30 June 2005; and
 - (b) the principles referred to in Sections 4.8.4, 4.8.5 and 4.8.6 must be applied.
- 4.8.4 For the purposes of the Initial Re-valuation in relation to a Regulated Distribution System, and in the circumstances specified below in connection with them, the following methods of re-valuation may be used for different Asset Categories (as specified in, or in accordance with, Section 4.8.5):
- (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, e.g. because that asset is no longer manufactured.
- 4.8.5 The Initial Re-valuation in relation to a Regulated Distribution System must be undertaken utilising more than a single weighted average asset category. The

details of the re-valuation must be reconciled back to the relevant Regulated Entity's asset register or general ledger (as required), and such reconciliation must be fully documented in advance of the submission of the relevant 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, and the weighted average age of the assets, for the following Asset Categories j:

(a) distribution plant:

- land and land rights (dedicated to distribution purposes);
- structures and improvements (dedicated to distribution purposes);
- station equipment
 - power transformers;
 - switchgear;
 - protective equipment;
 - metering and control equipment;
 - communications equipment;
 - other station equipment;
- poles, towers and fixtures – distribution; customer;
- overhead conductors and devices – distribution; customer;
- underground conduits – distribution; customer;
- underground conductors and devices – distribution; customer;
- line transformers – distribution; customer;
- power conditioning equipment;¹¹
- services;
- meters, metering instruments & metering transformers – distribution, customer;¹²
- information technology equipment (dedicated to distribution purposes);
- regulated entity property on consumers' premises;
- street lights and signal systems; and
- submarine cables;

¹¹ This refers to equipment such as capacitor banks for power factor correction, voltage regulators, generators used for spinning reserve or voltage stability, VAR compensators etc..

¹² Demand and energy flow metering on the distribution network is separate from customer consumption metering.

where the differentiation between distribution and customer refers to the use of an asset either as part of the Distribution System, or as part of the Distribution Connection Assets;

- (b) general plant (non-system assets) :
- land and land rights (non-system related);
 - structures and improvements (non-system related);
 - office furniture and equipment;
 - transportation equipment;
 - stores equipment;
 - tools, shop and garage equipment;
 - laboratory equipment;
 - information systems equipment (non-system related);
 - power-operated equipment;
 - communication plant and equipment; and
 - miscellaneous equipment;
- (c) materials and supplies, including spares; and
- (d) any other Asset Categories specified by the ERC.

Where construction projects have commenced before the date of the Initial Revaluation but will only be completed after this date, any capital expenditure that has been incurred against the projects before the date of the Initial Revaluation will be included in the Initial Revaluation Report. In addition, capital expenditure incurred on completed assets added to the Regulatory Asset Base in the period between the date at which the final asset information for valuation purposes is recorded and the date of the Initial Revaluation, will also be included in the Initial Revaluation Report. Such expenditure will be:

- (e) broken down into in the Asset Categories j described above; and
- (f) based on the actual, documented value of the capital expenditure incurred, or the forecast value till the initial revaluation date, to the extent that such expenditure was reasonable and to the extent that it was attributable to assets which would (if they had been in existence as at the date of the Initial Revaluation, or at the date when the final valuation information was collected for the asset valuation) be included in the Regulatory Asset Base.

Regulated Entities are to provide the Regulatory Reset Expert or Regulatory Reset Experts with information regarding the nature of such projects under construction or completed in the period between the date that the final asset information is collected and the Initial Re-valuation date and the amounts of capital expenditure incurred or forecast to be incurred against these projects by the Initial Re-valuation date.

- 4.8.6 In undertaking the optimization of the re-valuation of the assets based on replacement cost, the optimization principles described in Appendix D must be employed. Other optimization principles may be used as approved by the ERC

following advice from a Regulatory Reset Expert or Regulatory Reset Experts referred to in Section 4.8.2. Such principles must include the manner in which windfall gains and losses arising from an Initial Re-valuation are to be treated.

- 4.8.7 The date of the Initial Re-valuation in relation to a Regulated Distribution System must be twelve (12) months prior to the commencement of the Second Regulatory Period.
- 4.8.8 The Initial Re-valuation Report for a Regulated Distribution System must differentiate between those assets which are to be included in the regulatory asset base for that Regulated Distribution System and those assets which are to be excluded from that 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 Distribution Services in respect of the Regulated Distribution System within the electricity distribution network planning horizon referred to in the optimization principles described in Appendix D;
 - (b) except in the case of spares, are in service (i.e. 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.
- 4.8.9 For the purposes of Section 4.8.10, the Construction Work in Progress (CWIP) Factor as it applies in respect of all assets or an Asset Category is intended to compensate for the investment cost (i.e. 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 4.11), 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). For these purposes, the "spend profile" is to be determined as the average expenditure on those types of assets in relation to past projects undertaken in respect of the relevant Regulated Distribution System, calculated on a project and month-by-month basis over the whole life of each such project from budget approval to commissioning.¹³ The CWIP Factor must be derived from a calculation method approved by the ERC which could take the form of:
- (a) uniformly escalating the optimized depreciated replacement cost of the re-valued assets by a constant factor; or

¹³ This average can be calculated on the basis of two or more projects of similar size and complexity, but should be reasonably representative of capital expenditure projects undertaken in respect of the relevant Regulated Distribution System in the normal course of business.

- (b) directly estimating the investment cost for specific past projects and adding this cost to the optimized replacement cost of the re-valued 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.

4.8.10 The Initial Re-valuation Report for a Regulated Distribution System must estimate, in respect of that Regulated Distribution System, 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 4.9.2 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 for that Regulated Distribution System (as defined in Section 4.8.8) and that is in existence as at the date of the Initial Re-valuation in relation to that Regulated Distribution System, such value being:
 - (i) where Asset Category j does not comprise Transferred Subtransmission Assets – the optimized depreciated replacement cost of those assets as at the date of that Initial Re-valuation increased by the application of the relevant CWIP Factor (except that the CWIP Factor must not be applied to the extent an asset is categorised as part of spares, easements, buildings, civil works and establishment, or non-system assets); and
 - (ii) where Asset Category j comprises Transferred Subtransmission Assets – the value of those assets as at the date of that Initial Re-valuation, as determined in accordance with Section 4.8.13;
- (b) $Capex_{j,t-1}$ will be deemed to be the actual or budgeted capital expenditure of the relevant Regulated Entity on assets in Asset Category j for the period from the date of that Initial Re-valuation in relation to that Regulated Distribution System 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 that Initial Re-valuation) be included in the regulatory asset base for that Regulated Distribution System (as defined in Section 4.8.8), 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:
 - (i) on an asset that is categorised as part of spares, easements, buildings, civil works and establishment, or non-system assets; or
 - (ii) on a Transferred Subtransmission Asset;
- (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 for that Regulated Distribution System (as defined in Section 4.8.8), and that are in existence as at the date of the Initial Re-valuation in relation to that Regulated Distribution System, excluding spares, easements and land, such Regulatory Depreciation being calculated in accordance with Section 4.10.1 (but as if the reference to Regulatory Year t in that Section were instead a reference to the period from the date of that 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 in Asset Category j , which is referred to in Section 4.8.10(b), excluding spares, easements and land, such Regulatory Depreciation being calculated consistently with the methodology set out in Section 4.10.1 (but as if the reference to Regulatory Year t in that Section were instead a reference to the period:
 - (i) from (in the case of an asset that is not a Transferred Subtransmission Asset) the actual or budgeted date of commissioning of the asset or (in the case of an asset that is a Transferred Subtransmission Asset) the actual or budgeted date of the transfer of the asset from TRANSCO to the relevant Regulated Entity;
 - (ii) 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 in relation to that Regulated Distribution System to the date of commencement of the Second Regulatory Period, of assets in Asset Category j that are to be included in the regulatory asset base for that Regulated Distribution System (as defined in Section 4.8.8) 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 depreciation regulatory asset base value of that asset at that time.

4.8.11 The Initial Re-valuation Report for a Regulated Distribution System must also identify the historical cost of the regulatory asset base for that Regulated Distribution System (as defined in Section 4.8.8) at the date of the Initial Re-valuation in relation to that Regulated Distribution System. Such historical cost must be depreciated in a similar manner to the Rolled-forward Depreciated Regulatory Asset Base for that Regulated Distribution System under Section 4.8.10 to obtain the opening written-down historical cost of that 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 for that Regulated Distribution System under Section 4.9 to obtain an opening written-down historical cost of that 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 4.14.3.

- 4.8.12 The ERC must, in respect of each Regulated Distribution System, determine the Rolled-forward Depreciated Regulatory Asset Base for each Asset Category (as specified in, or in accordance with, Section 4.8.5) 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 for that Regulated Distribution System pursuant to Section 4.8.10.
- 4.8.13 Notwithstanding the foregoing, any Transferred Subtransmission Assets must be valued at their Revenue Potential adjusted for the effect of inflation, capital expenditure on them and depreciation between:
- (a) the date of the transfer of those assets from TRANSCO to the relevant Regulated Entity; and
 - (b) the date of the valuation,
 - (c) such adjustment to be made in such manner as is specified for that purpose in these Rules or (in the absence of such specification) as is approved for that purpose by the ERC. For the avoidance of doubt, Sections 4.8.4 and 4.8.6 do not apply to any Transferred Subtransmission Assets.
- 4.8.14 Assets remaining in service beyond their regulatory life as described in Section 4.10.1(a), will remain part of the regulatory asset base and will be valued at 5% of their optimized replacement cost. Such assets and their residual value must be separately identified in the Initial Re-valuation Report. Since the Regulatory Depreciation on these assets would have been completely recovered, this 5% residual value is used for the purposes of calculating a return on the regulatory asset base only (in accordance with Sections 4.7.7 and 4.9.1). There will be no further depreciation on these assets and at such time that they are finally removed from service, there will be no further disposal value in terms of Section 4.10.1. Any revenue derived from the sale of assets thus disposed will however be taken into account for the purposes of Section 4.3.1.

4.9 Regulatory Asset Base

- 4.9.1 The Regulatory Asset Base for a Regulated Distribution System 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:

$$RAB_t = [(RAB_{0,t} + AORL_{0,t}) + (RAB_{c,t} + AORL_{c,t})] / 2$$

Where:

$$RAB_{0,t} = \text{In the case where Regulatory Year } t \text{ is the first Regulatory Year in the Second Regulatory Period, the sum across the Asset Categories } j \text{ of the Rolled-forward Depreciated Regulatory Asset Base for each Asset Category } j \text{ as at the commencement of the first Regulatory Year in the Second}$$

- Regulatory Period ($RAB_{oj,t-1}$) as determined by the ERC under Section 4.8.12; 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 4.9.2;
- $RAB_{c,t}$ = The sum across the Asset Categories j of the closing Rolled-forward Depreciated Regulatory Asset Base for each Asset Category j for Regulatory Year t ($RAB_{cj,t}$), as defined in Section 4.9.2;
- $AORL_{o,t}$ = 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 5% residual value of assets that are remaining in service beyond their regulatory lives 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 4.8.14; 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 5% residual value of assets that are remaining in service beyond their regulatory lives for each Asset Category j for that Regulatory Year t ($AORL_{oj,t} = AORL_{cj,t-1}$) as determined by the ERC under Section 4.8.14;
- $AORL_{cj,t}$ = The sum across the Asset Categories j of the 5% closing residual value of assets that are remaining in service beyond their regulatory lives for each Asset Category j for Regulatory Year t as determined by the ERC under Section 4.8.14; and

$$AORL_{cj,t} = AORL_{oj,t} + (AORLA_{j,t} - AORLR_{j,t})$$

Where

$AORLA_{j,t}$ = The 5% residual value of assets in category j reaching the end of their regulatory lives during Regulatory Year t; and

$AORLR_{j,t}$ = The 5% residual value previously recorded as part of RAB_t for assets in category j that were previously used beyond their regulatory lives but have been disposed of during Regulatory Year t.

(This value should not be included as part of the disposals described in Section 4.9.2.)

4.9.2 The closing Rolled-forward Depreciated Regulatory Asset Base, in respect of a Regulated Distribution System, for Asset Category j for Regulatory Year t ($RAB_{cj,t}$) is calculated as follows:

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

[Note to reviewers : The disposal value has been removed from this formula, since it is taken into account in the calculation of the regulatory depreciation, as per Section 4.10.1. This is a change that was not reflected in the previous consultation document.]

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 4.8.12;

$\text{RegDepn}_{oj,t}$ = 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 4.8.12 and with the method for calculating the Regulatory Depreciation for that Asset Category as set out in Section 4.10.1;

$\text{Capex}_{j,t}$ = The forecast capital expenditure of the Regulated Entity on assets in Asset Category j for Regulatory Year t as approved by the ERC for that Regulated Distribution System under Section 4.12.5;

$\text{RegDepn}_{cj,t}$ = The Regulatory Depreciation, for Regulatory Year t, of the forecast capital expenditure of the Regulated Entity on assets (excluding spares, land and easements) in Asset Category j (as approved by the ERC under Section 4.12.5 for that Regulated Distribution System) 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 4.10.1.

4.9.3 For the purposes of this Section 4.9 and Section 4.10, assets are to be included in the same categories as specified in, or in accordance with, Section 4.8.5 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 4.10.1).

4.10 Regulatory Depreciation

4.10.1 The Regulatory Depreciation, for Regulatory Year t, in respect of assets that are in an Asset Category j ($RegDepn_{j,t}$) is calculated on a straight line basis as follows:

- (a) where Asset Category j does not comprise Transferred Subtransmission Assets - using either of the following methods depending on the available data:

$$RegDepn_{j,t} = (ORC_{j,t} / RegL_{j,t}) + Disposals_{j,t} - FISDA_{j,t}$$

or

$$(ODRC_{j,t} / RemL_{j,t}) + Disposals_{j,t} - FISDA_{j,t}$$

Where:

$ORC_{j,t}$ = the optimized replacement cost, as at the commencement of Regulatory Year t, for the assets that are in Asset Category j;

$RegL_{j,t}$ = the Regulatory Life of Asset Category j as at the commencement of Regulatory Year t and is equal to the weighted average¹⁴ economic life of the relevant assets 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 4.10.3, $RegL_{j,t}$ may differ from the asset life used for financial reporting or taxation purposes;

$Disposals_{j,t}$ = the forecast receipts from the disposal, during Regulatory Year t, of assets in Asset Category j that are included in the regulatory asset base for that Regulated Distribution System (as defined in Section 4.8.8), 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. These receipts should not include the 5% residual value allocated to disposed assets previously used beyond their Regulatory Lives in terms of Section 4.8.14.

¹⁴ Weighted by optimized replacement cost or by optimized depreciated replacement cost, depending on the information availability for asset age in the relevant Regulated Entity's asset register systems.

- FISDA_{j,t} = the forecast income (expressed in PhP) to a Regulated Entity that would arise during Regulatory Year t from the sale of disposed assets in Asset Category j, that were previously part of the rolled forward regulatory asset base for a Regulated Distribution System, as determined by the ERC as part of the Regulatory Reset Process for the Second Regulatory Period under Article VII, after deducting any forecast expenses associated with the sale but excluding the value at which the disposed assets were forecast to be removed from the rolled forward regulatory asset base;
- ODRC_{j,t} = the optimized depreciated replacement cost for the relevant assets as at the commencement of Regulatory Year t, calculated (on the basis of the application of straight line depreciation of the optimized replacement cost for those assets) by multiplying their optimized replacement cost by the weighted average Remaining Life of Asset Category j (RemL_{j,t}) and dividing that product by the Regulatory Life of Asset Category j (RegL_{j,t});
- RemL_{j,t} = (RegL_{j,t} - Age_{j,t}) ; and
- Age_{j,t} = the weighted average age of the relevant assets as at the commencement of Regulatory Year t; and
- (b) where Asset Category j comprises Transferred Subtransmission Assets – using the following method:
- RegDepn_{j,t} = $RP_{j,t} / \text{RemL}_{j,t} + \text{Disposal}_{j,t} - \text{FISDA}_{j,t}$
- Where:
- RP_{j,t} = the value of those assets, as at the commencement of Regulatory Year t, as determined in accordance with Section 4.8.13;
- RemL_{j,t} = (RegL_{j,t} - Age_{j,t});
- RegL_{j,t} = the Regulatory Life of Asset Category j as at the commencement of Regulatory Year t and is equal to the weighted average¹⁵ economic life of those assets 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

¹⁵ Weighted by the value of the assets in Asset Category j, as determined in accordance with Section 4.8.13.

the report referred to in Section 4.10.3, $RegL_{j,t}$ may differ from the asset life used for financial reporting or taxation purposes;

$Age_{j,t}$ = the weighted average of the relevant assets as at the commencement of Regulatory Year t;

$Disposal_{j,t}$ = the forecast receipts from the disposal, during Regulatory Year t, of assets in Asset Category j that are included as part of the Transferred Subtransmission Assets for a Regulated Distribution System, 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. These receipts should not include the 5% residual value allocated to disposed assets previously used beyond their Regulatory Lives in terms of Section 4.8.14; and

$FISDA_{j,t}$ = the forecast income (expressed in PhP) to a Regulated Entity that would arise during Regulatory Year t from the sale of disposed assets in Asset Category j, that were previously part of the Transferred Subtransmission Assets for a Regulated Distribution System, as determined by the ERC as part of the Regulatory Reset Process for the Second Regulatory Period under Article VII, after deducting any forecast expenses associated with the sale but excluding the value at which the disposed assets were forecast to be removed from the rolled forward regulatory asset base.

4.10.2 The Regulatory Depreciation in respect of a Regulated Distribution System 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 4.9.2; and

$RegDepn_{c,t}$ = Sum of $RegDepn_{cj,t}$ for Regulatory Year t for each Asset Category j, as defined in Section 4.9.2.

4.10.3 For the purposes of this Section 4.10, the ERC must retain a Regulatory Reset Expert or Regulatory Reset 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 each Regulated Entity to provide Regulated Distribution Services in respect of a Regulated

Distribution System 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 4.10.3 are to be treated.

- 4.10.4 For the purposes of this Section 4.10, the regulatory life that is attributable to an Asset Category j must be determined by the ERC during the Regulatory Reset Process for the Second Regulatory Period under Article VII, having regard to such reports as are provided to it under Section 4.10.3, and such regulatory life must be the same for the same Asset Category for each Regulated Distribution System.
- 4.10.5 Assets remaining in use after reaching the end of their Regulatory Lives as described in Section 4.8.14 will not be subject to further depreciation.

4.11 Weighted Average Cost of Capital Determination

- 4.11.1 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 a Regulated Entity that provides Regulated Distribution Services in respect of a Regulated Distribution System.
- 4.11.2 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 4.7.7 and the principles in Section 4.6.1. The ERC must retain a Regulatory Reset Expert or Regulatory Reset 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. The WACC as so determined must be the same for all Regulated Entities and all Regulated Distribution Systems.
- 4.11.3 The WACC (expressed in decimal, as opposed to percentage, terms) is to be calculated as follows:

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

Where:

- r_e = the cost of equity and is calculated in accordance with Section 4.11.4;
- r_d = the cost of debt and is calculated in accordance with Section 4.11.10;
- E = the amount of equity funding assumed for regulatory purposes in the capital structure of a Regulated Entity, being 55% of V for the Second Regulatory Period¹⁶;

¹⁶ OFGEM in the UK has used D=50% and E = 50% for its decisions for Distribution Utilities (1999). OFGEM's recent consultation paper suggests more normal gearing is D = 60% to 65% (Dec 2003). The

D = the amount of debt funding assumed for regulatory purposes in the capital structure of a Regulated Entity, being 45% of V for the Second Regulatory Period¹³; and

V = E + D.

