

**R.A. 9136**  
**Electric Power Industry Reform Act of 2001**

**WHOLESALE ELECTRICITY SPOT MARKET**  
**RULES**  
**(As Amended)**

This document incorporates the amendments to the WESM Rules as approved and published by the Department of Energy in various Department Circulars. The foregoing is not an official copy of the amended WESM Rules and is circulated FOR REFERENCE OF THE PHILIPPINE ELECTRICITY MARKET CORPORATION ONLY. As such, Philippine Electricity Market Corporation assumes no liability with respect to use of the same.

## FOREWORD

The Wholesale Electricity Spot Market (WESM) Rules establishes the basic rules, requirements and procedures that govern the operation of the Philippine electricity market. The WESM Rules identifies and recognizes and sets the responsibilities of the Market Operator, System Operator, WESM Participants, and the PEM Board. These groups shall comply with and are bound by all the provisions of the WESM Rules. The WESM Rules are intended to be complimentary with the Grid Code and Distribution Code, all of which are meant to ensure the development of an appropriate, equitable and transparent electricity market, along with a safe, reliable, and efficient operation of the power system.

Republic Act No. 9136, also known as the "Electric Power Industry Reform Act of 2001" (Act), mandates the Department of Energy (DOE) to establish the WESM within one (1) year from its effectivity. The Act also mandates the DOE, jointly with the electric power industry participants, to formulate the detailed rules for the WESM.

The WESM is the market where trading of electricity will be made. It shall be governed by the Philippine Electricity Market Board (PEM Board). The PEM Board shall provide the policies and guidelines of the WESM contained in the Implementing Rules and Regulations of the Act, WESM Rules, and such other relevant laws, rules and regulations.

The Market Operator, a non-stock, non-profit organization, shall administer the operation of the WESM in accordance with the WESM Rules. For the first year, the Market Operator's functions shall be provided by the Autonomous Group Market Operator (AGMO) under the administrative supervision of the National Transmission Corporation (TRANSCO). After the first year, the Market Operator shall be an independent entity. Thereafter, the administrative supervision of the TRANSCO over such entity shall cease.

The WESM Rules is organized into eleven (11) Chapters. These are:

- Chapter 1. Introduction
- Chapter 2. Registration
- Chapter 3. The Market
- Chapter 4. Metering
- Chapter 5. Market Information and Confidentiality
- Chapter 6. Intervention and Market Suspension
- Chapter 7. Enforcement and Disputes
- Chapter 8. Rules Change Process
- Chapter 9. Interpretation
- Chapter 10. Transitory Provisions
- Chapter 11. Glossary

# WESM RULES

## TABLE OF CONTENTS

Chapter	Description	Page
	FOREWORD.....	i
	INTRODUCTION .....	1
1.1	SCOPE OF CHAPTER 1 .....	1
1.2	PURPOSE AND APPLICATION OF RULES .....	1
1.2.1	About the Philippines Wholesale Electricity Spot market Rules .....	1
1.2.2	Purpose of the WESM Rules.....	1
1.2.3	The Regulatory Framework.....	2
1.2.4	Scope of Application .....	3
1.2.5	WESM Objectives.....	3
1.3	MARKET OPERATOR AND SYSTEM OPERATOR .....	3
1.3.1	Responsibilities of the Market Operator .....	3
1.3.2	Market Operator Performance .....	5
1.3.3	Responsibilities of the System Operator .....	6
1.4	GOVERNANCE OF THE MARKET .....	7
1.4.1	Philippine Electricity Market (PEM) Board.....	7
1.4.2	Composition of the PEM Board .....	7
1.4.3	Appointment to the PEM Board.....	11
1.4.4	Voting Rights.....	12
1.4.5	Obligations of the PEM Board .....	13
1.4.6	Formation of Committees.....	14
1.5	THE PHILIPPINES ELECTRICITY MARKET AUDITOR .....	16
1.5.1	Appointment of the PEM Auditor .....	16
1.5.2	Responsibilities of the Auditor.....	17
1.5.3	Review of WESM Rules.....	18
1.6	MARKET SURVEILLANCE COMMITTEE.....	18
1.6.1	Appointment to the Market Surveillance Committee .....	18
1.6.2	Responsibilities of the Market Surveillance Committee .....	18
1.6.3	Design and Promulgation of Penalties.....	19
1.7	TECHNICAL COMMITTEE .....	20
1.7.1	Appointment to the Technical Committee .....	20
1.7.2	Responsibilities of the Technical Committee .....	20
1.8	ENFORCEABILITY AND AMENDMENT OF THESE RULES .....	21
1.8.1	Enforceability .....	21
1.8.2	Changes to the WESM Rules .....	21
1.9	PUBLIC CONSULTATION PROCEDURES .....	21
	REGISTRATION .....	23
2.1	SCOPE OF CHAPTER 2 .....	23
2.2	GENERAL.....	23
2.2.1	Scope of Application .....	23
2.2.2	Registration .....	23
2.2.3	Registration in Multiple Categories .....	24
2.2.4	WESM members .....	24
2.3	CATEGORIES OF WESM MEMBER.....	24