4.11.4 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 4.11.5;

Beta_e = the industry average Equity Beta for electricity distribution businesses in the Philippines (excluding electricity distribution businesses conducted by Electric Cooperatives) as determined by the ERC for regulatory purposes in accordance with Sections 4.11.6 to 4.11.8; and

$(r_m - r_f)$ = the Market Risk Premium (MRP), expressed in decimal terms, adopted by the ERC as specified in Section 4.11.9.

4.11.5 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 markets¹⁷ 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 lead to the derivation of a viable proxy for the risk-free rate within the Philippines.

4.11.6 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

Essential Services Commission in Victoria, Australia has used E = 40% and D=60% for its decision on AGL, CitiPower, Powercor, TXU and United Energy (Sept 2000). The values used were the same for all Distribution Utilities.

¹⁷ A secondary bond market or equivalent must be used so that sufficient liquidity (i.e. 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.

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). The industry average Equity Beta for electricity distribution businesses in the Philippines (excluding electricity distribution businesses conducted by Electric Cooperatives) is as determined by the ERC using such valid data as is available and by reference to comparable overseas electricity businesses.

- 4.11.7 For the Second Regulatory Period, the ERC will determine the industry average Equity Beta for electricity distribution businesses in the Philippines (excluding electricity distribution businesses conducted by Electric Cooperatives) ($Beta_e$) in accordance with the following formula:

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

Where:

$Beta_a$ = the industry average Asset Beta for electricity distribution businesses in the Philippines (excluding electricity distribution businesses conducted by Electric Cooperatives) as determined by the ERC in accordance with Section 4.11.8, 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 4.11.3; and

E = as defined in Section 4.11.3.

- 4.11.8 The Asset Beta for a business would normally be derived from an examination of the Equity Betas observed in the local Philippine 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 an industry average Asset Beta for electricity distribution businesses in the Philippines (excluding electricity distribution businesses conducted by Electric Cooperatives) and will do so on the basis of the Asset Betas of comparable overseas electricity businesses¹⁸. The ERC recognizes 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 distribution 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 Betas of integrated electricity businesses or of electricity transmission or distribution businesses in developed countries, with an emphasis on those

¹⁸ OFGEM in the UK has used Equity Beta = 1.0 for its decisions for Distribution Utilities (1999). The Essential Services Commission in Victoria, Australia has used Asset Beta = 0.40 or Equity Beta = 1.0 for its decisions on AGL, CitiPower, Powercor, TXU and United Energy (Sept 2000). The values used were the same for all Distribution Utilities.

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.

4.11.9 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 0.06¹⁹.

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

$$r_d = r_f + DM$$

Where:

r_f = the risk-free rate within the Philippines, expressed in decimal and nominal terms, as determined in accordance with Section 4.11.5; and

¹⁹ OFGEM in the UK has used MRP = 0.02 to 0.05 for its decisions for Distribution Utilities (1999). The Essential Services Commission in Victoria, Australia has used MRP = 0.06 for its decisions on AGL, CitiPower, Powercor, TXU and United Energy (Sept 2000). The values used were the same for all Distribution Utilities.

DM = the industry average debt margin (or premium) within the Philippines (expressed in decimal and nominal 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 electricity distribution businesses in the Philippines (other than electricity distribution businesses conducted by Electric Cooperatives) 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 distribution 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 industry average debt margin, but the industry average debt margin must reflect a realistic market outcome at the time it is determined. The ERC will determine the industry average 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 an electricity distribution business within the Philippines, such consideration to occur during the Regulatory Reset Process for the Second Regulatory Period under Article VII.

- 4.11.11 During the Regulatory Reset Process for the Second Regulatory Period under Article VII, the ERC will give each 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 industry average Equity Beta, the industry average Asset Beta and the cost of debt for the purposes of calculating WACC.
- 4.11.12 Once these Rules have come into effect, the formula for calculating WACC and its components as set out in this Section 4.11 must not be altered by the ERC for the Second Regulatory Period except with the agreement of each of the Regulated Entities.

4.12 Capital Expenditure Forecast

- 4.12.1 During the Regulatory Reset Process for the Second Regulatory Period under Article VII, each Regulated Entity must provide the ERC with its forward forecasts of its proposed annual capital expenditure, for each Regulated Distribution System that is operated by it, for each Regulatory Year in the Second Regulatory Period. This capital expenditure program must separately

identify each capital expenditure project in respect of which the forecast capital expenditure in any Regulatory Year or subsequent Years during or after the Second Regulatory Period is greater than PhP 50 million or 30% of total capital expenditure forecasted for that Regulatory Year, whichever is lower. For both these separately identified projects and the remaining forecasted capital expenditure, the forecasts must each be broken down into the asset categories specified in, or in accordance with, Section 4.8.5. The capital expenditure program will be subject to review by a Regulatory Reset Expert or Regulatory Reset Experts under Section 4.12.4.

4.12.2 For each of the capital expenditure projects which is separately identified in accordance with Section 4.12.1, 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 relevant Regulated Distribution System which are determined by the ERC under Article VIII;
- (d) a classification of the project into the following categories:
 - (i) renewal 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) growth-related or new assets (identifying which assets are for shared network infrastructure and which are for new connections); and
- (e) 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.

To avoid confusion over what constitutes load growth, renewal or refurbishment related projects, the following should be noted.

- (f) Projects undertaken to provide Regulated Distribution Services to new Customers or to increase the capacity of Regulated Distribution Systems in order to meet growing demands for Regulated Distribution Services from existing Customers, should be classed as load growth projects.
- (g) Projects undertaken to renew assets because they can no longer meet growing demands should be classed as load growth projects.
- (h) Renewal projects are those that replace existing assets due to their deteriorating condition, when the anticipated economic cost of operating, refurbishing and maintaining these assets exceed that to renew them.

- (i) Renewal projects can also be to replace assets due to technological obsolescence.
- (j) There is often a significant degree of overlap between maintenance and refurbishment projects. In general, maintenance works are defined as those works required to ensure that an asset performs its designated function for its full standard asset life. Refurbishment projects on the other hand, are those that are used to increase the serviceability of assets to beyond their normal standard asset lives. Expenses incurred for maintenance activities should not be capitalized.
- (k) Refurbishment projects often involve at least a degree of asset replacement, which may give rise to some ambiguity. Such projects should be classed in accordance with their underlying activities that constitute the largest part of the project value.

4.12.3 For the remaining forecast capital expenditure which is not allocated to separately identified capital expenditure projects in accordance with Section 4.12.1, the capital expenditure program must be accompanied by a justification, against each of the asset categories specified in, or in accordance with, Section 4.8.5, as to why the forecasted expenditures are necessary and are of reasonable magnitude, and must be categorised as follows:

- (a) renewal-related;
- (b) refurbishment-related; or
- (c) growth-related or new assets;

as defined in Section 4.12.2(d).

4.12.4 The ERC must retain a Regulatory Reset Expert or Regulatory Reset Experts pursuant to Article XIV for the purpose of reviewing both the capital expenditure program for a Regulated Distribution System and the 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 4.12.1, 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 connections, co-incident peak demand and energy delivered and is sufficient to allow the relevant 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 4.12.6 are reasonable.

4.12.5 Once the Regulatory Reset Expert or Regulatory Reset Experts referred to in Section 4.12.4 have presented their written reports to the ERC, the ERC must decide, following a consideration of the recommendations of the Regulatory Reset Expert or Regulatory Reset Experts as provided in their written reports:

- (a) whether the relevant 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 connections, co-incident peak demand and energy delivered and is sufficient to allow the relevant 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 4.12.6 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 for that purpose.

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.

- 4.12.6 The capital expenditure forecasts provided by a Regulated Entity as part of a capital expenditure program referred to in Section 4.12.1 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. These exchange rate and CPI forecasts must be consistent with those used for forecasting operating and maintenance expenditure, as described in Section 4.13.6.
- 4.12.7 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 a Regulatory Reset Expert or Regulatory Reset Experts referred to in Section 4.12.4.
- 4.12.8 During the Regulatory Reset Process for the Second Regulatory Period under Article VII, each Regulated Entities has to provide historical records of capital expenditure on Distribution System Assets and Non-system Assets related to the Distribution System for the last five calendar years before the start of the Second Regulatory Period. These expenditure records have to be broken down into the categories described in Section 4.8.5. Projects completed over this period with values exceeding PhP50 million or 30% of the total annual capital expenditure should be separately identified.

4.13 Operating and Maintenance Expenditure

- 4.13.1 During the Regulatory Reset Process for the Second Regulatory Period under Article VII, each Regulated Entity must provide the ERC with:
 - (a) its historical operating and maintenance expenditure, in relation to each Regulated Distribution System that is operated by it, for each of the five calendar years preceding the commencement of the Second Regulatory Period as well as in relation to Regulatory Year 2007 (the last such periods must include the Regulated Entity's best estimate of such

- expenditure for that period to the extent such operating and maintenance expenditure for those periods has not then been incurred); and
- (b) its forward forecasts of its proposed annual operating and maintenance expenditure, in relation to each such Regulated Distribution System, 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 in relation to the relevant Regulated Distribution System:

- (c) Distribution expenses - operation
 - (i) Operation supervision and engineering
 - (ii) Load Dispatching
 - (iii) Station Expenses
 - (iv) Overhead Lines (demand & customer)
 - (v) Street Lighting and Signal System (non-roadway and roadways)
 - (vi) Metering (distribution network related including metering related to monitoring and managing system losses))
 - (vii) Consumer Installations
 - (viii) Rents
 - (ix) Information technology (distribution network related)
 - (x) Miscellaneous

- (d) Distribution expenses – maintenance
 - (i) Maintenance supervision & engineering
 - (ii) Structures
 - (iii) Substations
 - (iv) Overhead line – demand
 - (v) Overhead line – customer
 - (vi) Streetlighting (non-roadway)
 - (vii) Streetlighting (roadway)
 - (viii) Line transformers
 - (ix) Information technology
 - (x) Metering
 - (xi) Miscellaneous

- (e) Consumer accounts expenses
 - (i) Supervision
 - (ii) Meter Reading Expenses
 - (iii) Information technology (consumer related)
 - (iv) Consumer Records and Collection Expenses

- (v) Bad debts
 - (vi) Informational and Instructional Advertising Expenses
 - (vii) Miscellaneous Consumer Services Expenses
 - (viii) Consumer Prompt Payment Discount
- (f) Administrative and general
- (i) Administrative and General Salaries
 - (ii) Office Supplies and Expenses
 - (iii) Information technology (admin & general)
 - (iv) Outside Services Employed
 - (v) Property Insurance
 - (vi) Injuries and Damages
 - (vii) Employee Pension and Benefits
 - (viii) Regulatory liaison and compliance
 - (ix) Rents
 - (x) Maintenance of Office and General Plant
 - (xi) Officers Allowances and Benefits
 - (xii) Travel
 - (xiii) Training
 - (xiv) WESM compliance – market fees²⁰
 - Registration fees
 - Metering fees
 - Billing and settlement fees
 - Administration fees
 - Costs for the PEM Board, committees & working groups
 - Market Management Software and upgrades costs recovery
 - WESM – provision and maintenance of security²¹
 - (xv) Miscellaneous General Expenses
- (g) Any other categories or sub-categories specified by the ERC.
- (h) The regulatory liaison and compliance cost category included above *is for all reasonable costs associated with complying with applicable ERC rules and regulations*, including the costs of any Regulatory Reset Expert that the Regulated Entity is required to bear under Section 14.4.1, the reasonable costs of any other expert or consultant engaged by the ERC as referred to in Section 14.1.2 and which the Regulated Entity is required to pay, the reasonable costs of any independent appraisal company engaged by the Regulated Entity pursuant to Section 4.8.2(a), and the reasonable costs associated with complying with the Business Separation Guideline.

²⁰ Only to the extent that these costs apply to Regulated Distribution Services

²¹ Distribution Utilities are mandated to source at least 10% of their power requirements from the Spot Market

Where Regulated Entities engage in alternative business activities outside the operation of their Regulated Distribution Systems and incur operating and maintenance expenditure for services that are shared between these alternative business activities and the Regulated Distribution Services, Regulated Entities must provide full details of the magnitude of these costs and the manner in which these costs are allocated between the alternative business activities and the Regulated Distribution Services. *Such alternative business activities can include related business activities as noted in Section 4.3.4.*

- 4.13.2 During the Regulatory Reset Process for the Second Regulatory Period under Article VII, each 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), incurred in relation to each Regulated Distribution System that is operated by it, for each of the five 12 month periods preceding the commencement of the Second Regulatory Period (the last such 12 month period must include the Regulated Entity's best estimate of such payments for that period to the extent such payments for that period have not then been made); and
 - (b) its forward forecasts of its expected payments of taxes, levies and duties (other than corporate income tax), to be incurred in relation to each such Regulated Distribution System, 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 referred to in Section 4.13.1 and the Regulated Entity must ensure that such payments are not double counted.

- 4.13.3 The annual operating and maintenance expenditure forecasts referred to in Section 4.13.1 must be accompanied by a justification against each of the expenditure categories referred to in Section 4.13.1 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 distribution 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, service performance or other measures may be used to justify the relevant expenditures.
- 4.13.4 The ERC must retain a Regulatory Reset Expert or Regulatory Reset Experts pursuant to Article XIV for the purpose of reviewing both the operating and maintenance expenditure forecasts in relation to a Regulated Distribution System and the accompanying documentation to determine:
- (a) whether the forecast operating and maintenance expenditure is reasonably efficient, is likely to support the forecast growth in connections, coincident peak demand and energy delivered and is sufficient to allow the relevant 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 4.13.6 are reasonable.

4.13.5 Once the Regulatory Reset Expert or Regulatory Reset Experts referred to in Section 4.13.4 have presented their written reports to the ERC, the ERC must decide, following a consideration of the recommendations of the Regulatory Reset Expert or Regulatory Reset Experts as provided in their written reports:

- (a) whether the relevant forecast operating and maintenance expenditure is reasonably efficient, is likely to support the forecast growth in connections, co-incident peak demand and energy delivered and is sufficient to allow the relevant 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 4.13.6 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 4.13.2 (b)) proposed by the Regulated Entity; and
- (e) the PhP/\$US exchange rate and CPI forecasts used by the Regulated Entity for that purpose.

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.

4.13.6 The operating and maintenance expenditure forecasts, and forecast payments of taxes, levies and duties referred to in Section 4.13.2 (b), provided by a 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 and CPI forecasts, for each Quarter of the Second Regulatory Period, which have been used by the Regulated Entity to generate those forecasts. These exchange rate and CPI forecasts must be consistent with those used for forecasting capital expenditure, as described in Section 4.12.6.

4.13.7 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 a Regulatory Reset Expert or Regulatory Reset Experts referred to in Section 4.13.4.

4.14 Calculation of Corporate Income Tax

4.14.1 The estimated corporate income tax payable by a Regulated Entity in respect of a Regulated Distribution System 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 4.14.2; and

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

4.14.2 For the purposes of Section 4.14.1, $NTIncome_{t-1}$ 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 Distribution Services in respect of the relevant Regulated Distribution System 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 4.14.3; and

AT_{t-2} = the net tax losses carried forward at the end of the Regulatory Year in the Second Regulatory Period which precedes Regulatory Year $t-1$,

where the net tax losses:

- (i) arise from the provision of Regulated Distribution Services in respect of the relevant Regulated Distribution System by the Regulated Entity;
- (ii) are calculated from the start of the last year of the First Regulatory Period to the end of the Regulatory Year in the Second Regulatory Period which precedes Regulatory Year $t-1$;

- (iii) carried forward at the end of any Regulatory Year in the period covered are calculated as the sum of the tax losses carried forward into that Regulatory Year and the taxable income or tax loss for that Regulatory Year; and
- (iv) only exist where it is a negative amount, with positive amounts resulting in a zero net tax loss carried forward.

For these purposes, taxable income will be treated as a positive amount and tax losses will be treated as a negative amount.

4.14.3 For the purposes of Section 4.14.2, $TIncome_{t-1}$ is calculated as:

$$TIncome_{t-1} = (SMAP_{t-1} \times Q_{t-1}) - Opex_{t-1} - HCDepr_{t-1} - RegInt_{t-1}$$

Where:

$SMAP_{t-1}$ = the Smoothed Maximum Annual Price cap (expressed in PhP/kWh) that the Regulated Entity is permitted to charge for the provision by it, during Regulatory Year t-1, of Regulated Distribution Services in respect of that Regulated Distribution System, as calculated in accordance with Section 4.15.4;

Q_{t-1} = the total amount of energy (expressed in kWh) that is forecasted to be delivered through the relevant Regulated Distribution System, during Regulatory Year t-1, to Connection Points in respect of that Regulated Distribution System, such amount of energy being forecasted in a manner that is approved for this purpose by the ERC;

$Opex_{t-1}$ = the nominal operating and maintenance expenditure, and the payments of taxes, levies and duties (other than corporate income taxes), which are forecasted to be incurred in relation to the relevant Regulated Distribution System for Regulatory Year t-1 and which are approved by the ERC in accordance with Section 4.13;

$HCDepr_{t-1}$ = the regulatory historical cost depreciation of the Regulatory Asset Base for the relevant Regulated Distribution System for Regulatory Year t-1 (see Sections 4.8.11 and 4.9) in real terms as determined by the ERC on the basis of the methodology for the determination of $RegDepr_{t-1}$ as set out in Sections 4.10.1 and 4.10.2, with the substitution, in the depreciation calculation, of historical cost valuations (as per Philippine accounting practice) for replacement cost valuations or valuations in accordance with Section 4.8.13 (as the case may be); 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:

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

Where:

RAB_{t-1} = the Regulatory Asset Base for the relevant Regulated Distribution System for Regulatory Year t-1 in real terms as determined under Section 4.9.1;

$$\text{AORL}_{t-1} = (\text{AORL}_{o,t-1} + \text{AORL}_{c,t-1}) / 2$$

Where

$\text{AORL}_{o,t-1}$ = the opening 5% residual value of assets that are remaining in service beyond their regulatory lives for Regulatory Year t-1 in real terms as determined under Section 4.9.1; and

$\text{AORL}_{c,t-1}$ = the closing 5% residual value of assets that are remaining in service beyond their regulatory lives for Regulatory Year t-1 in real terms as determined under Section 4.9.1;

D and V are as defined in Section 4.11.3; and

r_d = the cost of debt as calculated in accordance with Section 4.11.10.

4.15 Smoothing

4.15.1 As a result of the Building Block approach, it is unlikely that there will be a linear increase, for each Regulatory Year in the Second Regulatory Period, in the allowed annual revenue requirement for a Regulated Distribution System. Accordingly, so as to reduce the likelihood of price shocks to Customers of that Regulated Distribution System and of revenue shocks to the Regulated Entity that operates that Regulated Distribution System, the ERC will smooth the Maximum Annual Price caps for that Regulated Distribution System for each Regulatory Year in the Second Regulatory Period in accordance with this Section 4.15. Such smoothed Maximum Annual Price caps will incorporate a recovery of efficiency savings in costs.

4.15.2 The first step is to calculate the present value of the allowed annual revenue resulting from the maximum average prices that the relevant Regulated Entity is permitted to charge for the provision by it, during each of the Regulatory Years in the Second Regulatory Period, of Regulated Distribution Services in respect of the relevant Regulated Distribution System (PVR_{2007}), such amount being calculated as follows:

$$\begin{aligned} \text{PVR}_{2007} = & (\text{ARR}_{2008}) / (1 + \text{WACC}) + \\ & (\text{ARR}_{2009}) / (1 + \text{WACC})^2 + \\ & (\text{ARR}_{2010}) / (1 + \text{WACC})^3 + \\ & (\text{ARR}_{2011}) / (1 + \text{WACC})^4 \end{aligned}$$

where:

ARR_t = the allowed annual revenue requirement for that Regulated Distribution System for Regulatory Year t (t = 2008 to 2011) as calculated in accordance with Section 4.7.7; and

WACC = the classical weighted average cost of capital as determined by the ERC in accordance with Section 4.11.