2.3.1	Generation Company .....	24
2.3.2	Customer .....	27
2.3.3	Trading Participant .....	27
2.3.4	Network Service Provider .....	29
2.3.5	Ancillary Services Provider .....	29
2.3.6	Metering Services Provider .....	30
2.3.7	System operator .....	31
2.4	INDIRECT WESM MEMBERS .....	31
2.5	APPLICATIONS FOR REGISTRATION .....	31
2.5.1	Application process .....	31
2.5.2	Prerequisites for applicants .....	31
2.5.3	Further information to assess application .....	31
2.5.4	Approval of applications .....	32
2.5.5	Notice of approval of application .....	32
2.5.6	Notice of non-approval of application .....	33
2.5.7	Market Operator to maintain a list .....	33
2.6	CEASING TO BE A WESM MEMBER .....	33
2.6.1	Notifying the Market Operator .....	33
2.6.2	Date of cessation .....	34
2.6.3	Notifying all WESM members .....	34
2.6.4	Market Operator notification of cessation .....	34
2.7	SUSPENSION .....	34
2.7.1	Grounds for Suspension .....	34
2.7.2	Effect of a suspension notice .....	34
2.8	DEREGISTRATION .....	35
2.8.1	Deregistration of a Trading Participant .....	35
2.8.2	Obligations and liabilities following deregistration .....	35
2.8.3	Deregistration procedure development .....	35
2.9	INTENDING WESM MEMBERS .....	35
2.9.1	Registration as an Intending WESM member .....	35
2.9.2	Applications for registration .....	36
2.9.3	Notice of cessation of registration .....	36
2.9.4	Activities of Intending WESM members .....	36
2.9.5	Rights and obligations of Intending WESM members .....	36
2.10	MARKET FEES .....	37
2.10.1	Imposing Market Fees .....	37
2.10.2	Structure and Level of Market Fees .....	37
2.10.3	Guiding Principles .....	37
2.10.4	Components of Market Fees .....	37
2.10.5	Publication of Market Fees Structure .....	38
2.11	BUDGET .....	38
2.11.1	Submission of annual statements and other documents .....	38
2.12	FINANCIAL YEAR REPORT .....	39
2.12.1	Market Operator to prepare report .....	39
2.12.2	Providing copy of report .....	39
	THE MARKET .....	40
3.1	SCOPE OF CHAPTER 3 .....	40
3.2	MARKET NETWORK MODEL, TRADING NODES, AND PRICING ZONES .....	40
3.2.1	Market Network Model .....	40
3.2.2	Market Trading Nodes .....	42
3.2.3	Customer Pricing Zones .....	43
3.3	ANCILLARY SERVICES .....	44

3.3.1	Introduction.....	44
3.3.2	Ancillary Services Contracting by the System operator .....	45
3.3.3	Ancillary Services Agreements.....	45
3.3.4	Reserve Market Arrangements.....	47
3.3.5	Ancillary Services Cost Recovery.....	47
3.3.6	Provision of Ancillary Services.....	49
3.3.7	Approval, Periodic Review and Evaluation of Ancillary Service Arrangements .....	49
3.4	MARKET TRADING INTERVAL AND TIMETABLE .....	50
3.4.1	Trading Intervals .....	50
3.4.2	Timetable.....	51
3.5	SUBMISSION OF OFFERS, BIDS, AND DATA .....	51
3.5.1	Communications of Offers and Bids.....	51
3.5.2	Network Service Provider Data .....	51
3.5.3	System operator Data.....	52
3.5.4	Load Forecasting.....	54
3.5.5	Generation Offers and Data .....	55
3.5.6	Customer Demand Bids .....	57
3.5.7	Generation Company Reserve Offers .....	58
3.5.8	Customer Reserve Offers .....	59
3.5.9	Revision of Standing Offers/Bids.....	59
3.5.10	Initial setting of Market Offers/Bids .....	60
3.5.11	Revision of Market Offers/Bids, Nomination of Loading Levels, and Projected Outputs .....	60
3.5.12	Confirmation of Receipt of Valid Offers, Bids, Nomination of Loading Levels, and Projected Outputs .....	63
3.5.13	Over-riding Constraints.....	64
3.6	MARKET DISPATCH OPTIMIZATION MODEL .....	67
3.6.1	Model Definition .....	67
3.6.2	Constraint Violation Coefficients.....	70
3.6.3	Interpretation of Model Outputs.....	71
3.6.4	Modeling Approximations .....	71
3.6.5	Model Development .....	72
3.6.6	Market Settlement.....	72
3.7	MARKET PROJECTIONS .....	73
3.7.1	Week Ahead Projections .....	73
3.7.2	Day Ahead Projections.....	73
3.7.3	Preparation of Market Projections.....	73
3.7.4	Published Information .....	75
3.8	SCHEDULING AND DISPATCH IMPLEMENTATION .....	76
3.8.1	Responsibilities of the Market Operator .....	76
3.8.2	Responsibilities of the System operator .....	77
3.8.4	Dispatched Trading Participants.....	81
3.8.5	Ramp Rate of Trading Participant .....	82
3.8.6	Deviations from the Ramp Rate.....	82
3.8.7	Dispatch Tolerances.....	83
3.8.8	Sanctions of Trading Participants .....	83
3.9	TREATMENT OF LOAD SHEDDING, EXCESS GENERATION AND RESERVE VIOLATION.....	84
3.9.1	Direction to Conduct Load Shedding .....	84
3.9.2	Market Operator Advice on Load Shedding .....	84
3.9.3	System operator Responsibility to Initiate Load Shedding.....	84

3.9.4	Advising of Load Shedding .....	85
3.9.5	Revising Forecasts .....	85
3.9.6	Pricing Error Notice .....	85
3.9.7	Management of Load Shedding .....	85
3.9.8	Management Procedures for Excess Generation .....	85
3.9.9	Management Procedures for Reserve Violation .....	87
3.10	DETERMINATION OF MARKET PRICES.....	87
3.10.1	Calculation of Prices .....	87
3.10.2	Determination of Ex-Ante Nodal Energy Price.....	88
3.10.3	Determination of Ex-Ante Zonal Energy Prices.....	88
3.10.4	Publishing Ex-Ante Prices According to Timetable .....	88
3.10.5	Pricing Error Notice .....	88
3.10.6	Determination of Ex-Post Nodal Energy Price .....	89
3.10.7	Procedures for Ex-Post Nodal Energy Price .....	90
3.10.8	Determination of Ex-Post Zonal Energy Prices .....	91
3.10.9	Determination of Ex-Ante And Ex-Post Energy Settlement Prices .....	91
3.10.10	Determination of Zonal Reserve Price.....	92
3.11	MARKET INFORMATION .....	92
3.11.1	Market Information .....	92
3.11.2	Access to Information.....	93
3.12	FINANCIAL TRANSMISSION RIGHTS.....	93
3.12.1	Market for Transmission Rights .....	93
3.12.2	Publication of Rental Information.....	93
3.12.3	Further Transmission Rights.....	94
3.12.4	Matters to Consider in Assessment.....	94
3.12.5	Issuing Transmission Rights .....	94
3.12.6	Accounting for Net Income .....	95
3.13	SETTLEMENT QUANTITIES AND AMOUNTS .....	95
3.13.1	Submission of Bilateral Contract Data .....	95
3.13.2	Submission of Transmission Right Data .....	96
3.13.3	Data for Bilateral Contracts and Transmission Rights .....	97
3.13.4	Zonal Reserve Settlement Quantity.....	97
3.13.5	Defining the Gross Ex-Ante Energy Settlement Quantity for Market Trading Nodes.....	97
3.13.6	Defining the Gross Ex-Post Energy Settlement Quantity for Market Trading Nodes.....	98
3.13.7	Energy Settlement Quantity Adjustments for Bilateral .....	100
3.13.8	Determining the Ex Ante Energy Trading Amount .....	100
3.13.9	Determining the Ex Post Energy Trading Amount .....	100
3.13.10	Determining the Reserve Trading Amount.....	101
3.13.11	Determining the Reserve Cost Recovery Charge .....	101
3.13.12	Calculation of Line Rental Trading Amounts .....	101
3.13.13	Determining the Transmission Rights Trading Amount .....	101
3.13.14	Settlement Amounts for Trading Participants.....	102
3.13.16	Treatment of Remaining Settlement Surplus .....	104
3.13.17	Settlement Amounts for Trading Participants with Bilateral Contracts .....	105
3.14	SETTLEMENT PROCESS.....	107
3.14.1	Settlements Management by Market Operator .....	107
3.14.2	Electronic Funds Transfer .....	107
3.14.3	Payment of Settlement Amount .....	107
3.14.4	Preliminary Statements .....	108
3.14.5	Final Statements.....	109