4.15.3 The second step is to calculate the Efficiency Factor (X) in respect of the relevant Regulated Distribution System 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 4.15.2:

$$\begin{aligned}
 PVR_{2007} &= [MAP_{2007} - P_o] \times \\
 &\{ (1 + Inflation_{2008} - X) \times FQ_{2008} / (1 + WACC) \} + \\
 &\{ (1 + Inflation_{2008} - X) \times (1 + Inflation_{2009} - X) \times FQ_{2009} / (1 + WACC)^2 \} + \\
 &\{ (1 + Inflation_{2008} - X) \times (1 + Inflation_{2009} - X) \times (1 + Inflation_{2010} - X) \times \\
 &FQ_{2010} / (1 + WACC)^3 \} + \\
 &\{ (1 + Inflation_{2008} - X) \times (1 + Inflation_{2009} - X) \times (1 + Inflation_{2010} - X) \times (1 + \\
 &Inflation_{2011} - X) \times FQ_{2011} / (1 + WACC)^4 \}]
 \end{aligned}$$

where:

PVR₂₀₀₇ is as calculated pursuant to Section 4.15.2;

MAP₂₀₀₇ = where the Regulated Entity is an Initial Regulated Entity, the *Maximum Annual Price cap* (expressed in PhP/kWh) that the Initial Regulated Entity is permitted to charge for the provision by it, during Regulatory Year 2007, of Regulated Distribution Services in respect of that Regulated Distribution System, as calculated in accordance with Section 3.2.1 but as if the Correction Factor for that year (K_t) were zero;

= where the Regulated Entity is a Subsequent Regulated Entity, MAP₂₀₀₇ = MAP_{bs} and is as calculated in accordance with Section 4.5;

FQ_t = The total amount of energy (expressed in kWh) that is forecasted to be delivered through the relevant Regulated Distribution System, during Regulatory Year t (t = 2008 to 2011), to Connection Points in respect of that Regulated Distribution System, such amount of energy being forecasted in a manner that is approved for this purpose by the ERC;

P_o is such amount (expressed in PhP/kWh) as the ERC determines in respect of that Regulated Distribution System to take into account a balance between windfall gains and windfall losses in revenue resulting from exogenous factors, and to assist with the reduction of price shocks during the transition from the

First Regulatory Period to the Second Regulatory Period, provided only that such amount must be:

- (a) less than or equal to $MAP_{2007} - [(ARR_{2008} / FQ_{2008}) / (1 + WACC)]$ (but must not be a negative amount)

where $MAP_{2007} \geq [(ARR_{2008} / FQ_{2008}) / (1 + WACC)]$

(\geq meaning greater than or equal to); or

- (b) greater than or equal to $MAP_{2007} - [(ARR_{2008} / FQ_{2008}) / (1 + WACC)]$ (but must not be a positive amount)

where $MAP_{2007} \leq [(ARR_{2008} / FQ_{2008}) / (1 + WACC)]$

(\leq meaning less than or equal to);

WACC = the classical weighted average cost of capital as determined by the ERC in accordance with Section 4.11; and

Inflation_t is the forecast inflation for Regulatory Year t (t = 2008 to 2011), 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.

[Note to reviewers : This following Section 4.15.4 has been added in its totality to the previous draft of the RDWR.]

4.15.4 The Smoothed Maximum Annual Price cap (SMAP) for each Regulatory Year in the Second Regulatory Period is calculated as follows :

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

$$SMAP_{2008} = (MAP_{2007} - P_0) \times (1 + Inflation_{2008} - X); \text{ and}$$

- (b) where the relevant Regulatory Year is any Regulatory Year in the Second Regulatory Period after the first Regulatory Year, the Smoothed Maximum Annual Price cap for that Regulatory Year (SMAR_t) is:

$$SMAP_t = SMAP_{t-1} \times (1 + Inflation_t - X) ,$$

Where:

MAP_{2007} = Where the Regulated Entity is an Initial Regulated Entity and Regulatory Year t is Regulatory Year 2008, $MAP_{t-1} = MAP_{2007}$ and is as calculated under Section 3.2.1 but as if the Correction Factor for that year (K_t) was zero;

= Where the Regulated Entity is a Subsequent Regulated Entity and Regulatory Year t is Regulatory Year 2008, $MAP_{t-1} = MAP_{bs}$ and is as calculated in accordance with Section 4.5;

$Inflation_t$ = 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 Second Regulatory Period under Article VII;

P₀ is the amount determined by the ERC as described in Section 4.15.3;

and

X is as calculated pursuant to Section 4.15.3.

4.16 Revenue Path Transition

4.16.1 The ERC must treat any over or under recovery of revenue by an Initial Regulated Entity in respect of Regulatory Year 2007 in accordance with Section 4.3.

4.17 Force Majeure and Tax Event Pass Throughs

4.17.1 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 under Article X or XI (as the case may be) to be applied after the expiry of the First Regulatory Period, is incorporated into the relevant 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.

4.17.2 The ERC must ensure that, in applying the Building Block analysis for the Second Regulatory Period, an Initial 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.

4.17.3 The ERC must ensure that any increase or saving in costs in the distribution of electricity to Connection Points in respect of a Regulated Distribution System that is operated by an Initial Regulated Entity and that the Initial 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 relevant Building Block analysis to be applied for the Second Regulatory Period.

4.18 Service Quality Measures and Targets

4.18.1 The ERC must implement a performance incentive scheme that rewards each Regulated Entity for achieving specified target levels of performance, and penalizes each Regulated Entity for failing to achieve specified target levels of performance, during the Second Regulatory Period in accordance with Article VIII, as described in Sections 8.2.5 and 8.2.6.

4.18.2 The performance incentive scheme for the Second Regulatory Period will include a price-linked incentive component which will be used to determine the S_t factor described in 4.2.1 for each Regulatory Year t after Regulatory Year 2008. Where Regulatory Year t is Regulatory Year 2008, $S_t = S_{2008} = 0$.

4.18.3 The performance incentive scheme for the Second Regulatory Period will include a guaranteed service level scheme in terms of which Regulated Entities will compensate a Customer directly if certain service delivery performance thresholds are not met.

4.19 Efficiency Adjustments

4.19.1 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.

4.20 Change in Weighted Index

4.20.1 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 in relation to a Regulated Distribution System under Sections 4.12.5 and 4.13.5 and which are to be undertaken in or are otherwise referable to a foreign currency.

4.20.2 If, as a result of its review under Section 4.20.1, the ERC determines that the values of any 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 4.20.1, then the ERC must determine the altered values and those altered values must be used in applying the formula for the calculation of MAP_t for the relevant Regulated Distribution System 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 4.20.2, 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 4.20.2 must not be changed during the Second Regulatory Period.

4.20.3 For the avoidance of doubt, the values of W1 and W2 that are used in applying the formula for the calculation of MAP_t for a Regulated Distribution System as set out in Section 4.2.1 may vary as between Regulated Distribution Systems.

4.21 Side Constraint

During the Regulatory Reset Process for the Second Regulatory Period under Article VII, the ERC must determine, in respect of each Regulated Distribution System, 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 (but may vary as between Regulated Distribution Systems).

4.22 Financial Ratio Analysis

4.22.1 During the Regulatory Reset Process for the Second Regulatory Period under Article VII, each Regulated Entity must provide the ERC with a forecast financial ratio 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.

4.22.2 The forecast financial ratios which must be provided by each 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 Distribution Code or reputable financial institutions in respect of such financial ratios).

For the purposes of this Section 4.22.2, EBIT means earnings before interest and tax, and EBITDA means earnings before interest, tax, depreciation and amortisation.

4.22.3 The ERC may retain a Regulatory Reset Expert or Regulatory Reset 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 4.22.

4.22.4 In determining the Annual Revenue Requirement for a Regulated Distribution System 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 relevant Regulated Entity which results from the forecast financial ratios referred to in this Section 4.22 so as to achieve the general Building Block principles in Section 4.6.1.

4.23 Quantity Forecasts

- 4.23.1 During the Regulatory Reset Process for the Second Regulatory Period under Article VII, each Regulated Entity must provide the ERC with its forecasts, for each Regulatory Year in the Second Regulatory Period, of the total amount of energy (expressed in kWh) forecasted to be delivered through each Regulated Distribution System operated by it, during that Regulatory Year, to Connection Points in respect of that Regulated Distribution System, such amount of energy being forecasted in a manner that is approved for this purpose by the ERC.
- 4.23.2 During the Regulatory Reset Process for the Second Regulatory Period under Article VII, each Regulated Entity must provide the ERC with its forecasts, for each Regulatory Year in the Second Regulatory Period, of the total maximum demand²² (expressed in MW²³) forecasted of each Regulated Distribution System operated by it, during that Regulatory Year. These demand forecasts should be broken down into the following level of detail for each Regulatory Year:
- (a) co-incident maximum demand for the Regulated Distribution System, as measured at all Grid Connection Points and connection points to generators, including embedded generation;
 - (b) maximum demand at each Grid Connection Point and connection points to generators, including embedded generation;
 - (c) maximum demand at each major substation forming part of a Regulated Distribution System;
 - (d) maximum demand on each sub-transmission feeder (or combination of feeders where redundancy is built into the system); and
 - (e) maximum demand on each major distribution feeder (or combination of feeders where redundancy is built into the system).
- 4.23.3 The ERC must retain a Regulatory Reset Expert or Regulatory Reset Experts pursuant to Article XIV for the purpose of reviewing the forecasts referred to in Sections 4.23.1 and 4.23.2 to determine whether they are reasonable. Once such Regulatory Reset Expert or Regulatory Reset Experts have presented their written reports to the ERC, the ERC must decide, following a consideration of the recommendations of the Regulatory Reset Expert or Regulatory Reset Experts as provided in their written reports, whether the relevant forecasts are reasonable. If:
- (a) the ERC decides that those forecasts are reasonable, it must approve them;

²² The maximum demand at any point is defined as the highest peak demand experienced there (or forecast to be experienced) over any half-hour period (or other period as approved) during a Regulatory Year. Half-hourly demand will be determined by integrating (numerically or otherwise) the instantaneous demand experienced at that point for the half-hourly period.

²³ Where demand is measured in apparent power terms (MVA), an appropriate conversion should be made to real power (MW) using historical evidence of the power factor experienced during peak demand times.

- (b) the ERC decides that those forecasts are not reasonable, it must, after consulting with the relevant Regulated Entity, approve those forecasts with such amendments as the ERC considers necessary to make them reasonable.

5.

ARTICLE V

SUBSEQUENT REGULATORY PERIODS

5.1 General Price Control Principles

5.1.1 The ERC must continue to apply a price cap form of price control for each Subsequent Regulatory Period. Subject to Section 6.2.1(f) and (g), the maximum distribution wheeling rates that a Regulated Entity is permitted to charge for the provision by it, during each Regulatory Year that occurs in a Subsequent Regulatory Period, of Regulated Distribution Services in respect of a Regulated Distribution System will be set under the price cap formula set out in Section 4.2.1 except that, as part of the Regulatory Reset Process for that Subsequent Regulatory Period under Article VII:

- (a) the ERC must modify that formula to accommodate the fact that it applies to a Regulatory Period that is not the Second Regulatory Period, including to accommodate the facts that:
 - (i) for the purposes of calculating MAP_t where Regulatory Year t is the first Regulatory Year of that Subsequent Regulatory Period:
 - A MAP_{t-1} will be the maximum average price that applied in respect of the immediately preceding Regulatory Year; and
 - B K_t will be an amount determined by reference to billings, income, energy amounts and maximum average prices referable to a previous period and so will not have a deemed value of zero;
 - (ii) for the purposes of calculating MAP_t , ITA_t will be an amount determined by reference to corporate income tax payments and energy amounts referable to a previous period and so will not have a deemed value of zero; and
 - (iii) for the purposes of calculating MAP_t , S_t will be an amount determined by reference to the actual service performance of a Regulated Distribution System during the calendar year ending in December of the preceding Regulatory Year against the target performance levels and so will not have a deemed value of zero;
- (b) the ERC may alter the values and names of the components of that formula for the purposes of its application in respect of any Regulated Distribution System (the values of such components are likely to vary as between Regulated Distribution Systems); and
- (c) the ERC may amend that formula by the addition of any of the components referred to in Section 5.2.1, in which case the formula as so amended will apply in respect of all the Regulated Distribution Systems (such components may have values that differ as between Regulated Distribution Systems).

- 5.1.2 Notwithstanding Section 5.1 or 5.2, the price cap formula that is to apply for a Subsequent Regulatory Period must accommodate the requirements of the first paragraph of Section 26 of the EPIRA (other than the final proviso).
- 5.1.3 A Regulated Entity must ensure that the maximum average price that it charges for the provision by it, during a Regulatory Year that occurs in a Subsequent Regulatory Period, of Regulated Distribution Services in respect of a Regulated Distribution System does not exceed the price cap for that Regulated Distribution System for that Regulatory Year as calculated in accordance with the price cap formula that applies for that Regulatory Year in accordance with this Article V. Notwithstanding the foregoing, a failure to comply with this obligation will not be a violation of these Rules (any revenue that is derived as a result of the price cap being exceeded will effectively be returned to Customers of that Regulated Distribution System by way of a reduction in the price cap for that Regulated Distribution System for the following Regulatory Year to an amount that is lower than that which would otherwise have applied).

5.2 Price Control Formula

- 5.2.1 For the purposes of Section 5.1.1(c) 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 average price that a Regulated Entity is permitted to charge for the provision by it, during a Regulatory Year, of Regulated Distribution Services in respect of a Regulated Distribution System so as to account for differences between the forecast system co-incident maximum demand used to determine 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) a change to the general form of the price cap formula to allow it to better compensate Regulated Entities in the event that there is hyper inflation; and
 - (c) any other component that is consistent with internationally-accepted rate setting methodologies.
- 5.2.2 During the Regulatory Reset Process for each Subsequent 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 from time to time for the purposes of the price cap formula that applies in respect of any Regulated Distribution System) 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 in relation to a Regulated Distribution System 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 price cap formula that is to apply in respect of that Regulated Distribution System for that Subsequent 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 that Subsequent Regulatory Period or that are different for each Regulatory Year in that Subsequent Regulatory Period. The values of W1 and W2 as determined pursuant to this Section 5.2.2 must not be changed during that Subsequent Regulatory Period.

- 5.2.3 For the avoidance of doubt, the values of W1 and W2 that are used in the price cap formula may vary as between Regulated Distribution Systems.

5.3 General Building Block Principles

- 5.3.1 The ERC must continue to apply the general Building Block principles provided in Section 4.6.1 for each Subsequent Regulatory Period (for which purposes Section 4.6.1 (i) and (j) will be deemed to refer to that Subsequent Regulatory Period instead of the Second Regulatory Period).
- 5.3.2 The resultant allowed annual revenue requirement for each Regulated Distribution System for each Regulatory Year during a Subsequent Regulatory Period must include the relevant efficiency adjustment which is carried over to that Regulatory Year from a previous Regulatory Period in accordance with Section 9.3 or Section 5.16 (as applicable).

5.4 Primary Building Blocks

- 5.4.1 Subject to Sections 5.5 to 5.11, the ERC may adopt a Building Block analysis different from that set out in Section 4.7 for any Subsequent Regulatory Period (including by altering the relevant Building Blocks), but the same Building Block analysis must be applied in respect of all Regulated Entities and all Regulated Distribution Systems for the same Subsequent Regulatory Period.

5.5 Asset Valuation

- 5.5.1 An asset re-valuation must be undertaken in relation to each Regulated Distribution System prior to the commencement of the Third Regulatory Period and the provisions of Section 4.8 will apply with such modifications as are necessary in respect of that re-valuation.
- 5.5.2 Where the re-valuation undertaken pursuant to Section 5.5.1 shows that an asset that has previously been optimized out of the regulatory asset base for a Regulated Distribution System should be included in the regulatory asset base for that Regulated Distribution System 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 that 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 that regulatory asset base in the Regulatory Year in the Third Regulatory Period in which the asset is forecasted to be required to support the provision of Regulated Distribution Services in respect of that Regulated Distribution System 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 optimized out of the regulatory asset base.

- 5.5.3 As part of the Regulatory Reset Process under Article VII for Subsequent Regulatory Periods following the Third Regulatory Period, and subject to Section 5.5.4, the ERC must require that either:
- (a) the regulatory asset base for a Regulated Distribution System is re-valued, in which case the provisions of Section 4.8 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 optimized deprival value (i.e. at the lesser of their optimized 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 for a Regulated Distribution System is rolled-forward, in which case the provisions of Sections 4.8.9 and 4.8.10 will apply with such modifications as are necessary in respect of such roll-forward.

However, any assets previously optimized out of the regulatory asset base for a Regulated Distribution System will be included in that regulatory asset base if the ERC is satisfied that those assets are required to support the provision of Regulated Distribution Services in respect of that Regulated Distribution System by the Regulated Entity, in which case the principles set out in Section 5.5.2 must be employed in relation to the treatment of those assets.

- 5.5.4 Notwithstanding Section 5.5.3(a), the value of any Transferred Subtransmission Assets must be determined in accordance with Section 4.8.13.
- 5.5.5 The ERC must adopt the same alternative under Section 5.5.3 in respect of all Regulated Entities and all Regulated Distribution Systems for the same Subsequent Regulatory Period.

5.6 Rolled Forward Regulatory Asset Base

- 5.6.1 The ERC must continue to apply the approach to rolling forward the regulatory asset base for a Regulated Distribution System as provided in Section 4.9 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 5.4.
- 5.6.2 The ERC may, for any Subsequent Regulatory Period following the Third Regulatory Period, change its approach to rolling forward the regulatory asset base for a Regulated Distribution System from the approach provided in Section 4.9, provided that:
- (a) the approach used is consistent with the approach adopted by the ERC under Sections 5.4 and 5.5 in relation to the Building Block analysis and the valuation of the regulatory asset base; and

- (b) the same approach is used in respect of all Regulated Entities and all Regulated Distribution Systems for the same Subsequent Regulatory Period.

5.7 Regulatory Depreciation

- 5.7.1 The ERC may change its approach to regulatory depreciation for any Subsequent Regulatory Period provided that:
 - (a) the same approach to regulatory depreciation must be applied in respect of all Regulated Distribution Systems;
 - (b) the regulatory life that is attributable to any asset category must be the same for the same asset category for each Regulated Distribution System;
 - (c) if the ERC changes the regulatory life that is attributable to any asset category, it must also change the depreciation rate so that the Regulated Entity that operates the relevant Regulated Distribution System does not over or under recover the value of the regulatory asset base for that Regulated Distribution System; and
 - (d) the regulatory depreciation that is applied in respect of Transferred Subtransmission Assets is calculated by reference to, and is applied to, the value of those assets as determined in accordance with Section 4.18.3.

5.8 Weighted Average Cost of Capital Determination

- 5.8.1 The ERC must continue to apply the approach to the calculation of the weighted average cost of capital provided in Section 4.11 for the Third Regulatory Period where the ERC continues to use the Building Block analysis set out in Section 4.7. 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.
- 5.8.2 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.
- 5.8.3 The ERC must retain a Regulatory Reset Expert or Regulatory Reset 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.
- 5.8.4 The weighted average cost of capital determined by the ERC in accordance with this Section 5.8 for any Subsequent Regulatory Period must be the same for all Regulated Entities and all Regulated Distribution Systems. For these purposes, where the value for a parameter used in the determination of the weighted average cost of capital is determined by reference to, or is influenced

by, the characteristics of electricity distribution businesses in the Philippines, that value must be determined as an industry average for electricity distribution businesses in the Philippines excluding electricity distribution businesses conducted by Electric Cooperatives.

5.9 Capital Expenditure Forecast

- 5.9.1 The ERC must continue to apply the approach to capital expenditure forecasts as provided in Section 4.12 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 5.4.
- 5.9.2 The ERC may change its approach to capital expenditure forecasts for Subsequent Regulatory Periods following the Third Regulatory Period.
- 5.9.3 The ERC must apply the same approach to capital expenditure forecasts in respect of all Regulated Entities and all Regulated Distribution Systems for the same Subsequent Regulatory Period.