3.14.6	Payment by Trading Participants.....	109
3.14.7	Payment to Trading Participants .....	110
3.14.8	Disputes.....	111
3.14.9	Settlement Revisions.....	112
3.14.10	Payment of Adjustments .....	113
3.14.11	Payment Default Procedure .....	113
3.14.12	Interest on Overdue Amounts .....	116
3.15	PRUDENTIAL REQUIREMENTS .....	117
3.15.1	Purpose .....	117
3.15.2	Provision of Security .....	117
3.15.3	Form of Security .....	118
3.15.4	Amount of Security.....	119
3.15.5	Replacement Security .....	122
3.15.6	Drawdown of Security .....	123
3.15.7	Refund of Security.....	124
3.15.8	Suspension of a WESM member .....	124
3.15.9	Trading Limits .....	126
3.15.10	Monitoring.....	126
3.15.11	Margin Calls.....	127
3.15.12	Confidentiality .....	128
METERING	.....	129
4.1	SCOPE OF CHAPTER 4 .....	129
4.2	APPLICATION OF CHAPTER.....	129
4.3	OBLIGATIONS OF TRADING PARTICIPANTS .....	129
4.3.1	Obligations .....	129
4.3.2	Election of a Metering Services Provider by a Trading Participant .....	130
4.3.3	Metering Services Provider Obligations .....	131
4.4	REGISTRATION OF METERING SERVICES PROVIDERS .....	131
4.5	METERING INSTALLATION .....	132
4.5.1	Metering Installation Components .....	132
4.5.2	Location of Metering Point .....	133
4.5.3	Meter Accuracy .....	133
4.5.4	Use of Meters .....	133
4.5.5	Security of Metering Equipment.....	134
4.5.6	Security of Metering Data Held in a Metering Installation .....	134
4.5.7	Performance of Metering Installations .....	135
4.5.8	Meter Time.....	135
4.6	METERING DATA.....	135
4.6.1	Changes to Metering Data.....	135
4.6.2	Data Transfer and Collection.....	136
4.7	DEREGISTRATION OF METERING SERVICES PROVIDERS .....	137
4.7.1	Settlement with inaccurate metering information .....	137
4.7.2	Sanctions for inaccurate metering information .....	137
4.7.3	Notice following material breach of WESM Rules .....	137
4.7.4	Deregistration following unethical act .....	137
4.7.5	Effect of deregistration for unethical act .....	137
4.8	DATABASES.....	138
4.8.1	Installation Databases.....	138
4.8.2	Metering Database.....	138
4.8.3	Rights of Access to Metering Data.....	139
4.8.4	Confidentiality .....	139
4.8.5	Payment for Access to Metering Data .....	139



4.9	DATA VALIDATION AND SUBSTITUTION .....	139
4.10	PROCESSES AND REVIEW .....	140
4.11	TRANSITORY PROVISION .....	140
	<b>MARKET INFORMATION AND CONFIDENTIALITY .....</b>	<b>141</b>
5.1	SCOPE OF CHAPTER 5 .....	141
5.2	MARKET INFORMATION AND CONFIDENTIALITY .....	141
5.2.1	Provision of Information .....	141
5.2.2	Systems and Procedures .....	142
5.2.3	Participant Data .....	143
5.2.4	Planning and Design Data .....	143
5.2.5	Information Records .....	143
5.2.6	Market Audit .....	143
5.3	CONFIDENTIALITY .....	145
5.3.1	Confidentiality .....	145
5.3.2	Exceptions .....	145
5.3.4	Indemnity to the Market Operator .....	148
5.3.5	Survival .....	148
5.3.6	The Market Operator Information .....	148
5.3.7	Timetable .....	149
	<b>MARKET INTERVENTION AND MARKET SUSPENSION .....</b>	<b>150</b>
6.1	SCOPE OF CHAPTER 6 .....	150
6.2	OVERVIEW .....	150
6.2.1	Preparation and Responses .....	150
6.2.2	Exemption from Liability due to Market Suspension and Market Intervention 152	
6.2.3	Administered Price .....	153
6.3	EMERGENCIES .....	153
6.3.1	Emergency .....	153
6.3.2	Emergency Procedures .....	155
6.4	EMERGENCY PLANNING BY WESM PARTICIPANTS .....	156
6.4.1	WESM Participant Emergency Contacts .....	156
6.4.2	WESM Participant Procedures .....	157
6.4.3	Emergency Procedures Awareness .....	157
6.5	RESPONSE TO AN EMERGENCY .....	157
6.5.1	Instructions during Emergency Condition .....	157
6.6	SYSTEM SECURITY .....	161
6.6.1	System Security and Reliability Guidelines .....	161
6.6.2	Notice of Declaration of Market Intervention .....	161
6.6.3	Response to System Security Threat .....	163
6.6.4	Market Response to Threat to System Security .....	163
6.6.5	Market Intervention Due to System Security Threat .....	164
6.7	FORCE MAJEURE .....	165
6.7.1	Force Majeure Event .....	165
6.7.2	Force Majeure Event .....	165
6.7.3	Notification .....	166
6.7.4	Obligations of WESM Participants .....	166
6.8	BUSINESS CONTINUITY PLAN AND DISASTER RECOVERY PROCEDURES OF THE MARKET OPERATOR .....	166
6.8.1	Development, Updating and Implementation of the Business Continuity and Disaster Recovery Procedures .....	166
6.8.2	Simulations .....	167
6.9	MARKET SUSPENSION .....	168

6.9.1	Conditions for Suspension of the Market .....	168
6.9.2	Declaration of Market Suspension.....	168
6.9.3	Effect of Market Suspension.....	169
6.9.4	Market Intervention Report .....	169
6.9.5	Market Suspension Report .....	170
<b>ENFORCEMENT AND DISPUTES .....</b>		<b>172</b>
7.1	SCOPE OF CHAPTER 7 .....	172
7.2	ENFORCEMENT.....	172
7.2.1	Compliance.....	172
7.2.2	Breaches of the WESM Rules by WESM members.....	172
7.2.3	Alleged Breaches of the WESM Rules by the Market Operator or System Operator .....	175
7.2.4	Investigations.....	176
7.2.5	Sanctions .....	177
7.2.6	Actions by Agents, Employees or Officers of Participants .....	178
7.2.7	Publication .....	178
7.2.8	Appointment of an Enforcement and Compliance Officer .....	178
7.2.9	Designation of a Compliance Officer for WESM Member, Market Operator and System Operator .....	178
7.3	DISPUTE RESOLUTION.....	179
7.3.1	Application and Guiding Principles.....	179
7.3.2	Appointment of Dispute Resolution Administrator (DRA) .....	181
7.3.3	Dispute Management Protocol .....	183
7.3.4	Accreditation and Selection of Mediators and Arbitrators .....	184
7.3.5	Dispute Resolution Process .....	185
7.3.6	Disputes About Payment .....	186
7.3.7	Disputes Affecting Final Statements.....	187
7.3.8	Interim and Emergency Relief .....	187
7.3.9	Legal Representation .....	187
7.3.10	Cost of Dispute Resolution .....	188
7.3.11	Effect of Resolution .....	188
7.3.12	Recording and Publication .....	189
7.3.13	Limitation of Liability .....	189
<b>RULE CHANGE .....</b>		<b>190</b>
8.1	SCOPE OF CHAPTER 8 .....	190
8.2	RULES CHANGE COMMITTEE .....	190
8.2.1	Establishment of a Rules Change Committee .....	190
8.2.2	Composition of Rules Change Committee .....	190
8.2.3	Membership requirements - Rules Change Committee .....	191
8.2.4	Termination.....	191
8.2.5	Appointment for Vacated Positions .....	192
8.2.6	Resignation.....	192
8.2.7	Conduct of meetings .....	192
8.2.8	Advice and assistance.....	193
8.2.9	Rules Change Classification and Procedures .....	193
8.3	REFERRAL OF MATTERS TO THE RULES CHANGE COMMITTEE.....	193
8.3.1	Proposals for Changes to the <i>WESM Rules</i> or <i>Market Manuals</i> , or Adoption of New <i>Market Manuals</i> .....	194
8.3.2	Form of submission.....	194
8.3.3	Rules Change Committee obligations .....	195