5.10 Operating and Maintenance Expenditure

- 5.10.1 The ERC must continue to apply the approach to operating and maintenance expenditure forecasts 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 5.4.
- 5.10.2 The ERC may change its approach to operating and maintenance expenditure forecasts for Subsequent Regulatory Periods following the Third Regulatory Period.
- 5.10.3 The ERC must apply the same approach to operating and maintenance expenditure forecasts in respect of all Regulated Entities and all Regulated Distribution Systems for the same Subsequent Regulatory Period.

5.11 Calculation of Corporate Income Tax

- 5.11.1 Subject to changes which may be required to accommodate a different Building Block analysis adopted by the ERC under Section 5.4, the ERC must continue to apply the approach to estimating corporate income tax as provided in Sections 4.14.1 to 4.14.3 for the Third Regulatory Period.
- 5.11.2 The ERC may change its approach to the treatment of corporate income tax for the purposes of calculating the allowed annual revenue requirement for a Regulated Distribution System for Subsequent Regulatory Periods following the Third Regulatory Period, provided that the same approach is applied in respect of all Regulated Entities and all Regulated Distribution Systems for the same Subsequent Regulatory Period.

5.12 Smoothing

- 5.12.1 The ERC must continue to apply the approach to smoothing as provided in Section 4.15 for the Third Regulatory Period, subject to changes which may be required to accommodate:
 - (a) a different Building Block analysis adopted by the ERC under Section 5.4; and

- (b) the fact that the relevant maximum average prices will be those that result from the price cap formula set out in Section 4.2.1 as modified in accordance with this Article V.

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

5.12.3 The ERC must apply the same approach to smoothing in respect of all Regulated Entities and all Regulated Distribution Systems for the same Subsequent Regulatory Period.

5.13 Revenue Path Transition

5.13.1 The ERC must ensure that, for the transition from the Second Regulatory Period to the Third Regulatory Period, and for the transition from any Subsequent Regulatory Period to another Subsequent Regulatory Period, it applies a correction factor so that any over recovery of revenue in respect of the last Regulatory Year of the Second Regulatory Period or the last Regulatory Year of the first-mentioned Subsequent Regulatory Period (as the case may be) is effectively returned to Customers of the relevant Regulated Distribution System by way of a reduction in the maximum average price that the Regulated Entity is permitted to charge for the provision by it, during the first Regulatory Year of the Third Regulatory Period or the first Regulatory Year of the second-mentioned Subsequent Regulatory Period (as the case may be), of Regulated Distribution Services in respect of that Regulated Distribution System.

5.14 Force Majeure and Tax Event Pass Throughs

5.14.1 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 under Article X or XI (as the case may be) to be applied after the expiry of that Regulatory Period, is incorporated into the relevant 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.

5.14.2 The ERC must ensure that, in applying the Building Block analysis for a Subsequent Regulatory Period, a 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.

5.14.3 The ERC must ensure that any increase or saving in costs in the distribution of electricity to Connection Points in respect of a Regulated Distribution System that is operated by a Regulated Entity and 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 relevant Building Block analysis to be applied for that Subsequent Regulatory Period.

5.15 Service Quality Measures and Targets

- 5.15.1 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 each Regulated Entity for achieving specified target levels of performance and penalizes each 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 each Regulated Entity must comply during that Subsequent Period and may be a continuation of that developed under Section 8.2 and as set out in Appendix B.

5.16 Efficiency Adjustments

- 5.16.1 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 in respect of a Regulated Distribution System 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 in respect of that Regulated Distribution System 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 (i.e. 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 Regulated Entities;
- (b) the introduction of a mechanism to reward Regulated Entities for advances in universal access which have the potential to benefit End-users through improved access to the Regulated Distribution Systems that are operated by them; and
- (c) the introduction of a mechanism to reward Regulated Entities for the elimination of network constraints which would enhance the operation of the WESM and potentially benefit End-users through lower electricity prices.

5.17 Side Constraint

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 distribution wheeling rates that may be charged by a Regulated Entity for the provision by it of Regulated Distribution Services in respect of a Regulated Distribution System that is operated by it. 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 those maximum distribution wheeling rates that may be charged by the Regulated Entity during that Subsequent Regulatory Period. For the avoidance of doubt, such method may vary as between Regulated Entities and Regulated Distribution Systems.

5.18 Financial Ratio Analysis

- 5.18.1 As part of the Regulatory Reset Process for a Subsequent Regulatory Period under Article VII, the ERC may require each Regulated Entity to provide the ERC with a forecast financial ratio 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 Distribution Code or reputable financial institutions in respect of such financial ratios).
- 5.18.2 The ERC may retain a Regulatory Reset Expert or Regulatory Reset Experts pursuant to Article XIV for the purpose of reviewing, remodelling or recalculating the forecast financial ratios referred to in Section 5.18.1.
- 5.18.3 In determining the allowed annual revenue requirement for a Regulated Distribution System for a Regulatory Year in a Subsequent Regulatory Period for the purposes of a Regulatory Reset Process for that Subsequent Regulatory Period under Article VII, the ERC must take into account the estimated credit rating of the relevant Regulated Entity which results from the forecast financial ratios referred to in Section 5.18.1 so as to achieve the general Building Block principles in Section 4.6.1.

5.19 Re-Opening Events

- 5.19.1 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 price cap formula that applies for that Subsequent Regulatory Period may be altered, or the value of a component of that formula may be changed, during that Subsequent Regulatory Period.

5.20 Quantity Forecasts

- 5.20.1 The ERC must continue to apply the approach to energy delivery forecasts as provided in Section 4.23 for Subsequent Regulatory Periods.

6.

ARTICLE VI

ANNUAL VERIFICATION AND ADJUSTMENT OF TARIFF RATES

6.1 Annual Distribution Rate Setting

6.1.1 This Article VI applies:

- (a) to Initial Regulated Entities in so far as it relates to the review and setting of the maximum distribution wheeling rates that may be charged by a Regulated Entity for the provision of Regulated Distribution Services in respect of a Regulated Distribution System during a Regulatory Year that occurs in the First Regulatory Period; and
- (b) to both Initial Regulated Entities and Subsequent Regulated Entities in so far as it relates to the maximum distribution wheeling rates that may be charged by a Regulated Entity for the provision of Regulated Distribution Services in respect of a Regulated Distribution System during a Regulatory Year that occurs in a Regulatory Period other than the First Regulatory Period.

6.1.2 The maximum distribution wheeling rates that may be charged by a Regulated Entity for the provision of Regulated Distribution Services in respect of a Regulated Distribution System during a Regulatory Year may only be set and changed in accordance with this Article VI and the DSOAR²⁴, following an annual review that is conducted in accordance with this Article VI and the DSOAR.

6.2 Annual Rate Setting Timetable

6.2.1 Subject to the requirements of any applicable law, the annual review of the maximum distribution wheeling rates that may be charged by a Regulated Entity for the provision of Regulated Distribution Services in respect of a Regulated Distribution System during a Regulatory Year (such Regulatory Year being referred to for the purposes of this Article VI as the Application Year) must proceed according to the following timetable and process:

- (a) During the month of April prior to the commencement of the Applicable 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 the immediately preceding 31 December (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, using the template provided by the ERC:
 - (i) the amount billed to Customers of that Regulated Distribution System for the provision by the Regulated Entity of Regulated Distribution Services in respect of that Regulated Distribution System during the Historical Period (as determined, adjusted and

²⁴ Distribution Services and Open Access Rules

- audited in accordance with Sections 3.4.1, 3.5, 4.3.1 or 4.5, as applicable) (CR) (see Sections 3.4, 3.5, 4.3, 4.5 and 5.1);
- (ii) the net income derived, during the Historical Period, from each related business undertaking which is engaged in directly or indirectly by the Regulated Entity and which utilizes assets that form part of the regulatory asset base for that Regulated Distribution System (see Sections 3.4, 3.5, 4.3, 4.5 and 5.1);
 - (iii) the total amount of energy (expressed in kWh) delivered through that Regulated Distribution System, during the Historical Period, to Connection Points in respect of that Regulated Distribution System (as determined and audited in accordance with Sections 3.4.1, 3.5, 4.3.1 or 4.5, as applicable) (see Sections 3.4, 3.5, 4.3, 4.5 and 5.1);
 - (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 5.1);
 - (v) the Correction Factor under the over/under recovery formula for the Application Year (K_t) (see Sections 3.4, 4.3 and 5.1);
 - (vi) the change in Weighted Index for the Application Year (CWI_t) (see Sections 3.3, 4.2, 5.1 and 5.2);
 - (vii) to the extent it applies, the Tax Adjustment for the Application Year (ITA_t) (see Sections 4.4 and 5.1);
 - (viii) the maximum average price (expressed in PHP/kWh) that the Regulated Entity is permitted to charge for the provision by it, during the Application Year, of Regulated Distribution Services in respect of that Regulated Distribution System (MAP_t) (see Sections 3.2, 4.2, 5.1 and 5.2); and
 - (ix) 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 the 30 April which immediately precedes the commencement of the Application Year, the Regulated Entity must submit to the ERC, in both written and soft copy form, its proposal for the maximum distribution wheeling rates that may be charged by it for the provision of Regulated Distribution Services in respect of the relevant Regulated Distribution System 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, 5.1.3, 6.4 and 6.5 (as applicable)) and the DSOAR.
 - (c) The submission by the Regulated Entity must clearly indicate the data used in calculating the proposed maximum distribution 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 distribution 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 before the 25 May which immediately precedes the commencement of the Application Year.
 - (e) Where the ERC requires such by notice in writing given to the Regulated Entity by the 20 May which immediately precedes the commencement of the Application Year, the Regulated Entity must provide to the ERC, in both written and soft copy form, further information on the proposed maximum distribution wheeling rates set out in its submission, and such further information must be so provided before the 25 May which immediately precedes the commencement of the Application Year.
 - (f) The ERC must, on or before the 16 June which immediately precedes the commencement of the Application Year, determine whether or not the maximum distribution 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, 5.1.3, 6.4 and 6.5 (as applicable)) and the DSOAR. If:
 - (i) the ERC is satisfied that such rates do comply (or are likely to comply) with the requirements of these Rules and the DSOAR, the Regulated Entity must implement those rates with effect from 1 July of the Application 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 DSOAR:
 - (A) the Regulated Entity must amend its proposed maximum distribution 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 DSOAR; 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 1 July of the Application 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 distribution wheeling rates before the 30 April which immediately precedes the commencement of the Application Year (as required under Section 6.2.1 (b)), the maximum distribution wheeling rates that may be charged by it for the provision of Regulated Distribution Services in respect of the relevant Regulated Distribution System 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 DSOAR), 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.

6.2.2 The DSOAR set out the manner in which Regulated Entities must pass through to Customers of the Regulated Distribution Systems that are operated by them:

- (a) the transmission wheeling rate charges that are imposed on those Regulated Entities; and
- (b) such other amounts as are specified in the Transmission Wheeling Rate Guidelines to be in addition to, or in reduction of, the maximum amounts that the "Regulated Entity" is otherwise permitted to charge "Customers" for "Regulated Transmission Services" (as those terms are defined in those guidelines) and as are payable by or for the benefit of those Regulated Entities in their capacity as such "Customers".

6.2.3 The amounts so passed through are not to be taken into account in the calculation of the maximum average prices that such Regulated Entities are permitted to charge for the provision by them of Regulated Distribution Services in respect of the Regulated Distribution Systems that are operated by them, or in determining whether those prices have been exceeded.

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 each Regulated Entity to the ERC, in both written and soft copy form, with its proposal for the maximum distribution wheeling rates that may be charged by it for the provision of Regulated Distribution Services in respect of the relevant Regulated Distribution System during the Application Year.

6.3.2 The historical financial and operational data that must be provided to the ERC will depend on the components of the price control formula which is determined by the ERC to apply for the Application Year. However, until the ERC determines otherwise, each Regulated Entity must provide the ERC, during the month of April prior to the commencement of the Application 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 (expressed in PhP) billed to all Customers of the relevant Regulated Distribution System in each Customer Segment for the provision by the Regulated Entity, during the Historical Period, of Regulated Distribution Services in respect of that Regulated Distribution System, the amount:
 - (i) so billed being determined in a manner that is approved for this purpose by the ERC; and

- (ii) as so determined being audited to the satisfaction of the ERC by a person that is approved for this purpose by the ERC ($CR_{k, t-1}$) (see Section 6.4);
 - (b) the maximum distribution wheeling rates it has applied to each Customer Segment in respect of the relevant Regulated Distribution System during the Historical Period; and
 - (c) the actual distribution wheeling rates it has applied to each Customer Segment in respect of the relevant Regulated Distribution System during the Historical Period; and
 - (d) the total amount of energy (expressed in kWh) delivered through the relevant Regulated Distribution System, during the Historical Period, to all Customers of that Regulated Distribution System in each Customer Segment, the amount of energy so delivered:
 - (i) being determined in a manner that is approved for this purpose by the ERC; and
 - (ii) as so determined being audited to the satisfaction of the ERC by a person that is approved for this purpose by the ERC ($AQ_{k, t-1}$) (see Section 6.4).
- 6.3.3 The forecast financial and operational data that must be provided to the ERC will depend on the components of the price control formula which is determined by the ERC to apply for the Application Year. However, until the ERC determines otherwise, each Regulated Entity must provide the ERC, during the month of April prior to the commencement of the Application 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 (expressed in PhP) forecasted to be billed to all Customers of the relevant Regulated Distribution System in each Customer Segment for the provision by the Regulated Entity, during the 12 month period ending on 31 December in the Application Year (the Forecast Period), of Regulated Distribution Services in respect of that Regulated Distribution System, the amount so forecasted being determined in a manner that is approved for this purpose by the ERC ($FCR_{k,t}$) (see Section 6.4); and
 - (b) the total amount of energy (expressed in kWh) forecasted to be delivered through the relevant Regulated Distribution System, during the Forecast Period, to all Customers of that Regulated Distribution System in each Customer Segment, the amount so forecasted being determined in a manner that is approved for this purpose by the ERC ($FQ_{k,t}$) (see Section 6.4).

6.4 Side Constraints on Proposed Maximum Distribution Wheeling Rates

- 6.4.1 Subject to Section 6.5, the maximum distribution wheeling rates that may be charged by a Regulated Entity for the provision of Regulated Distribution Services in respect of a Regulated Distribution System during an Application

Year to a Customer Segment in respect of that Regulated Distribution System (k) must comply with the following condition:

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

Where:

$FCR_{k,t}$ = the total amount (expressed in PhP) forecasted to be billed to all Customers of the Regulated Distribution System in Customer Segment k for the provision by the Regulated Entity, during the Forecast Period, of Regulated Distribution Services in respect of the Regulated Distribution System, as provided under Section 6.3.3(a);

$CR_{k,t-1}$ = the total amount (expressed in PhP) billed to all Customers of the Regulated Distribution System in Customer Segment k for the provision by the Regulated Entity, during the Historical Period, of Regulated Distribution Services in respect of the Regulated Distribution System, as provided under Section 6.3.2(a);

“ \leq ” = less than or equal to;

SC_t = the Side Constraint in respect of the Regulated Distribution System 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 for the Second Regulatory Period under Article VII, having regard to the needs of End-users (for the avoidance of doubt, such amount may vary as between Regulated Distribution Systems);

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

$FQ_{k,t}$ = the total amount of energy (expressed in kWh) forecasted to be delivered through the Regulated Distribution System, during the Forecast Period, to all Customers of that Regulated Distribution System in Customer Segment k, as provided under Section 6.3.3(b); and

$AQ_{k, t-1}$ = the total amount of energy (expressed in kWh) delivered through the Regulated Distribution System, during the Historical Period, to all Customers of that Regulated Distribution System in Customer Segment k, as provided under Section 6.3.2(d).

6.5 Other parameters

6.5.1 The maximum distribution wheeling rates that may be charged by a Regulated Entity for the provision of Regulated Distribution Services in respect of a Regulated Distribution System 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 any applicable ERC 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 order by the ERC; and
- (d) comply with the applicable requirements of any law or order made by the ERC relating to the treatment of system losses.

7.

ARTICLE VII

REGULATORY RESET PROCESS

7.1 Regulatory Reset Process Timelines

7.1.1 Prior to the commencement of each Regulatory Period (other than the First 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;
- (b) specify the information to be provided by each Regulated Entity for the purposes of the Regulatory Reset Process and the time by which that information must be provided; and
- (c) the time by which each Regulated Entity must file an application with the ERC to commence the Regulatory Reset Process pursuant to this Article VII.

Each 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 retain a Regulatory Reset Expert or Regulatory Reset 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 in relation to each Regulated Distribution System that is operated by a Regulated Entity, as referred to in Section 4.8 or Section 5.5 (as applicable) (see Section 4.8.2);
 - (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 Distribution Services and the regulatory life which should be attributed to such assets (see Section 4.10.3);
 - (c) the determination of the weighted average cost of capital as referred to in Section 4.11 or Section 5.8 (as applicable);
 - (d) the review of each Regulated Entity's proposed capital expenditure in relation to each Regulated Distribution System that is operated by it, as referred to in Section 4.12 or Section 5.9 (as applicable);
 - (e) the review of each Regulated Entity's proposed operating and maintenance expenditure in relation to each Regulated Distribution System that is operated by it, as referred to in Section 4.13 or Section 5.10 (as applicable); and
 - (f) the review of each Regulated Entity's energy delivery forecasts as referred to in Section 4.23 or Section 5.20 (as applicable).
- 7.1.6 The Regulatory Reset Expert(s) must be able to commence work at least 17 months prior to the start of the next relevant Regulatory Period, and substantially conclude their work by five months prior to the start of that Regulatory Period.
- 7.1.7 Not later than four 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 six weeks 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 two to one 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 determination must be published not later than one month 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.

8.

ARTICLE VIII

SERVICE QUALITY MEASURES AND TARGETS

8.1 Establishment of Distribution Performance Standards

8.1.1 Not later than twelve 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:
 - (i) the performance of each Regulated Distribution System; and
 - (ii) the service performance of the Regulated Entity that operates that Regulated Distribution System;

and which for the Second Regulatory Period will be as determined by the ERC after consultation with each Regulated Entity, based on those performance aspects that can be effectively measured for each Regulated Distribution System, and for which sufficient historical performance information exists to allow realistic performance targets to be set;

and which for the Third and subsequent Regulatory Periods will be in accordance with those indices specified as part of the performance incentive scheme described in Appendix B;

- (b) for each of the indices referred to in paragraph (a), the target level of performance of the relevant Regulated Distribution System or the target level of service performance of the relevant 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 each Regulated Entity must record the actual performance of each Regulated Distribution System that is operated by it, and the actual service performance of that 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, each Regulated Entity must report to the ERC on the actual performance of each Regulated Distribution System that is operated by it, and the actual service performance of that Regulated Entity, for each Regulatory Year occurring during the Second Regulatory Period, as measured by each of the indices referred to in paragraph (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 a Regulated Distribution System, or the service performance of a Regulated Entity in restoring Regulated Distribution Services in respect of a Regulated Distribution System following the outage of a component of that Regulated Distribution System, using the indices referred to in paragraph (a) (as a minimum such circumstances must include the events provided in clause 3.3.3.2(b), (d) and (e) of the Distribution Code).

For the purposes of assisting the ERC to determine the matters referred to in this Section 8.1.1, each 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 Distribution Code.