8.4	CONSIDERATION OF PROPOSALS TO CHANGE THE WESM RULES OR MARKET MANUALS OR TO ADOPT NEW MARKET MANUALS BY THE RULES CHANGE COMMITTEE.....	195
8.4.1	Rules Change Classification Procedures .....	195
8.4.2	Assessment of proposals .....	198
8.4.3	Discretions when assessing a proposal .....	198
8.4.4	Notification following failure to satisfy criteria.....	199
8.4.5	Notification following satisfying criteria.....	199
8.4.6	Submissions regarding proposed Rules change .....	200
8.4.7	Approval of proposals.....	200
8.5	CONSIDERATION OF PROPOSALS TO CHANGE THE WESM RULES OR MARKET MANUALS OR ADOPT NEW MARKET MANUALS BY THE PEM BOARD .....	200
8.5.1	PEM Board assessment of proposals .....	200
8.5.2	PEM Board discretions when assessing a proposal for a change in the <i>WESM Rules</i> or <i>Market Manuals</i> , or for the adoption of new <i>Market Manuals</i> .....	201
8.5.3	Notification following unsuccessful proposal .....	201
8.5.4	Approving and submitting a proposal for approval .....	202
8.6	APPROVAL OF PROPOSAL FOR CHANGES TO THE WESM RULES OR MARKET MANUALS OR ADOPT NEW MARKET MANUALS.....	203
8.6.1	DOE assessment of proposal.....	203
8.6.2	DOE discretions when assessing proposal for a change in the <i>WESM Rules</i> or <i>Market Manuals</i> , or for the Adoption of New Market Manuals.....	204
8.6.3	Notification following failure to satisfy criteria.....	204
8.6.4	Approval of a proposal.....	204
8.6.5	Report by the Rules Change Committee .....	205
8.7	RULES CHANGE COMMITTEE INDEMNITY .....	206
	INTERPRETATION .....	207
9.1	GENERAL.....	207
9.2	TIME AND DATES .....	208
9.3	ASSIGNMENT .....	209
9.4	WAIVER.....	209
9.5	PAYMENT .....	209
9.5.1	Method of payment.....	209
9.5.2	Interest rates .....	209
9.6	NOTICES.....	210
9.6.1	Properly giving notices .....	210
9.6.2	Notices treated as being given.....	210
9.6.3	Form of notice .....	211
9.6.4	Calculating a specified period for notices .....	211
9.6.5	General .....	212
9.7	RETENTION OF RECORDS AND DOCUMENTS .....	212
9.8	SEVERABILITY .....	212
	TRANSITORY PROVISIONS.....	213
10.1	PURPOSE AND SCOPE.....	213
10.1.1	Purpose .....	213
10.1.2	Scope of Application .....	213
10.2	MARKET TRANSITION .....	213
10.2.1	Establishment of the Wholesale Electricity Spot market.....	213
10.2.2	The Market Operator .....	213
10.2.3	The Governing Board .....	214
10.2.4	Membership to the WESM .....	214
10.2.5	Price Determination Methodology.....	215

10.3	PROVISIONS FOR THE INTERIM WESM .....	215
10.3.1	Spot market Trading .....	215
10.3.2	Ancillary Services.....	216
10.3.3	Market Dispatch Optimization Model .....	216
10.3.4	Metering .....	216
10.4	ACTIONS TO BE TAKEN PRIOR TO SPOT MARKET COMMENCEMENT DATE .....	217
10.4.1	Significant Variations .....	217
10.4.2	Market Operator Performance .....	217
10.4.3	Formulation of PEM Board By-law .....	218
10.4.4	Determination of Market Network Model .....	219
10.4.5	Determination of Market Trading Nodes .....	219
10.4.6	Determination of Customer Pricing Zones.....	219
10.4.7	Ancillary Services.....	220
10.4.8	Timetable.....	222
10.4.9	Load Forecasting.....	223
10.4.10	Market Dispatch Optimization Model .....	223
10.4.11	Constraint Violation Coefficients.....	223
10.4.12	Dispatch Tolerances.....	224
10.4.13	Management Procedures During Load Shedding .....	224
10.4.14	Management Procedures for Excess Generation .....	224
10.4.15	Management Procedures for Excess Generation .....	224
10.4.16	Procedures for Ex-Post Nodal Energy Price .....	225
10.4.17	Emergency Procedures .....	225
10.4.18	Harmonization.....	225
10.4.19	The Technical Working Group (TWG).....	226
	GLOSSARY .....	228
	APPENDICES .....	252
	APPENDIX A .....	252
	APPENDICES TO CHAPTER 3 .....	252
	Appendix A1. Information to be Supplied with Offers to Supply and to Buy Electricity	
	252	
	A1.1 Generation Offer .....	252
	A1.2 Reserve Offers .....	252
	A1.3 Demand Bids.....	253
	Appendix A2. Information to be Supplied by Network Service Provider .....	254
	APPENDIX B .....	255
	APPENDICES TO CHAPTER 4 .....	255
	Appendix B1. Metering Register .....	255
	B1.1 General .....	255
	B1.2 Metering register information .....	255
	Appendix B2. Installation .....	256
	APPENDIX C .....	258
	APPENDICES TO CHAPTER 7 .....	258
	Appendix C1 - Classification of Rules.....	258



## CHAPTER 1

### INTRODUCTION

#### 1.1 SCOPE OF CHAPTER 1

- (a) Purpose of the *WESM Rules*;
- (b) Parties bound by the *WESM Rules*;
- (c) Responsibilities of the *Market Operator*,
- (d) Responsibilities of the *System Operator*,
- (e) Composition and functions of the *PEM Board*;
- (f) Responsibilities of the *PEM Auditor*,
- (g) Responsibilities of the *Market Surveillance Committee*;
- (h) Responsibilities of the Technical Committee; and
- (i) Public consultation procedures.

#### 1.2 PURPOSE AND APPLICATION OF RULES

##### 1.2.1 About the Philippines Wholesale Electricity Spot market Rules

- 1.2.1.1 This document shall be known as the Wholesale Electricity *Spot market Rules* ("*WESM Rules*").
- 1.2.1.2 Formulated jointly with electric power industry participants;
- 1.2.1.3 Promulgated by the *DOE*;
- 1.2.1.4 In the *WESM Rules*, words and phrases that appear in italics are defined in the glossary in chapter 11.
- 1.2.1.5 The *WESM Rules* shall be interpreted in accordance with the provisions of chapter 9, objectives of the *Act* and other provisions of law.

##### 1.2.2 Purpose of the *WESM Rules*

The *WESM Rules* are promulgated to implement the provisions of the *Act*, its Implementing Rules and Regulations and other related laws as well as to:

- (a) Promote competition;
- (b) Provide an efficient, competitive, transparent and reliable *spot market*,

- (c) Ensure efficient operation of the *WESM* by the *Market Operator* in coordination with the *System Operators* a way which:
  - (1) Minimizes adverse impacts on *system security*;
  - (2) Encourages market participation; and
  - (3) Enables access to the *spot market*.
- (d) Provide a cost-effective framework for resolution of disputes among *WESM Participants*, and between *WESM Participants* and the *Market Operator*,
- (e) Provide for adequate sanctions in cases of breaches of the *WESM Rules*;
- (f) Provide efficient, transparent and fair processes for amending the *WESM Rules*;
- (g) Provide for the terms and conditions to which entities may be authorized to participate in the *WESM*;
- (h) Provide the authority and governance framework of the *PEM Board*; and
- (i) Encourage the use of environment-friendly renewable sources of energy in accordance with the *Act*.

### **1.2.3 The Regulatory Framework**

- 1.2.3.1 The *Act* mandates the Department of Energy (*DOE*) to promulgate the detailed rules for the *WESM*, which it shall formulate jointly with the Electric Power Industry Participants.
- 1.2.3.2 To ensure a greater supply and rational pricing of electricity, the *Act* provides the Energy Regulatory Commission (*ERC*) the authority to enforce the rules and regulations governing the operations of the electricity *spot market* and the activities of the *spot Market Operator* and other participants in the *spot market*.
- 1.2.3.3 The *WESM Rules* form part of the regulatory framework which is applicable to the owners, operators and users of the *power system* under the *Act*.
- 1.2.3.4 On matters pertaining to financial and technical standards set for *Generation Companies*, *TRANSCO*, *Distribution Utilities*, and Suppliers, inconsistencies between the

*WESM Rules*, the *Grid Code* and the *Distribution Code*, may be referred to the *ERC* for resolution only.

#### **1.2.4 Scope of Application**

Pursuant to Section 30 of the Act, all *WESM Participants* shall comply with the *WESM Rules* and applicable laws or regulations of the Philippines.