- 8.1.2 The target levels of performance determined under Section 8.1.1(b) may vary as between Regulatory Years, as between different Regulated Entities and different Regulated Distribution Systems, and as between the location of different parts of the same Regulated Distribution System.
- 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, or accepted Philippines electricity industry practices, in relation to the matters referred to in Section 8.1.1;
 - (b) the measures which a 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 for a Regulated Distribution System that is approved by the ERC under Section 4.12;
 - (d) the relevant provisions of the Distribution Code and any relevant guidelines promulgated pursuant to the Distribution 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 each Regulated Entity to the extent that the actual level of performance of a Regulated Distribution System that is operated by that Regulated Entity or the actual level of service performance of that 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 that Regulated Distribution System or the target level of service performance of that Regulated Entity (as the case may be) for that Regulatory Year, as determined under Section 8.1.1(b);
 - (b) penalizes each Regulated Entity to the extent that the actual level of performance of a Regulated Distribution System that is operated by that Regulated Entity or the actual level of service performance of that 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 that Regulated Distribution System or the target level of service performance of that 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 each Regulated Entity:
 - (i) is entitled to an increase in the maximum average price that Regulated Entity is permitted to charge for the provision by it, during a Regulatory Year, of Regulated Distribution Services in respect of the relevant Regulated Distribution System (where Section 8.2.1(a) applies); or
 - (ii) suffers a decrease in the maximum average price that Regulated Entity is permitted to charge for the provision by it, during a Regulatory Year, of Regulated Distribution Services in respect of the relevant Regulated Distribution System (where Section 8.2.1(b) applies); or
- (b) a scheme under which each Regulated Entity:
 - (i) is entitled to levy a surcharge on some or all of the Customers of the relevant Regulated Distribution System (where Section 8.2.1(a) applies); or
 - (ii) is required to pay a rebate to some or all of the Customers of the relevant Regulated Distribution System (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 each Regulated Distribution System, and of the Regulated Entity that operates that Regulated Distribution System, over time but not so as to encourage excessive investment in capacity, extension or interconnectivity of that Regulated Distribution System;
- (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 allowed annual revenue requirement for the relevant Regulated Distribution System for that Regulatory Year, as determined for the purposes of the Regulatory Reset Process undertaken under Article VII in respect of the Second Regulatory Period;
 - (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 distribution wheeling rate tariff applicable to affected connections of the relevant Customers; and

(B) do not exceed 3% of the allowed annual revenue requirement for the relevant Regulated Distribution System for that Regulatory Year, as determined for the purposes of the Regulatory Reset Process undertaken under Article VII in respect of the Second Regulatory Period; and

- (iii) if the scheme is a combination of the above schemes, the scheme must be such that the rewards and penalties applying in respect of any Regulatory Year do not exceed the above limits.
- 8.2.4 In Appendix B, the performance incentive that will apply to all Regulated Entities for the Third Regulatory Period and subsequent Regulatory Periods is described.
- 8.2.5 During the Second Regulatory Period, an initial performance incentive scheme will be adopted for each Regulated Entity that will reflect those performance indices that can be effectively measured for each Regulated Distribution System and for which sufficient historical performance records exist to allow realistic performance targets to be set.
- 8.2.6 Each Regulated Entity is required to develop its own initial performance incentive scheme for the purposes of Section 8.2.5, that reflects its own performance measurement capacity and historical performance records. This initial performance incentive scheme shall be presented to the ERC for discussion and approval not less than twelve months before the start of the Second Regulatory Period. This initial performance incentive scheme:
- (a) is to be developed taking into account the eventual performance incentive scheme described in Appendix B and considering how the indices that will be measured under the initial performance incentive scheme will be migrated into the eventual performance incentive scheme;
 - (b) has to include a price-linked performance incentive component which will be used to calculate the S_t factor described in Section 4.18.2; and
 - (c) has to include a guaranteed service levels component as described in Section 4.18.3.

9.

ARTICLE IX

OPEX AND CAPEX EFFICIENCY ADJUSTMENTS

9.1 General Efficiency Adjustment Principles

- 9.1.1 The Net Efficiency Adjustment in respect of a Regulated Distribution System is designed to ensure that the Regulated Entity that operates that Regulated Distribution System 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 2004 in respect of a Regulated Distribution System have not been maintained for any Regulatory Year during the Second Regulatory Period, the ERC may elect not to apply the Net Efficiency Adjustment in respect of that Regulated Distribution System for that Regulatory Year.

9.2 Definition of Net Efficiency Adjustment

- 9.2.1 The Net Efficiency Adjustment in respect of a Regulated Distribution System 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 in respect of that Regulated Distribution System for Regulatory Year t , as defined in Section 9.2.2; and

OEA_t is the Net Operating and Maintenance Efficiency Adjustment in respect of that Regulated Distribution System for Regulatory Year t , as defined in Section 9.2.3.

- 9.2.2 The Net Capital Efficiency Adjustment in respect of a Regulated Distribution System 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 determined by the ERC in accordance with Section 4.11; and

Capex Forecast_t = the real capital expenditure forecasted for Regulatory Year t in relation to that Regulated Distribution System, determined by deflating the nominal capital expenditure forecasted in relation to that Regulated Distribution System as approved by the ERC for Regulatory Year t pursuant to Section 4.12.5 (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 that Regulated Distribution System by the Regulated Entity that operates that Regulated Distribution System, 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 in respect of a Regulated Distribution System for Regulatory Year t (OEA_t) is calculated as follows:

(a) Where Regulatory Year t is Regulatory Year 2008:

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

(b) Where Regulatory Year t is a Regulatory Year (other than Regulatory Year 2008) in the Second Regulatory Period:

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

Where:

Opex Forecast_t = the nominal operating and maintenance expenditure forecasted in relation to that Regulated Distribution System that is approved by the ERC for Regulatory Year t pursuant to Section 4.13, as adjusted in accordance with Section 9.2.4;

Opex Forecast_{t-1} = the nominal operating and maintenance expenditure forecasted in relation to that Regulated Distribution System that is approved by the ERC for Regulatory Year t-1 pursuant to Section 4.13, as adjusted in accordance with Section 9.2.4;

Opex Actual_t = the actual nominal level of operating and maintenance expenditure incurred in Regulatory Year t in respect of that Regulated Distribution System by the Regulated Entity that operates that Regulated Distribution System; and

Opex Actual_{t-1} = the actual nominal level of operating and maintenance expenditure incurred in Regulatory Year t-1 in respect of that Regulated Distribution System by the Regulated Entity that operates that Regulated Distribution System.

9.2.4 For the purposes of calculating the Net Capital Efficiency Adjustment, or the Net Operating and Maintenance Efficiency Adjustment, in respect of a Regulated Distribution System for a Regulatory Year t the ERC may, at its discretion but after taking into account any submissions made by the Regulated Entity that operates that Regulated Distribution System, adjust the capital expenditure forecast in relation to that Regulated Distribution System that is approved by the ERC for Regulatory Year t pursuant to Section 4.12.5 or the operating and maintenance expenditure forecast in relation to that Regulated Distribution System that is approved by the ERC for Regulatory Year t-1 or

Regulatory Year t pursuant to Section 4.13.5 (as the case may be) so as to reflect:

- (a) changes in the scope of services provided and activities undertaken by that Regulated Entity from those which formed the basis of the forecasts (for example as a result of an acquisition of any Subtransmission Assets);
- (b) material differences between the forecast level of output of that Regulated Distribution System for a Regulatory Year (as accepted by the ERC) and the level of actual output of that Regulated Distribution System 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));
- (c) material differences between the actual Philippine CPI as compared with the Philippine CPI figures used for the capital expenditure forecasts approved by the ERC pursuant to section 4.12.5 and operating and maintenance expenditure forecasts approved by the ERC pursuant to section 4.13.5 (for these purposes there will only be deemed to be such a material difference where the actual ΔCPI_t for a Regulatory Year as calculated in section 3.3.2, varies by more than 10% from the annual change in the CPI forecast by a Regulated Entity for Regulatory Year t , as calculated by using the ΔCPI_t formula in section 3.3.2 but substituting actual quarterly CPI figures with the Regulated Entity's approved quarterly forecast figures for the same period); and
- (d) material differences between the actual PhP/US\$ exchange rate and the USA CPI as compared with the exchange rate and USA CPI figures used for the capital expenditure forecasts approved by the ERC pursuant to section 4.12.5 and operating and maintenance expenditure forecasts approved by the ERC pursuant to section 4.13.5 (for these purposes there will only be deemed to be such a material difference where the actual ΔUSER_t for a Regulatory Year, as calculated in section 3.3.3, varies by more than 10% from the annual change in the exchange and CPI rates forecast by a Regulated Entity for Regulatory Year t , as calculated by using the ΔUSER_t formula in section 3.3.3 but substituting actual quarterly exchange rate and USA CPI figures with the Regulated Entity's approved quarterly exchange rate and USA CPI forecast figures for the same period).

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 Regulatory Year 2011 then the actual levels of capital expenditure and operating and maintenance expenditure incurred by a Regulated Entity in that Regulatory Year in respect of a Regulated Distribution System that is operated by it 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) each Regulated Entity must, during such Regulatory Reset Process, provide to the ERC its best estimate of its actual levels of capital expenditure, and of its actual levels of operating and maintenance expenditure, in respect of that Regulated Distribution System 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 in respect of that Regulated Distribution System for that Regulatory Year.
- (c) 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 in respect of a Regulated Distribution System for a Regulatory Year *t* will be retained by the Regulated Entity that operates that Regulated Distribution System for a period of 4 years (where such Net Efficiency Adjustment for that Regulatory Year is a positive amount) and will be borne by that Regulated Entity for a period of 4 years (where such Net Efficiency Adjustment for that Regulatory Year is a negative amount). Accordingly, the Net Efficiency Adjustment in respect of a Regulated Distribution System for Regulatory Year *t* must be:

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

the allowed annual revenue requirement (calculated in accordance with Article V) for that Regulated Distribution System for each of the Regulatory Years in the Third Regulatory Period up to and including that Regulatory Year which is the fourth Regulatory Year after Regulatory Year *t*.²⁵

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

²⁵ For example, if Regulatory Year *t* is 2009, then the fourth Regulatory Year after Regulatory Year *t* is Regulatory Year 2013.

10.

ARTICLE X

FORCE MAJEURE EVENT REGULATED PASS THROUGH

10.1 Force Majeure Event Pass Through

10.1.1 This Article X only applies in relation to:

- (a) an Affected Regulated Entity which is an Initial Regulated Entity - to the extent the relevant Force Majeure Event occurs in any Regulatory Period; and
- (b) an Affected Regulated Entity which is a Subsequent Regulated Entity - to the extent the relevant Force Majeure Event occurs in a Regulatory Period that is not the First Regulatory Period.

10.1.2 If a Force Majeure Event occurs, the Affected Regulated Entity may seek the ERC's approval to charge Customers of the relevant Regulated Distribution System, in addition to the maximum amounts that the Affected Regulated Entity is otherwise permitted to charge those Customers for Regulated Distribution Services in respect of that Regulated Distribution System 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 Affected 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 10.1.2, the Affected 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 Affected Regulated Entity has actually incurred as at the date of the Force Majeure Event Claim:
 - (i) in the distribution of electricity to Connection Points in respect of the relevant Regulated Distribution System; and
 - (ii) in complying with the provisions of any legislation, or of any rules, regulations or guidelines made under the EPIRA, including the IRR

and the Distribution Code, which must be complied with in relation to the distribution of such electricity,

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

- (d) the extent (if any) to which the Affected Regulated Entity has the benefit of any insurance against the consequences of the Force Majeure Event;
- (e) the FM Pass Through Amount the Affected Regulated Entity proposes in relation to the Force Majeure Event;
- (f) the basis on which the Affected Regulated Entity proposes to apply the FM Pass Through Amount to Customers of the relevant Regulated Distribution System, including the amount the Affected Regulated Entity proposes to apply to such Customers in each Regulatory Year; and
- (g) the date from, and the period over, which the Affected Regulated Entity proposes to apply the FM Pass Through Amount to Customers of the relevant Regulated Distribution System,

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 Affected Regulated Entity proposes to apply to any Customer of the relevant Regulated Distribution System 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 Affected Regulated Entity proposes in relation to that Force Majeure Event and the basis on, date from and period over which the Affected Regulated Entity proposes to apply that FM Pass Through Amount to Customers of that Regulated Distribution System (including the amount the Affected Regulated Entity proposes to apply to such Customers in each Regulatory Year), in each case as set out in the Force Majeure Event Claim;
- (c) states that, if the Affected 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 of that Regulated Distribution System; and

- (iv) the effect of the claimed Force Majeure Event on the delivery of electricity to End-users.

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

$$FMTA_t = \text{PhP}0.02/\text{kWh} \times (\text{CPI}_{t-1} / \text{CPI}_b)$$

Where:

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

CPI_b is the sum of the CPIs for the Quarters ending on 30 June 2004, 30 September 2004, 31 December 2004 and 31 March 2005 (namely, $120.3 + 123.0 + 125.4 + 127.0 = 495.7^{26}$).

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 Affected 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 of the relevant Regulated Distribution System; 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 such Customers,

and notify the Affected 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 Affected 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 Affected Regulated Entity of its decision that:

- (a) the FM Pass Through Amount proposed by the Affected Regulated Entity in relation to the relevant Force Majeure Event in the Force Majeure

²⁶ This figure is calculated using National Statistics Office dated 2005, and is derived from the monthly Consumer Price Index for all income households in the Philippines by commodity group, Base 2000 = 100.

- 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 of the relevant Regulated Distribution System 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:
- (i) the Force Majeure Event Claim from the Affected 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 Affected 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 Affected Regulated Entity to have procured insurance against the consequences of the Force Majeure Event; and
- (d) any amount recoverable by the Affected Regulated Entity under insurances against the consequences of the Force Majeure Event and of which the Affected Regulated Entity has the benefit,

and, subject to the requirement that the Affected Regulated Entity is not to be compensated for losses against which it would have been reasonable for the Affected 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 Affected Regulated Entity has the benefit, the ERC must seek to ensure that the Affected 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 Affected Regulated Entity to incur those costs (or for such lesser amount as is proposed by the Affected Regulated Entity), taking into account:

- (e) the relative amounts of electricity distributed by the Affected Regulated Entity to each Customer of the relevant Regulated Distribution System;
- (f) the time cost of money based on the weighted average cost of capital (if any) 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 Affected 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 retain an appropriately qualified expert or experts 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 Affected Regulated Entity may, after:

- (a) receipt or deemed receipt of a notice under Section 10.3.1 or 10.3.2 allowing the Affected 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 Affected Regulated Entity will apply the Approved FM Pass Through Amount to Customers of the relevant Regulated Distribution System,

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 4.17.1, 4.17.2, 5.14.1 and 5.14.2, an Approved FM Pass Through Amount that may be applied by an Affected Regulated Entity under this Article X is not to be taken into account in the calculation of the maximum average price that the Affected Regulated Entity is permitted to charge for the provision by it of Regulated Distribution Services in respect of the relevant Regulated Distribution System, or in determining whether that price has been exceeded.

11.

ARTICLE XI
TAX EVENT REGULATED PASS THROUGH

11.1 Tax Event Pass Through

11.1.1 This Article XI only applies in relation to:

- (a) an Affected Regulated Entity which is an Initial Regulated Entity - to the extent the relevant Tax Change Event occurs in any Regulatory Period; and
- (b) an Affected Regulated Entity which is a Subsequent Regulated Entity - to the extent the relevant Tax Change Event occurs in a Regulatory Period that is not the First Regulatory Period.

11.1.2 If a Positive Tax Change Event occurs, the Affected Regulated Entity may seek the ERC's approval to charge Customers of the relevant Regulated Distribution System, in addition to the maximum amounts that the Affected Regulated Entity is otherwise permitted to charge those Customers for Regulated Distribution Services in respect of that Regulated Distribution System 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 Affected Regulated Entity) in respect of that Tax Change Event.

11.1.3 If a Negative Tax Change Event occurs, the ERC may require an Affected Regulated Entity to pass through to Customers of the relevant Regulated Distribution System, as a reduction in the maximum amounts that the Regulated Entity is otherwise permitted to charge those Customers for Regulated Distribution Services in respect of that Regulated Distribution System 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 11.1.2, the Affected 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 distribution of electricity to Connection Points in respect of the relevant Regulated Distribution System that the Affected 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 Affected Regulated Entity proposes in relation to the Tax Change Event;
- (e) the basis on which the Affected Regulated Entity proposes to apply the Positive Tax Pass Through Amount to Customers of the relevant Regulated Distribution System, including the amount the Affected Regulated Entity proposes to apply to such Customers in each Regulatory Year; and
- (f) the date from, and period over, which the Affected Regulated Entity proposes to apply the Positive Tax Pass Through Amount to Customers of the relevant Regulated Distribution System,

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 Affected 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 of the relevant Regulated Distribution System; 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 such Customers,

and notify the Affected 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 Affected Regulated Entity under Section 11.2.2 within 90 Business Days of receiving:

- (a) a statement from the Affected 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 Affected Regulated Entity's statement and that evidence, the ERC is deemed to have notified the Affected Regulated Entity of its decision that:

- (c) the Positive Tax Pass Through Amount proposed by the Affected Regulated Entity in relation to the Tax Change Event in the Affected 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 of the relevant Regulated Distribution System are as specified in the Affected 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 an Affected Regulated Entity in relation to that Negative Tax Change Event as described in Section 11.1.3, 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 of the relevant Regulated Distribution System; 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 such Customers,

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

11.3.2 A 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 Affected Regulated Entity's statement and:

- (a) in the case of a decision under Section 11.2.2 - the ERC must ensure that the Affected 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 Affected 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 Affected Regulated Entity is required to pass through to Customers of the relevant Regulated Distribution System is an amount that is not more than the costs that the Affected 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 distribution of electricity to Connection Points in respect of that Regulated Distribution System as a result of the Negative Tax Change Event,

taking into account:

- (c) the relative amounts of electricity distributed by the Regulated Entity to each Customer of the relevant Regulated Distribution System;

- (d) the time cost of money based on the weighted average cost of capital (if any) 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 in respect of the Affected Regulated Entity 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 in respect of the Affected Regulated Entity since the later of:
 - (i) the commencement of the First Regulatory Period (where the Affected Regulated Entity is an Initial Regulated Entity) or the commencement of the Second Regulatory Period (where the Affected Regulated Entity is a Subsequent Regulated Entity); and
 - (ii) the last decision relating to the Affected Regulated Entity which has been 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 Affected Regulated Entity may, after:

- (a) receipt or deemed receipt of a notice under Section 11.2.2 or 11.2.3 allowing the Affected 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 Affected Regulated Entity will apply the Approved Tax Pass Through Amount to Customers of the relevant Regulated Distribution System,

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 An Affected Regulated Entity must, after receipt of a notice under Section 11.3.1 requiring the Affected 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 4.17.1, 4.17.2, 5.14.1 and 5.14.2, an Approved Tax Pass Through Amount that may be applied by an Affected Regulated Entity under this Article XI is not to be taken into account in the calculation of the maximum average price that the Affected Regulated Entity is permitted to charge for the provision by it of Regulated Distribution Services in respect of the relevant Regulated Distribution System, or in determining whether that price has been exceeded.

12.

ARTICLE XII

RE-OPENING AND ADJUSTMENT EVENTS

12.1 Increase in CPI – Maximum Annual Price Cap Re-opening

12.1.1 A Regulated Entity may apply to the ERC in writing for a change in the method used to calculate the Maximum Annual Price Cap for a Regulated Distribution System (MAP_t) as set out in:

- (a) where the Regulated Entity is an Initial Regulated Entity - Section 3.2.1; or
- (b) where the Regulated Entity is an Initial Regulated Entity or a Subsequent Regulated Entity - Section 4.2.1,

if the absolute value of the change in CPI between two consecutive Quarters within the then current Regulatory Period, as calculated pursuant to Section 12.1.6, is greater than 0.07.

12.1.2 Where a Regulated Entity makes an application pursuant to Section 12.1.1, it must include with that application the following information:

- (a) the raw data relied upon to demonstrate that the circumstance referred to in Section 12.1.1 has occurred; and
- (b) the calculations relied upon to demonstrate that the circumstance referred to in Section 12.1.1 has occurred.

12.1.3 Upon receiving an application under Section 12.1.1, the ERC must decide whether or not the circumstance referred to in Section 12.1.1 has occurred.

12.1.4 The ERC must notify the relevant Regulated Entity in writing of the ERC's decision under Section 12.1.3, and the reasons for that decision, by:

- (a) the 30th Business Day after the date the ERC receives the application from the Regulated Entity under Section 12.1.1; or
- (b) the day (if any) that the ERC notifies to the Regulated Entity is the extended date for making its decision (such extended date must be not later than the 30th Business Day after the end of the period referred to in Section 12.1.4(a) and such notice, which may only be given once, must be given prior to the end of the period referred to in Section 12.1.4(a)).

12.1.5 Where, following an application by a Regulated Entity under Section 12.1.1, the ERC decides that the circumstance referred to in Section 12.1.1 has occurred, the ERC must determine a new method for the purpose of calculating the Maximum Annual Price cap for the relevant Regulated Distribution System 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.

12.1.6 For the purposes of this Section 12.1, 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:

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

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

12.2 Deferred Capital Expenditure on Significant Projects – X factor adjustment for Second Regulatory Period

12.2.1 A Regulated Entity must promptly notify the ERC in writing if any capital expenditure for a Significant Project, which is forecasted to be undertaken in the capital expenditure program that is approved by the ERC under Section 4.12.5 for a Regulated Distribution System that is operated by the Regulated Entity, has not been substantially undertaken within 18 months of the time it was so forecasted to be undertaken.

12.2.2 If at any time the ERC determines that any capital expenditure for a Significant Project, which is forecasted to be undertaken in the capital expenditure program that is approved by the ERC under Section 4.12.5 for a Regulated Distribution System that is operated by a Regulated Entity, has not been substantially undertaken within 18 months of the time it was so forecasted 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 Price cap for that Regulated Distribution System 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 forecasted to be undertaken in that program for the Significant Project;
 - (ii) disallowing excess revenue earned by a Regulated Entity on capital expenditure that has been deferred but which has been included in the forecasts used for the original calculation of the X factor, as described in Section 12.2.3 below; and
 - (iii) so as to recognize 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 12.2.2 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 value for the X factor in the formula for the calculation of the Maximum Annual Price cap for that Regulated Distribution System, or a new method for the purpose of calculating that Maximum Annual Price cap, that is to apply for such Regulatory Years.

- 12.2.3 Excess revenue earned by a Regulated Entity as a result of delaying capital expenditure will be recovered as part of recalculating the X-factor. This will be based on calculating the excess revenue earned by a Regulated Entity over the period that a Significant Project was deferred. The excess revenue calculation will be based on the return on the deferred forecast capital expenditure and the allowance made for regulatory depreciation on this capital expenditure, as was included as part of the building blocks used for the calculation of the X factor prior to the start of the current Regulatory Period, converted to present value at the time of the calculation, using the following formula:

$$ER_n = (WACC \times CV_n \times \frac{Def_n}{12} + Depn_n)(1 + WACC)^{\frac{Def_n}{12}}$$

where,

- ER_n = excess revenue earned related to deferred Significant Project n;
- WACC = Regulatory WACC as described in Section 11;
- CV_n = estimated capital value for deferred Significant Project n that was included in the approved capital expenditure forecast for the current Regulatory Period;
- Def_n = the time with which the Significant Project n has been deferred (measured in months); and
- $Depn_n$ = regulatory depreciation on the capital expenditure for Significant Project n that was included in the approved depreciation forecast for the current Regulatory Period, over the time Def_n .

In recalculating the X factor as described in Section 12.2.2(b), the excess revenue will be deducted from the allowed revenue requirements for the first of the remaining years of the Regulatory Period. If the next Regulatory Year falls in the next Regulatory Period, the excess amount will be deducted from the allowed revenue calculated for the first Regulatory Year of the next Regulatory Period.

- 12.2.4 If the deferment of a Significant Project extends into the next Regulatory Period²⁷, the calculations described in Sections 12.2.2(b) and 12.2.3 will also apply. In this case the X-factor will be recalculated for the remainder of the next Regulatory Period.

²⁷ This is for situations where Significant Projects were scheduled to start within the last 18 months of a Regulatory Year.

12.2.5 In the case that a deferred Significant Project is still be required, but more than 18 months after originally scheduled, if a Regulated Entity intends to :

- (a) continue with a deferred project during the same Regulatory Period in which it was originally included, it should inform the ERC of its intention as soon as it receives notice about the ERC's determination with regard to a delayed Significant Project, highlighting when it now intends to commence with the project. In such a case, the ERC will recalculate the X-factor for the remainder of that Regulatory Period by considering the revised construction start date for the Significant Project in the capital expenditure and depreciation expense forecasts, after deducting the excess revenue calculated in accordance with Section 12.2.3 earned up to the time of the recalculation of the X-factor from the allowed annual revenue for the next Regulatory Year; or
- (b) continue with a deferred project, but only in the next Regulatory Period, the project will be removed from the capital expenditure forecasts for the current Regulatory Period and the X-factor for the remainder of the period will be recalculated, after deducting the excess revenue calculated in accordance with Section 12.2.3 from the allowed annual revenue for the next Regulatory Year (which could fall in the next Regulatory Period). For the next Regulatory Period, the Regulated Entity should then re-include the project in their rate application as part of their capital expenditure forecast, where it will be treated the same as any other forecasted project.

12.2.6 Capital expenditure forecasts approved for Regulatory Period, for which the actual expenditure is delayed to the next Regulatory Period, will not be re-allowed as part of the capital expenditure forecasts for next Regulatory Period, unless a Regulated Entity requests the ERC to remove such a project from the capital forecasts for the current Regulatory Period, in which case Section 12.2.5(b) will apply.

12.3 Major Unforecasted Acquisitions – X factor adjustment for First Regulatory Period

12.3.1 An Initial Regulated Entity may apply to the ERC in writing for the determination of a new value for the X factor in the formula for the calculation of the Maximum Annual Price cap for a Regulated Distribution System that is operated by the Initial Regulated Entity where:

- (a) the Initial Regulated Entity has acquired assets which, following such acquisition, form part of that Regulated Distribution System;
- (b) that acquisition (referred to in this Section 12.3.1 as the "relevant acquisition") occurs during the First Regulatory Period; and
- (c) the value of the assets so acquired, together with the aggregate value of all other assets which form part of that Regulated Distribution System and which have previously been acquired by the Initial Regulated Entity during the First Regulatory Period, is greater than the lesser of PhP 20 Million or 0.4% of the value of all assets that, at the time of the relevant

acquisition, are used by the Initial Regulated Entity to provide Regulated Distribution Services in respect of that Regulated Distribution System.

- 12.3.2 Where an Initial Regulated Entity makes an application pursuant to Section 12.3.1, it must include with that application information that demonstrates that the circumstances referred to in Section 12.3.1 have occurred.
- 12.3.3 Upon receiving an application under Section 12.3.1, the ERC must decide whether or not the circumstances referred to in Section 12.3.1 have occurred.
- 12.3.4 The ERC must notify the relevant Initial Regulated Entity in writing of the ERC's decision under Section 12.3.3, and the reasons for that decision, by:
- (a) the 30th Business Day after the date the ERC receives the application from the Initial Regulated Entity under Section 12.3.1; or
 - (b) the day (if any) that the ERC notifies to the Regulated Entity is the extended date for making its decision (such extended date must be not later than the 30th Business Day after the end of the period referred to in Section 12.3.4(a) and such notice, which may only be given once, must be given prior to the end of the period referred to in Section 12.3.4(a)).
- 12.3.5 If, following an application by an Initial Regulated Entity under Section 12.3.1, the ERC decides that the circumstances referred to in Section 12.3.1 have occurred, the ERC must, after taking into account any submissions made by the Initial Regulated Entity, determine a new value for the X factor in the formula for the calculation of the Maximum Annual Price cap for that Regulated Distribution System as set out in Section 3.2.1 by recalculating the X factor:
- (a) based on the inclusion of the value of the assets which have been so acquired; and
 - (b) so as to recognize the extent to which the previous X factor was set on the basis of those assets not being so acquired by the Initial Regulated Entity.

Any X factor which is recalculated under this Section 12.3.5 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 value for the X factor in the formula for the calculation of the Maximum Annual Price cap for that Regulated Distribution System, or a new method for the purpose of calculating that Maximum Annual Price cap, that is to apply for such Regulatory Years.

12.4 Major Unforecasted Acquisitions – X factor adjustment for Second Regulatory Period

12.4.1 Where:

- (a) a Regulated Entity has acquired assets which, following such acquisition, form part of a Regulated Distribution System that is operated by the Regulated Entity;
- (b) that acquisition (referred to in this Section 12.4.1 as the "relevant acquisition") occurs during the Second Regulatory Period;

- (c) the value of the assets so acquired, together with the aggregate value of all other assets which form part of that Regulated Distribution System and which have previously been acquired by the Regulated Entity during the Second Regulatory Period, is greater than the lesser of **PhP 150 Million or 1.5%** of the value of all assets that, at the time of the relevant acquisition, are used by the Regulated Entity to provide Regulated Distribution Services in respect of that Regulated Distribution System; and
 - (d) the acquisition of the assets referred to in paragraph (c) (i.e. the assets which are the subject of the relevant acquisition as well as those which have previously been acquired 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 that Regulated Distribution System for any Regulatory Year in the Second Regulatory Period, pursuant to Section 4.9.1, 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 that Regulated Distribution System for any Regulatory Year in the Second Regulatory Period, pursuant to Section 4.9.1, 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 **110%**; or
 - less than 90%**,of the forecast amount included for that purpose by the ERC in the calculation of that Regulatory Asset Base,
- then:
- (e) where paragraphs (a), (b), (c) and (d)(i) or (d)(ii)(A) apply, the Regulated Entity may apply to the ERC in writing for the determination of a new value of the X factor in the formula for the calculation of the Maximum Annual Price cap for that Regulated Distribution System; or
 - (f) where paragraphs (a), (b), (c) and (d)(ii)(B) apply, the Regulated Entity must promptly notify the ERC in writing of the application of those paragraphs.

12.4.2 Where a Regulated Entity makes an application pursuant to Section 12.4.1(e), it must include with that application information that demonstrates that the circumstances referred to in Section 12.4.1(a), (b), (c) and (d)(i) or (d)(ii)(A) have occurred.

12.4.3 Upon receiving an application under Section 12.4.1(e), the ERC must decide whether or not the circumstances referred to in Section 12.4.1(a), (b), (c) and (d)(i) or (d)(ii)(A) have occurred.

12.4.4 The ERC must notify the relevant Regulated Entity in writing of the ERC's decision under Section 12.4.3, and the reasons for that decision, by:

- (a) the 30th Business Day after the date the ERC receives the application from the Regulated Entity under Section 12.4.1(e); or
- (b) the day (if any) that the ERC notifies to the Regulated Entity is the extended date for making its decision (such extended date must be not later than the 30th Business Day after the end of the period referred to in Section 12.4.4(a) and such notice, which may only be given once, must be given prior to the end of the period referred to in Section 12.4.4(a)).

12.4.5 If at any time the ERC determines that the circumstances referred to in Section 12.4.1(a), (b), (c) and (d)(ii)(B) have occurred, the ERC must promptly notify the relevant Regulated Entity in writing of its determination.

12.4.6 If:

- (a) following an application by a Regulated Entity under Section 12.4.1(e), the ERC decides that the circumstances referred to in Section 12.4.1(a), (b), (c) and (d)(i) or (d)(ii)(A) have occurred – the ERC must; or
- (b) at any time the ERC determines that the circumstances referred to in Section 12.4.1(a), (b), (c) and (d)(ii)(B) have occurred – the ERC may,

in either case after taking into account any submissions made by the Regulated Entity, determine a new value for the X factor in the formula for the calculation of the Maximum Annual Price cap for that Regulated Distribution System as set out in Section 4.2.1 by recalculating the X factor:

- (c) based on:
 - (i) where Section 12.4.1(a), (b), (c) and (d)(i) apply, the inclusion of the value of the assets which have been so acquired;
 - (ii) where Section 12.4.1(a), (b), (c) and (d)(ii)(A) or (d)(ii)(B) apply, the amount for which the assets were acquired; and
- (d) so as to recognize the extent to which the previous X factor was set on the basis of:
 - (i) in the case of paragraph (c)(i), those assets not being so acquired by the Regulated Entity; and
 - (ii) in the case of paragraph (c)(ii), those assets being acquired by the Regulated Entity for a different amount.

Any X factor which is recalculated under this Section 12.4.6 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 value for the X factor in the formula for the calculation of the Maximum Annual Price cap for that Regulated Distribution System, or a new method for the purpose of calculating that Maximum Annual Price cap, that is to apply for such Regulatory Years.

12.5 PhP/\$US exchange rate adjustment

12.5.1 If:

- (a) a prescribed change in the PhP/\$US exchange rate during the First Regulatory Period (as defined in Section 12.5.2) occurs, then this Section 12.5.1 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 30 June – 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 30 June – 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 12.5.1 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 4.12.5 for a Regulated Distribution System (see also Section 12.5.3), then this Section 12.5.1 applies in respect of the Regulatory Year t that immediately follows the Regulatory Year in which that Quarter occurs (Section 3.3.1 specifies the consequences of Section 12.5.1 so applying).

12.5.2 For the purposes of Section 12.5.1(a), a prescribed change in the PhP/\$US exchange rate during the First Regulatory Period occurs where:

- (a) $\Delta \text{USER}_{Q1/Q2} > 0.07$ and $\Delta \text{USER}_{Q2/Q3} > 0.07$; or
- (b) $\Delta \text{USER}_{Q1/Q2} < -0.07$ and $\Delta \text{USER}_{Q2/Q3} < -0.07$.

For the purposes of this Section 12.5.2:

- (c) $\Delta \text{USER}_{Q1/Q2} = [\text{USER}_{Q2}/\text{USER}_{Q1}] - 1$; and
- (d) $\Delta \text{USER}_{Q2/Q3} = [\text{USER}_{Q3}/\text{USER}_{Q2}] - 1$;

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 Section 12.5.1(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 Procedure for events leading to an adjustment of rates

Section 4(e), Rule 3 of the Implementing Rules and Regulations (IRR) of R.A. 9136 should be strictly adhered to in all applications filed with the Commission for rates and other relief affecting consumers. Any application that would lead to revenue recovery on the part of Regulated Entity and therefore give rise to an adjustment in rates for consumers (which could be an increase or decrease), including applications for applying pass-through costs and re-opening events for recalculating the X-factor, should comply with Section 4(e), Rule 3 of the IRR. In this light, the following procedure will be applied to any applications filed by Regulated Entities that may give rise to rate adjustments for consumers:

- (a) filings by Regulated Entities of applications for recovery should be made within the times prescribed in Articles X, XI or XII and in compliance with the pre-filing requirements set forth in Section 4(e), Rule 3 of the IRR of R.A. 9136;
- (b) the ERC shall set a date for the public hearing of such filings not later than thirty (30) days after receipt of the filing;
- (c) all memorandums, comments, position papers on the application, together with all supporting documentation and testimonial evidences in affidavit form associated with the public hearing shall be submitted within a period of one month from the date of the hearing; and
- (d) a final resolution on the application for recovery shall be given not later than six months from the filing of the application.

13.

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 a 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 each Regulated Entity in writing to which the decision applies of:
 - (i) the proposed revocation;
 - (ii) the false or misleading information or the calculation error;
 - (iii) the information required from such Regulated Entities 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 each Regulated Entity to which the decision applies 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 submissions made 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 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(1) of the EPIRA for such a breach.

13.2 Modification of Time Periods

13.2.1 The ERC may, by written notice to a 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.

14.

ARTICLE XIV
EXPERTS AND CONSULTANTS

14.1 Engagement of experts and consultants

14.1.1 Where these Rules confer on the ERC the right or obligation to retain a Regulatory Reset Expert in relation to a matter pursuant to this Article XIV, that Regulatory Reset Expert must be an expert who:

- (a) has expertise in one or more of the following areas:
 - (i) asset valuation;
 - (ii) distribution system design, construction, maintenance and operation;
 - (iii) load flow modelling of electricity distribution networks;
 - (iv) distribution network benchmark service performance;
 - (v) accounting;
 - (vi) corporate finance, financial modelling and pricing;
 - (vii) economic analysis and economic modelling;
 - (viii) fire inspection;
 - (ix) insurance and claims risk adjustment;
 - (x) such other areas as the ERC considers appropriate;
- (b) in respect of its relevant area of expertise, satisfies the applicable criteria that are specified in Appendix C or that are otherwise notified in writing by the ERC to each Regulated Entity from time to time; and
- (c) has no commercial or pecuniary relationship with a Regulated Entity at a financial, management or board level.

14.1.2 Nothing in Section 14.1.1 precludes the ERC from retaining any other expert or consultant for the purpose of assisting it in connection with any matter arising under these Rules in relation to a particular Regulated Entity or a particular Regulated Distribution System (other than in circumstances where these Rules entitle or oblige the ERC to retain a Regulatory Reset Expert pursuant to this Article XIV) and, if the ERC retains such an expert or consultant, the reasonable costs of that expert or consultation must, if and as so required by the ERC, be paid to the ERC, or the expert or consultant, by the relevant Regulated Entity or the Regulated Entity that operates the relevant Regulated Distribution System.

14.2 Cooperation with experts and consultants

14.2.1 Where the ERC retains any expert or consultant (including a Regulatory Reset Expert) for the purpose of assisting it in connection with any matter arising under these Rules, each Regulated Entity must provide that expert or consultant with such access to the Regulated Entity's systems, records, infrastructure and personnel as the expert or consultant requires to enable it to successfully

complete its work for the ERC and must otherwise fully cooperate with the expert or consultant for that purpose.

14.3 Report of expert or consultant

14.3.1 Where:

- (a) a report is provided to the ERC:
 - (i) by an expert or consultant who is retained by the ERC (including a Regulatory Reset Expert); or
 - (ii) by an independent appraisal company pursuant to Section 4.8; and
- (b) that report contains information of a confidential nature relating to a Regulated Entity,

the ERC may only disclose that information:

- (c) to the Regulated Entity; or
- (d) 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 that information, 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 information contained in the intended disclosure for the purpose of protecting the confidentiality of that information.

14.4 Payment of fees of Regulatory Reset Experts

14.4.1 Where these Rules confer on the ERC the right or obligation to retain a Regulatory Reset Expert in relation to a matter pursuant to this Article XIV, the costs of that Regulatory Reset Expert must be borne by the Regulated Entities as follows:

- (a) If the matter is assisting the ERC to determine the method for calculating, or the value of, the weighted average cost of capital that is to apply for a Regulatory Period, as referred to in Section 4.11 or Section 5.8 (as applicable), each Regulated Entity must bear a proportion of those costs (PC), expressed in decimal terms, which is calculated in accordance with the following formula:

$$PC = \frac{AQ}{TAQ}$$

Where:

AQ = the total amount of energy (expressed in kWh) delivered through the relevant Regulated Distribution System operated by the Regulated Entity, during the Measurement Period for the Relevant Regulatory Period, to Connection

Points in respect of that Regulated Distribution System, such amount of energy:

- (a) being determined in a manner that is approved for this purpose by the ERC; and
- (b) as so determined being audited to the satisfaction of the ERC by a person that is approved for this purpose by the ERC; and

TAQ = the sum of the amounts denoted "AQ" for all of the Regulated Entities.

(b) If the matter is:

- (i) the undertaking or review of an asset re-valuation or the preparation of a report relating to it as referred to in or contemplated by Section 4.8 or Section 5.5 (as applicable); or
- (ii) the preparation of a written report as referred to in Section 4.10.3; or
- (iii) a review of proposed capital expenditure as referred to in Section 4.12 or Section 5.9 (as applicable); or
- (iv) a review of proposed operating and maintenance expenditure as referred to in Section 4.13 or Section 5.10 (as applicable); or
- (v) a review, remodelling or recalculating of the forecast financial accounting statements and forecast financial ratios as referred to in Section 4.22 or Section 5.18 (as applicable); or
- (vi) a review of energy delivery forecasts as referred to in Section 4.23 or Section 5.20 (as applicable); or
- (vii) any other matter in respect of which the ERC determines it requires assistance for the purpose of a Regulatory Reset Process under Article VII for a Regulatory Period and which is not common to all Regulated Entities or all Regulated Distribution Systems but instead relates to a particular Regulated Entity or a particular Regulated Distribution System,

the relevant Regulated Entity or the Regulated Entity that operates the relevant Regulated Distribution System to which that matter relates must bear those costs.

14.4.2 Each Regulated Entity must pay to the ERC, or (if so required by the ERC) to the Regulatory Reset Expert, the amount of such of the costs of the Regulatory Reset Expert as it is required to bear in accordance with Section 14.4.1 within 30 days of receiving a written statement from the ERC which:

- (a) sets out that amount; and
- (b) shows how that amount was calculated.
 - (i) Unless otherwise agreed with a Regulated Entity, the only costs that may be included in a statement that is given by the ERC under this

Section 14.4.2 are those costs in respect of which the ERC has received a written invoice from the Regulatory Reset Expert. Nothing in this Section 14.4 precludes the ERC from giving successive statements under this Section 14.4 in respect of the costs of a Regulatory Reset Expert in relation to work performed, or to be performed, by that Regulatory Reset Expert (e.g. as where the ERC is invoiced by the Regulatory Reset Expert for a deposit or an instalment or progress payment).

14.4.3 If a Regulated Entity fails to pay any amount that is required to be paid to the ERC or a Regulatory Reset Expert in accordance with Section 14.4.2, that Regulated Entity must pay interest to the ERC, at the Default Rate in respect of the Measurement Period for the Relevant Regulatory Period, on the amount which the Regulated Entity has failed to pay from the time the payment fell due until that amount has been paid in full.

- (a) the "Measurement Period", in respect of a Relevant Regulatory Period, is the 12 month period ending on:
 - (i) where the Relevant Regulatory Period is the Second Regulatory Period – 31 December 2004; or
 - (ii) where the Relevant Regulatory Period is not the Second Regulatory Period – the 31 December which occurs in the second Regulatory Year of the Regulatory Period which immediately precedes that Relevant Regulatory Period;
- (b) the "Relevant Regulatory Period" is the Regulatory Period that immediately follows the Regulatory Period in which the relevant Regulatory Reset Expert performs the work in relation to the matter for which it is retained by the ERC; and
- (c) the "Default Rate" in respect of a Measurement Period means the sum of 4% and the simple average of the monthly 180 day weighted-average Manila Reference Rate in nominal percent per annum terms published by Bangko Sentral ng Pilipinas for the Measurement Period.

Pasig City, Philippines,

,

RODOLFO B. ALBANO

Chairman

OLIVER B. BUTALID

Commissioner

JESUS N. ALCORDO

Commissioner

RAUF A. TAN

Commissioner

ALEJANDRO Z. BARIN

Commissioner

**APPENDIX A
QUALIFIED FRANCHISE AREAS**

Qualified Franchise Area	Regulated Entity	
	Initial Regulated Entity	Subsequent Regulated Entity
City of Cagayan de Oro and Municipalities of Tagoloan, Jasaan and Villanueva, all in Misamis Oriental, Mindanao	Cagayan Electric Power & Light Company, Inc (Cepalco)	
Dagupan City, Calasiao, Sta. Barbara, San Jacinto, San Fabian (Luzon)		Dagupan Electric Corporation (Decorp)
Metro Manila, entire provinces of Bulacan, Cavite and Rizal, part of the provinces of Batangas, Laguna and Quezon, barangays in the province of Pampanga		Manila Electric Company (Meralco)

The ERC must make an order in relation to the entities that are to be included in this Appendix A (whether as Initial Regulated Entities or Subsequent Regulated Entities), together with their respective Qualified Franchise Areas, before the commencement of the First Regulatory Period.

APPENDIX B
PERFORMANCE INCENTIVE SCHEME

B1. OVERVIEW

The performance incentive scheme that will apply for the Third Regulatory Period and subsequent Regulatory Periods is described below. (The description is based on the Third Regulatory Period, but will similarly apply to subsequent regulatory periods, after allowing for the date differences.) The scheme will have three main streams.

a) Price-linked incentive scheme

The performance of Regulated Distribution Systems will be assessed against a number of network performance and service performance measures.²⁸ If performance levels exceed predetermined targets, Regulated Entities will be financially rewarded or, if performance levels fail to meet predetermined performance targets, Regulated Entities will be financially penalized.

The reward or penalty will take the form of a performance incentive factor (S-factor) to be used in price control formula described in Section 4.2.1. The performance incentive factor will be a weighted performance measure, based on the performance levels achieved against a number of indices over the calendar year preceding each Regulatory Year.

b) Guaranteed Service Levels

A system of Guaranteed Service Levels (GSLs) will be introduced for each Regulated Distribution System, in terms of which customers will receive certain guarantees with regard to the responsiveness and effectiveness of Regulated Entities. If these GSLs are not met, predetermined penalties will be paid by the Regulated Entities directly to customers.

c) Information disclosure

The performance of Regulated Distribution Systems against a further number of performance indices (network and service related) will be regularly measured and published.

B2. PRICE-LINKED INCENTIVE SCHEME

B2.1 Capturing the performance rewards or penalties

The performance incentive factor included in the price control formula described in Section 4.2.1, as repeated below, includes an incentive factor (S-factor) that is calculated based on the performance of a Regulated Distribution System against a number of performance indices.

²⁸ Network performance measures refer to those indices measured directly in terms of Distribution System performance, usually expressed as technical factors. Service performance measures refer to those indices relating directly to the performance of the staff supporting the operation of the Distribution System, usually expressed in terms of the time taken to complete actions, or the number of times actions exceeded or missed target levels.

$$MAP_t = [MAP_{t-1} \times \{1 + CWI_t - X\}] + S_t - K_t + ITA_t$$

This factor can be zero, positive or negative, depending on whether actual performance against the (weighted) majority of the indices has exceeded the performance targets discussed below or has fallen below these.

B2.1.1 Service performance indices to be measured

The following service performance indices will be taken into account in calculating the performance incentive factor:

Network Performance Measures

- (a) System average interruption frequency index (SAIFI). A measure of the average number of sustained service interruptions experienced per customer over the measurement period.
- (b) **Planned** customer average interruption duration index (CAIDI). A measure of the average duration of planned sustained service interruptions over the measurement period.
- (c) System average interruption duration index (SAIDI). A measure of the average duration of sustained service interruptions for all customers over the measurement period.
- (d) Voltage regulation. A measure of the probability of Distribution System voltage levels falling outside the boundaries prescribed in the Distribution Code.
- (e) System losses. An indication of total losses on a Regulated Distribution System, including technical and non-technical losses (but excluding administrative losses).

Service performance measures

- (f) Time to process applications for Regulated Distribution Services.
- (g) Time to connect premises to the Regulated Distribution System after compliance with all government and Regulated Entity requirements.
- (h) Percentage of calls answered at the call centre (or equivalent) within a predetermined time.

Regulated Entities already face a downside potential from the system loss cap that is imposed on Regulated Distribution Systems. It is therefore the intention that the system loss performance index will not have a negative measure– it will be zero or positive only.

B2.1.2 Calculation of the performance incentive factor

The performance incentive factor will be based on a weighted sum of performance components, one for each of the indices noted above. It will be calculated as follows:

$$S_t = \frac{[S_{SAIFI,t} + S_{CAIDI,t} + S_{SAIDI,t} + S_{VoltViol,t} + S_{Sysloss,t} + S_{Proc,t} + S_{Con,t} + S_{Call,t}]}{FQ_t} \times 0.025ARR_t$$

where,

ARR_t = the allowed annual revenue for Regulatory Year t calculated in accordance with Section 4.7.7;

FQ_t = the total amount of energy (expressed in kWh) that is forecast to be delivered to Connection Points through the relevant Regulated Distribution System during Regulatory Year t, with the forecast as approved by the ERC;

and

$$S_{SAIFI,t} = W_{SAIFI} \times Perf_{SAIFI,t-1}$$

where, $S_{SAIFI,t}$ = S-component for SAIFI for Regulatory Year t;
 W_{SAIFI} = Weighting given to the SAIFI S-component; and
 $Perf_{SAIFI,t-1}$ = SAIFI performance assessment for the calendar year ending on December 31 of Regulatory Year t-1.

$$S_{CAIDI,t} = W_{CAIDI} \times Perf_{CAIDI,t-1}$$

where, $S_{CAIDI,t}$ = S-component, **planned** CAIDI for Regulatory Year t;
 W_{CAIDI} = Weighting given to the CAIDI S-component; and
 $Perf_{CAIDI,t-1}$ = **Planned** CAIDI performance assessment for the calendar year ending on December 31 of Regulatory Year t-1.

$$S_{SAIDI,t} = W_{SAIDI} \times Perf_{SAIDI,t-1}$$

where, $S_{SAIDI,t}$ = S-component for SAIDI for Regulatory Year t;
 W_{SAIDI} = Weighting given to the SAIDI S-component; and
 $Perf_{SAIDI,t-1}$ = SAIDI performance assessment for the calendar year ending on December 31 of Regulatory Year t-1.

$$S_{VoltViol,t} = W_{VoltViol} \times Perf_{VoltViol,t-1}$$

where, $S_{VoltViol,t}$ = S-component for voltage regulation performance for Regulatory Year t;
 $W_{VoltViol}$ = Weighting given to the voltage regulation S-component; and
 $Perf_{VoltViol,t-1}$ = Voltage regulation performance assessment for the calendar year ending on December 31 of Regulatory Year t-1.

$$S_{Sysloss,t} = W_{Sysloss} \times Perf_{Sysloss,t-1}$$

where, $S_{Sysloss,t}$ = S-component for system losses performance for Regulatory Year t;

$W_{Sysloss}$ = Weighting given to the system losses S-component;
and

$Perf_{Sysloss,t-1}$ = System losses performance assessment for the
calendar year ending on December 31 of Regulatory
Year t-1.

$$S_{Proc,t} = W_{Proc} \times Perf_{Proc,t-1}$$

where, $S_{Proc,t}$ = S-component for time to process applications for
Regulatory Distribution Services for Regulatory Year
t;

W_{Proc} = Weighting given to the process time S-component;
and

$Perf_{Proc,t-1}$ = Process time performance assessment for the calendar
year ending on December 31 of Regulatory Year t-1.

$$S_{Con,t} = W_{Con} \times Perf_{Con,t-1}$$

where, $S_{Con,t}$ = S-component for time to provide connection to the
Regulated Distribution System for Regulatory Year t;

W_{Con} = Weighting given to the service connection time S-
component; and

$Perf_{Con,t-1}$ = Connection time performance assessment for the
calendar year ending on December 31 of Regulatory
Year t-1.

$$S_{Call,t} = W_{Call} \times Perf_{Call,t-1}$$

where, $S_{Call,t}$ = S-component for call-center performance for
Regulatory Year t;

W_{Call} = Weighting given to the call-center performance S-
component; and

$Perf_{Call,t-1}$ = Call-center performance assessment for the calendar
year ending on December 31 of Regulatory Year t-1.

B2.1.3 Weighting of the performance indices

In terms of Section 8.2.3 (c) the total level of the rewards or penalties under the performance incentive scheme for any Regulatory Year should not exceed 3 % of the allowed annual revenue for a Regulated Distribution System for that year. As the performance incentive scheme will have two streams involving possible changes to the annual revenue that can be earned, the following ceilings will apply to these streams:

- a) The maximum value of the price-linked incentive scheme in any Regulatory Year will be capped at 2.5% of the annual revenue requirement for that Regulatory Year.

- b) The revenue allowance for the GSL scheme will be set at 0.5 % of the annual revenue requirement in any Regulatory Year as calculated before the GSL scheme is taken into account.

The ceiling on the price-linked incentive scheme is already accounted for in the formulas in Section B2.1.2. The weightings set out in table B1 will be applied to the various performance S-components.

Table 1 : Weightings for the S-components

Component	Symbol	Weighting
SAIFI	W_{SAIFI}	0.20
Planned CAIDI	W_{CAIDI}	0.15
SAIDI	W_{SAIDI}	0.20
Voltage regulation	$W_{VoltViol}$	0.10
System losses	$W_{Sysloss}$	0.05
Time to process applications	W_{Proc}	0.10
Time to connect premises	W_{Con}	0.10
Call-center performance	W_{Call}	0.10

B2.1.4 Determination of the performance targets for the various performance indices

The methodology to determine the performance targets is described below. Regulated Entities are required to collect information about the performance levels of each Regulated Distribution System against these indices over the Second Regulatory Period. This data will be used when determining the final performance bands for the incentive scheme to be implemented during the third regulatory period.

Five discrete performance bands will be used for each performance index, as illustrated in table B2 below. Performance in each of these bands would result in the allocation of a simple performance assessment value to the index being assessed. These are the “Perf”-values described in Section B2.1.2.

Table 2 : Proposed performance assessment bands

Performance band	Description	Performance value
1	Performance greatly below target	-1.0
2	Target not achieved	-0.5
3	Performance as per expectation	0
4	Target exceeded	0.5
5	Target greatly exceeded	1.0

The manner in which the bands will be set for each performance index is described in table B3 (a-g) below.

Table B3a : Setting of performance bands for SAIFI performance

SAIFI	
Average SAIFI value	Average annual SAIFI for a Regulated Distribution System for the Second Regulatory Period
Standard deviation	Standard deviation of the annual SAIFI values for a Regulated Distribution System for the 10 calendar years ending on Dec 31, 2010
Performance greatly below target	Annual SAIFI more than 2 standard deviations above the SAIFI average
Target not achieved	Annual SAIFI more than 1 standard deviation, but less than or equal to 2 standard deviations, above the SAIFI average
Performance as per expectation	Annual SAIFI between or equal to 1 standard deviation above and 1 standard deviation below the average value
Target exceeded	Annual SAIFI more than 1 standard deviation, but less than or equal to 2 standard deviations, below the SAIFI average
Target greatly exceeded	Annual SAIFI more than 2 standard deviations below the SAIFI average

Table B3b : Setting of performance bands for *planned* CAIDI performance

PLANNED CAIDI	
Average CAIDI value	Average annual <i>planned</i> CAIDI for a Regulated Distribution System for the Second Regulatory Period
Standard deviation	Standard deviation of the annual <i>planned</i> CAIDI values for a Regulated Distribution System for the 10 calendar years ending on Dec 31, 2010
Performance greatly below target	Annual <i>planned</i> CAIDI more than 2 standard deviations above the <i>planned</i> CAIDI average
Target not achieved	Annual <i>planned</i> CAIDI more than 1 standard deviation, but less than or equal to 2 standard deviations, above the <i>planned</i> CAIDI average
Performance as per expectation	Annual <i>planned</i> CAIDI between or equal to 1 standard deviation above and 1 standard deviation below the average value
Target exceeded	Annual <i>planned</i> CAIDI more than 1 standard deviation, but less than or equal to 2 standard deviations, below the <i>planned</i> CAIDI average
Target greatly exceeded	Annual <i>planned</i> CAIDI more than 2 standard deviations below the <i>planned</i> CAIDI average

Table B3c : Setting of performance bands for SAIDI performance

SAIDI	
Average <i>planned</i> SAIDI value	Average annual SAIDI for a Regulated Distribution System for the Second Regulatory Period
Standard deviation	Standard deviation of the annual SAIDI values for a Regulated Distribution System for the 10 calendar years ending on Dec 31, 2010
Performance greatly below target	Annual SAIDI more than 2 standard deviations above the SAIDI average
Target not achieved	Annual SAIDI more than 1 standard deviation, but less than 2 or equal to standard deviations, above the SAIDI average
Performance as per expectation	Annual SAIDI between or equal to 1 standard deviation above and 1 standard deviation below the average value
Target exceeded	Annual SAIDI more than 1 standard deviation, but less than or equal to 2 standard deviations, below the SAIDI average
Target greatly exceeded	Annual SAIDI more than 2 standard deviations below the SAIDI average

Table B3d : Setting of performance bands for voltage regulation performance

VOLTAGE REGULATION	
Target probability of voltage violation (pV _v)	4%
Performance greatly below target	Probability of voltage violation greater than or equal to 6%
Target not achieved	Probability of voltage violation between 5% and 6%
Performance as per expectation	Probability of voltage violation on or between or equal to 3% and 5%
Target exceeded	Probability of voltage violation between 2% and 3%
Target greatly exceeded	Probability of voltage violation less than or equal to 2%

Table B3e : Setting of performance bands for system losses

SYSTEM LOSSES	
Target for system losses	9.5%
Performance greatly below target	Not applicable
Target not achieved	Not applicable
Performance as per expectation	System losses on or between 8.5% to 9.5%
Target exceeded	System losses between 7.0% and 8.5%
Target greatly exceeded	System losses less than or equal to 7.0%

Table B3f : Setting of performance bands for time to process applications

TIME TO PROCESS SERVICE APPLICATIONS	
Long-term average time to process a service application	Average application processing time over the Second Regulatory Period
Standard deviation	Standard deviation of the average time to process applications, based on actual cases for the Second Regulatory Period
Performance greatly below target	Annual average processing time more than 2 standard deviations above the long-term average value
Target not achieved	Annual average processing time more than 1 standard deviation, but less than or equal to 2 standard deviations, above the long-term average value
Performance as per expectation	Annual average processing time between or equal to 1 standard deviation above and 1 standard deviation below the long-term average value
Target exceeded	Annual average processing time more than 1 standard deviation, but less than or equal to 2 standard deviations, below the long-term average value
Target greatly exceeded	Annual average processing time more than 2 standard deviations below the long-term average value

Table B3g : Setting of performance bands for time to provide connection

TIME TO PROVIDE CONNECTIONS	
Long-term average time to provide a connection	Average time to provide a connection over the Second Regulatory Period
Standard deviation	Standard deviation of the average time to provide a connection, based on actual cases for the Second Regulatory Period
Performance greatly below target	Annual average connection time more than 2 standard deviations above the long-term average value
Target not achieved	Annual average connection time more than 1 standard deviation, but less than or equal to 2 standard deviations, above the long-term average value
Performance as per expectation	Annual average connection time between or equal to 1 standard deviation above and 1 standard deviation below the long-term average value
Target exceeded	Annual average connection time more than 1 standard deviation, but less than or equal to 2 standard deviations, below the long-term average value
Target greatly exceeded	Annual average connection time more than 2 standard deviations below the long-term average value

Table B3h : Setting of performance bands for call center performance

CALL CENTER PERFORMANCE	
Long-term average time to provide a connection	Average percentage of calls answered after 30 seconds over the Second Regulatory Period
Standard deviation	Standard deviation of the average percentage of calls answered after 30 sec., based on actual numbers for the Second Regulatory Period
Performance greatly below target	Annual average connection time more than 2 standard deviations above the long-term average value
Target not achieved	Annual average connection time more than 1 standard deviation, but less than or equal to 2 standard deviations, above the long-term average value
Performance as per expectation	Annual average connection time between or equal to 1 standard deviation above and 1 standard deviation below the long-term average value
Target exceeded	Annual average connection time more than 1 standard deviation, but less than or equal to 2 standard deviations, below the long-term average value
Target greatly exceeded	Annual average connection time more than 2 standard deviations below the long-term average value

B3 GUARANTEED SERVICE LEVELS SCHEME

A guaranteed service levels (GSL) scheme will be applied to Regulated Distribution Systems in terms of which Regulated Entities will compensate a Customer directly if certain service delivery performance thresholds are not met.

B3.1 Proposed GSL indices and payment levels

The indices that will be included in the GSL scheme are listed below. The actual performance targets for each index will be determined by the ERC during the reset process for the Third Regulatory Period.

- a) GSL1 : a Customer of a Regulated Distribution System experiencing more than the target time of sustained interruptions over any Regulatory Year;
- b) GSL2 : a Customer of a Regulated Distribution System experiencing more than the target number of sustained interruptions in a Regulatory Year;
- c) GSL3 : restoration of service to a Customer after a fault on the secondary side of a Regulated Distribution System, including the service drop, does not occur within the target time after the fault occurring; and
- d) GSL4 : the Regulated Entity failing to provide a connection to a Customer on the day promised, with cumulative payments applying for each day that a connection is later than promised.

Regulated Entities should collect performance data against each of these indices during the course of the Second Regulatory Period. This data will be provided to the ERC during the reset period for the Third Regulatory Period, not later than eighteen months before the start of the Third Regulatory Period. Final targets will be based on this information, as approved by the ERC.

B3.2 Determining the penalty levels

Setting appropriate GSL performance levels requires current information on actual performance against the indices. The ERC will collect the information from Regulated Entities over the Second Regulatory Period to determine the penalty levels that will apply when GSLs are not met.

The methodology that will be used to establish the penalty levels is as follows:

- (d) The ERC will calculate the total revenue allocation for the GSL scheme. In accordance with Section B2.1.3(b) , this allocation will be calculated as 0.5 % of the annual revenue requirement. Penalty levels will be constant for the whole of the Third Regulatory Period, these will be based on the annual revenue requirement for Regulatory Year 2012 (the start of the period).

$$GSLRev = 0.005 \times ARR_{2012}$$

where ARR_{2012} is the annual revenue requirement ARR_{2012} for Regulatory Year 2012 calculated in accordance with Section 4.7.7 (carried forward to article VI for subsequent regulatory periods)

- (e) Based on the data submitted by the Regulated Entities and the performance targets established for each index, the ERC will assess the likely number of instances in a year that each of the performance target levels will be exceeded. For example, the number of customers likely to have faults exceeding the target time duration (GSL3) during Regulatory Year t would be n_{GSL3} .
- (f) By allocating the same weighting to all the proposed GSL indices, the revenue allocation will be made per index. For example, the revenue allocated to the GSL3 measure would be :

$$GSL3Rev = 0.25 \times GSLRev$$

- (g) The penalty amount for each index will be calculated by dividing the revenue allocation for each index by the estimated number of times that the penalty level for that index is expected to be exceeded. For example, the penalty payable each time that an interruption on the secondary side of a Regulated Distribution System is not restored within the target time, would result in a penalty amount (rounded off) of :

$$Pen_{GSL3} = \frac{GSL3Rev}{n_{GSL3}}$$

B3.3 Adapting revenue requirements

An additional allowance will be made over and above the annual revenue requirement for each Regulated Entity, to cover the anticipated average amount that would be payable towards the GSL scheme. While this allowance will not be part of the annual revenue requirement (which is calculated based on the building blocks), it will be added to the annual revenue requirement for each Regulatory Year during the Third Regulatory Period for the purposes of calculating the smoothing factor and setting the initial price cap that will apply for the Third Regulatory Period.

Regulated Entities who manage to perform better than forecasted against the GSL will be allowed to retain the savings on the extra revenue allowance. Conversely, those Regulated

Entities that pay out more penalties than forecast, will bear the additional cost, up to a maximum of 0.5% of the annual revenue requirement for a Regulatory Year.²⁹

This intention of the 0.5% of the annual revenue requirement allowance is to allow Regulated Entities the option of incurring additional expenditure to avoid penalty situations, or to remain revenue neutral if they maintain current performance levels.

B4 Excluded events

There are a number of external events which can have a substantial impact on the actual performance of Regulated Distribution Systems against performance indices, but that are predominantly outside the control of Regulated Entities. The ERC will allow these events to be excluded from the statistics used to calculate network or service performance.

Events of which the impact on the performance of a Regulated Distribution System will generally be excluded are:

- supply interruptions made at the request of a customer;
- load shedding due to a shortfall in generation;
- supply interruptions caused by a failure of the transmission network;
- *excessive distribution voltage regulation caused by voltage levels at the transmission supply points falling outside the boundaries described in the Philippine Grid Code,³⁰*
- supply interruptions caused by a failure of a transmission connection asset, but only to the extent that the interruptions were not due to inadequate planning of transmission connections; and
- widespread supply interruptions due to rare and extreme events which were not reasonably able to be foreseen, or if they could be foreseen, for which the impact could still not be effectively mitigated even if appropriate responses were provided.

A Regulated Entity wishing to exclude the impact of a certain event from the calculation of the service performance incentive scheme would need to provide the ERC with the following:

- a detailed description of the nature of the event for which an exclusion is sought and the reasons justifying the exclusion of the event, including the provision of supporting evidence;
- evidence of the impact of the event on the Regulated Distribution System reliability performance, for each of the measures adversely affected;
- a description of the steps that the Regulated Entity took to mitigate against or respond to the events; and
- evidence that the Regulated Entity was unable to further mitigate against the impact of the event.

²⁹ If this value is exceeded, the cap of 3% of the annual revenue requirement for the performance incentive scheme could be breached.

³⁰ *Section 3.2.3.4 of the Philippine Grid Code (R.A. 9136) prescribes the RMS value of the long-duration voltage to be ensured at any (transmission) Connection Point by the Grid Owner and System Operator to be greater than 95% but less than 105% of the nominal (transmission) voltage level.*

The ERC will adopt the 2.5 beta approach, developed by the Institute for Electrical and Electronic Engineers (IEEE) to identify major event days.³¹

Further tests will be applied to determine the main cause(s) for the major event days, isolating, where appropriate, the underlying event and formally classing it as “severe”. These tests include assessing the nature and rarity of an event, the ability to foresee and prepare for an event, the ability of distribution companies to mitigate the effects of an event, and the reaction of Regulated Entities after the event.

If after this consideration the ERC approves the classification of an event as extreme, the impact of the event on the performance indices would be excluded from the performance statistics used as part of the performance incentive scheme.

B5 Information disclosure

The third component of the performance incentive scheme is the measurement and disclosure of further performance data. From the third regulatory period, Regulated Entities will be required to measure the performance of each Regulated Distribution System against the following indices:

Network performance indices

- momentary average interruption frequency index (MAIFI);
- frequency of tripping events per 100 circuit-km;

Service performance indices

- average time to respond to queries and complaints;
- average time to reconnect a service after payment of all dues.

The information has to be collected and supplied to the ERC on a monthly basis. In addition to the monthly figures, the cumulative performance total against each index must also be provided, from the start of the corresponding calendar year till the end of the month for which each index was measured.

The ERC intends to annually publicize the information disclosure data for all Regulated Distribution Systems.

³¹ IEEE Power Engineering Society. (2004, May). IEEE Std 1366TM – 2003. IEEE Guide for Electric Power Distribution Reliability Indices. New York, USA. Institute of Electronics and Electrical Engineers (IEEE)

**APPENDIX C
CRITERIA FOR REGULATORY RESET EXPERTS**

The main categories for which Regulatory Reset Experts will be retained by the ERC are listed below, with the experience and qualifications required for individual experts working on each category. These experience levels and qualifications may not necessary all lie in a single expert, but rather in a team, or in a group of one or more experts working on a category. Any individual making up part of such a team or group of Regulatory Reset Experts working on a category, should have qualifications in one or more of the areas listed, and have experience in one or more of the aspects listed against that particular category.

The requirements noted below are not intended to prevent a Regulatory Reset Expert from using the support of analysts, administrative or other supporting staff in the provision of services to the ERC in terms of the DWRG and it is not required or expected that such supporting staff should have the experience or qualifications noted below. However, a Regulatory Reset Expert shall review all the outputs from such supporting staff and accept full professional responsibility for such outputs. All information and reports provided by a Regulatory Reset Expert to the ERC shall be presented by the Regulatory Reset Expert in his/her own name and capacity.

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 distribution network assets, in an overseas jurisdiction, using an optimized 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.

Distribution system design, construction, maintenance and operation, load flow modelling and distribution network benchmark service performance

Have experience in:

- Electricity network load flow modelling;
- Design, construction and maintenance of electricity distribution 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 distribution 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;
- 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 optimized 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, with demonstrable experience of having worked in that field for three years or longer; or
- be a member of a professional institute in the Philippines or an overseas jurisdiction which represents that discipline, with a grading according to the rules of that institute that is higher than entry or training level.

Notwithstanding the above, the ERC may decide to appoint a Regulatory Reset Expert who does not comply with these requirements for professional qualifications, where it has been proven to the satisfaction of the ERC that the Reset Expert has more than 10 years demonstrable professional experience in the relevant discipline that is directly relevant to the service to be rendered. In such a case the ERC will communicate the decision in advance to the affected Regulated Entity or Entities, providing the supporting information on the experience of the intended Regulatory Reset Expert and why this appointment is considered appropriate for the task to be performed.

**APPENDIX D
OPTIMIZATION PRINCIPLES**

For the purposes of Section 4.8.6, the following optimization principles will be applied when undertaking the optimizing of the re-valuation of the Regulatory Asset Base.

D1. Background

The intention of optimization when valuing a distribution network is to ensure that the network would use the most cost-efficient design that would provide the required service potential. In theory such a state could only be achieved if an approach is followed that completely disregards the design and configuration of the existing asset base. However, such an approach would be cost intensive and is likely to result in variable and inconsistent outcomes and also does not reflect the constraints that an existing network impose on new network developments.

The form of optimization applied here uses the existing network as the starting point for the valuation. A series of optimization tests must be systematically applied to the whole network to identify stranded assets, excess capacity and over-engineering. Where necessary, the network is notionally redesigned to provide an optimized network.

Optimization is to be undertaken after the replacement cost (RC) distribution network has been determined. The output from this process is the optimized replacement cost (ORC).

The base rules for establishing the optimized network are that it should:

- (A) provide a quality of supply similar to that which currently exists, except where this exceeds the approved standard quality of supply criteria; and
- (B) have a capacity similar to that of the existing network, except where this exceeds allowed future load growth.

Optimization consists of five stages:

- 1) excluding stranded assets;
- 2) optimizing the configuration of the network;
- 3) optimizing the capacity of elements in the network;
- 4) optimizing network engineering; and
- 5) optimizing stores and spares.

The determination of indexed historical costs, replacement costs or modern equivalent replacement costs for existing individual network components is not part of the optimization process. This shall be done prior to calculating the RC.

D2 Life cycle analyses

As a general rule, optimization will involve the selection of the lowest cost asset that would provide the required capacity and service levels at a particular point on a distribution network. However, the most cost-efficient design is the one that minimizes the present value of the total costs of an asset and its use over its

standard lives. The situation may therefore arise where the use of a lower cost asset is avoided because of such life cycle cost analysis. In such cases, a general description of the analysis and assumptions used should be included in the valuation report.

In undertaking life cycle cost analyses to determine the most efficient design, the following may be taken into account:

- (a) the capital and operating costs over the life of the asset;
- (b) other costs that are incurred by the Regulated Entity as a result of the use of the asset; and
- (c) the cost of losses to the extent that these are caused by the existing load and the allowed future load growth.

D3. Constraints on Optimization

The optimization process shall be carried out subject to the following constraints:

- a) the potential level of service of the optimized network shall not exceed that of the existing network, and the performance of any part of the optimized network shall not exceed the Regulated Entities disclosed quality of supply criteria, unless nonstandard contracts with customers exist that require the Regulated Entity to provide an enhanced quality of supply;
- b) the location of points of connection to other networks should be assumed to be fixed. However, where a point of connection can be bypassed and replaced with a more cost-efficient network arrangement, then that point of connection shall be deleted for valuation purposes;
- c) the location and number of connection points to consumers should be assumed fixed;
- d) the optimized network should only use the voltage levels used on the existing network; and
- e) the existing geographic boundaries of the Regulated Entity's supply area should be assumed to be fixed.

D4. The Process of Optimization

Optimization of the network shall be undertaken on a systematic basis. The optimization process must examine the existing network and determine whether a more cost-efficient design could meet the required quality of supply criteria throughout the allowed planning period. Optimization shall be undertaken systematically across the network and shall include, in particular, the following network components:

- a) points of connection to other networks;
- b) substations and primary distribution switching stations;
- d) subtransmission lines and primary distribution circuits;
- e) high voltage distribution feeders; and
- f) the low voltage distribution system.

D5. Future Load Growth

The maximum capacity of any part of the optimized network shall be determined by the allowed future load growth, which is the maximum forecast load on the relevant part of the network under contingency operating conditions over the allowed planning period. However, in no case shall optimized capacity exceed existing capacity.

In order to ensure compliance with this clause, when preparing valuations Regulated Entities shall disclose both existing loads and the load forecast used as a basis for optimization. As a minimum, existing and forecast loads shall be provided for each grid connection point, each main substation and each high voltage distribution feeder. Clear justification and a detailed derivation of the load growth forecasts are required. Both the existing maximum demand and the highest forecast maximum demand during the planning period shall be provided.

Allowances should be made, where possible, for different growth rates in different parts of the network. Existing loads may be estimated where metering is not available.

The load forecast shall include only future electricity loads that can reasonably be expected to be supplied from the distribution network. A load outside the existing geographic boundaries of a Regulated Entity's area of supply shall not be included in the forecast unless a written customer contract to supply the load exists at the time of the valuation.

The planning periods over which future load growth can be allowed for shall not exceed the following:

- a) for subtransmission lines, substations (excluding transformers), primary distribution circuits and points of connection to a transmission network, 15 years;
- b) substation transformers, 10 years;
- c) high voltage (HV) and low voltage (LV) distribution, and other network assets, 5 years.

D.6 Quality of Supply

The optimized network shall be designed to supply the existing load, and the allowed future load growth, with a quality of supply that matches the level that currently exists for each part of the network, except where this is greater than the quality of supply criteria as approved by the ERC.

For the optimization process, Regulated Entities shall disclose the quality of supply criteria that it currently uses as a basis for network design. This should be based on their analysis of customer requirements and assessment of network maintenance requirements and costs.

Relevant quality of supply criteria include:

- a) the degree of security (redundancy) in different circumstances or localities;
- b) target reliability indices for different areas of the network (CBD, urban, rural);
- c) voltage regulation criteria; and

d) levels of electrical losses.

The degree of security may be disclosed either in probabilistic or deterministic terms. A deterministic approach could reference the level of in-built redundancy, i.e. as (n) or (n-1) or (n-2) component redundancy. (An (n) security level implies no component redundancy so that if a component fails, then customer supply is lost. An (n-1) security level is one in which customer supply is not interrupted in the event of any single component outage etc.) Irrespective of whether probabilistic or deterministic criteria are used, it is necessary for a Regulated Entity to express its degree of security criteria in such a way that the optimization process is transparent and can be shown to have been applied consistently across all parts of the network.

The ERC will apply the quality of supply criteria in Table D1 as part of its optimization process, unless compelling information is provided by a Regulated Entity that justifies an alternative approach.

The power factor, voltage variations, technical losses and signal distortion categories will not be used for optimizing out assets. They are included as additional criteria that could constitute sufficient justification of the need for distribution assets.

Existing Distribution System assets that provide a quality of supply greater than that disclosed by the Regulated Entity (as approved by the ERC) or the criteria in table A2, shall be optimized out, except where the assets are required to meet contractual obligations to provide an improved quality of supply to specific customers, where specific conditions have been negotiated with those customers to compensate the Regulated Entity for the provision of non-standard quality of supply levels.

Table D1 : Quality of supply criteria

Quality category	Network components	Quality level
Degree of network security	Points of connection to transmission network Sub-transmission network ³² Substations Primary switching stations Primary distribution feeders ³³	n-1
	Secondary distribution feeders Low voltage network	n-0
Power Factor	All	>85% lagging

³² For the purposes of optimization, sub-transmission assets are defined as those assets used on Regulated Distribution Systems to connect transmission and distribution substations. It does not include those assets owned by Regulated Entities to directly connect large consumers to the transmission network.

³³ A primary distribution circuit is a distribution voltage circuit used for transporting electricity to other circuits at the same or lower distribution voltage levels. In general, but not always, primary distribution circuits will not be used for the direct supply of electricity to customers or for the direct supply of distribution transformers that feed a low voltage network.

Voltage variations	All	>90% of nominal voltage level <110% of nominal voltage level
Signal distortion	All	Total Harmonic Distortion <5%
Technical system losses	All	<= 6.5% of energy conveyed

D7. Excluding Stranded Assets

Any system fixed assets not required to supply line services to existing customers, and which could therefore be disconnected, shall be identified and excluded from the optimized network. Such assets are known as stranded assets and should be optimized out.

D8. Optimizing System Configuration

Optimization of the system configuration shall be carried out by considering alternative configurations subject to the constraints on optimization and in accordance with the relevant criteria relating to the quality of supply declared by the Regulated Entity. The optimized configuration is the one that satisfies the relevant optimization criteria in the most cost efficient manner.

In the process of optimizing the system configuration, certain assets or groups of assets may become excess to requirements and should be valued at nil, while other new assets may need to be notionally brought in.

D9. Optimizing Network Capacity

After the configuration of the system has been optimized, the elements within that system shall be optimized by considering whether lower capacity, more cost-efficient elements would be adequate.

Civil engineering works such as spare ducts, cable tunnels and switchyard bays not currently used shall be optimized out unless they will be required to meet the allowed future load growth. If the future use of such assets is only intended to provide an improved quality of supply, rather than an increase in system capacity, the assets shall be optimized out since the optimized system shall not provide a quality of supply greater than that which currently exists.

D10. Optimizing Network Engineering

As part of the process of optimizing the network, the engineering of the network shall be examined to confirm that the optimized asset base is not over-engineered, given the required quality of supply criteria. Over-engineering may occur if parts of the existing asset base are engineered to a standard that exceeds the Regulated Entity’s current practice or if a more cost-efficient engineering arrangement or configuration would be used if the existing assets were replaced. The Regulated Entity’s design and construction standards, and the standard of engineering applied to its most recent projects should be used as the benchmark for this test. Where a more cost-efficient arrangement would result if the required level of service were provided by applying the Regulated Entity’s existing engineering standards then the relevant assets shall be replaced by a notional asset arrangement that reflects current practice.

D11. Optimizing Network Equipment Spares

Network equipment spares may be included in the ORC valuation as long as the spares are suitable replacements for assets installed in the network. However, the quantity of spares in valuation shall not exceed the reasonable quantity of spares required to meet the Regulated Entity's disclosed quality of supply criteria.

Stranded assets may be valued as network spares, subject to the criteria set out above. Stranded assets not required as network spares shall be assigned a zero value for the purposes of the valuation.

D.12 Assets to be subject to optimization

Only fixed assets forming part of a Regulated Distribution System owned by a Regulated Entity or subject to a finance lease are to be included as part of the optimized replacement cost of the Regulated Distribution System. Such fixed assets are assets that are tangible in nature, have relatively long useful lives, and are used, or intended to be used, for the conveyance or supply of electricity.

Where an easement forms an integral part of a network asset, it should be considered to be a system fixed asset and may be included in the valuation. Stores and spares held in stock that can be used in the network in place of existing network assets may be included in the valuation to the extent that the quantities of items included in the valuation are appropriate, considering the historical reliability of the equipment and the number of items installed on the network.

General plant (non-system assets) as described in Section 4.8.5 shall not be included in the ORC valuation.

To avoid any uncertainty, it is noted that assets forming part of the Regulatory Asset Base but not subject to optimization would still be included in the valuation of the Regulatory Asset Base in the Initial Re-valuation Report.