#### **1.2.5 WESM Objectives**

The objectives of the *spot market* are to establish a competitive, efficient, transparent and reliable market for electricity where:

- (a) A level playing field exists among *WESM Participants*;
- (b) Trading of electricity is facilitated among *WESM Participants* within the spot market;
- (c) Third parties are granted access to the power system in accordance with the Act,
- (d) Prices are governed as far as practicable by commercial and market forces; and
- (e) Efficiency is encouraged.

### **1.3 MARKET OPERATOR AND SYSTEM OPERATOR**

#### **1.3.1 Responsibilities of the Market Operator**

1.3.1.1 The *Market Operator* shall, generally and non-restrictively, have the following functions and responsibilities:

- (a) Administer the operation of the *WESM* in accordance with the *WESM Rules*;
- (b) Allocate resources to enable it to operate and administer the *WESM* on a non-profit basis;
- (c) Determine the dispatch schedule of all facilities in accordance with the *WESM Rules*. Such schedule shall be submitted to the *System Operator*.
- (d) Monitor daily trading activities in the market.
- (e) Oversee transaction billing and *settlement* procedures; and
- (f) Maintain and *publish* a register of all *WESM Participants* and update and publish the register whenever a person or entity becomes or ceases to be a *WESM Participant*.



- 1.3.1.2 In performing clause 1.3.1.1 (d), *the Market Operator* shall:
- (a) Determine whether or not such trading is performed in accordance with the *WESM Rules*;
  - (b) Identify any significant variations in and between *trading intervals*; and
  - (c) Identify any apparent or suspected incidents of *anti- competitive* behavior by any *WESM Member*.
- 1.3.1.3 The *Market Operator* shall, in consultation with *WESM Participants*, develop guidelines as to what constitutes a significant variation.
- 1.3.1.4 If the *Market Operator* identifies any significant variations, the *Market Operator* shall, prepare and *publish* a report explaining the identified significant variations within ten *business days* from the cognizance thereof.
- 1.3.1.5 The *Market Operator* shall publish a copy of the completed report referred to in clause 1.3.1.4 in the market information website. [\(As amended by DOE DC No. 2019-12-0017 dated 04 December 2019\)](#)
- 1.3.1.6 Where the *WESM Rules* require the *Market Operator* to develop procedures, processes or systems, the *Market Operator* shall do so after taking into consideration the likely costs to *WESM Participants* of complying with those procedures or processes and of obtaining, installing or adopting those systems, as the case may be and consistent with the purpose set forth in clause 1.2.2, the *Market Operator* may recommend changes to these procedures in accordance with the Rule Change process set out in Chapter 8.
- 1.3.1.7 The *Market Operator* shall:
- (a) Comply with each of the requirements and obligations imposed on it under the *WESM Rules*, *Grid Code*, and other applicable laws or regulations;
  - (b) Implement the transitory provision specified in Chapter 10;

- (c) Perform those actions that are required to be taken prior to the *spot market commencement date*, as specified in the *WESM Rules* and clause 10.4 hereof; and
- (d) Develop appropriate cost recovery processes to cover its liabilities in the event of damage or injury, which may be caused by its acts or omissions in the faithful performance of its functions.

1.3.1.8 The *Market Operator* shall ensure that the *dispatch schedules* comply with any constraints notified by the *System Operator* in accordance with clause 6.6.1.

### 1.3.2 Market Operator Performance

1.3.2.1 In exercising its discretions and performing its obligations under the *WESM Rules*, the *Market Operator* shall:

- (a) Act in accordance with any standard of performance provided for by any statute, regulation or *authorization* condition to which the *Market Operator* is subject;
- (b) Act in a reasonable and prudent manner;
- (c) Act in good faith;
- (d) Take into consideration, act consistently with and use its reasonable endeavors to contribute towards the achievement of the *WESM* objectives; and
- (e) Ensure an audit trail of documentation that is fully adequate to substantiate and reconstruct all relevant actions performed.

1.3.2.2 Clause 1.3.2.1 does not prevent the *Market Operator* from performing any obligation under the *WESM Rules*.

1.3.2.3 The PEM Board shall develop performance standards which monitor and provide an indication of, the *Market Operator's* performance with respect to: [\(As amended by DOE DC No. 2010-03-0004 dated 21 March 2010\)](#)

- (a) The *Market Operator's* responsibilities under the Act, its Implementing Rules and Regulations (IRR), the *WESM Rules*, the Philippine Grid Code (the Grid

Code) and all other applicable laws, rules and regulations; [\(As amended by DOE DC No. 2010-03-0004 dated 21 March 2010\)](#)

- (b) The achievement of the objectives of the Act and the WESM; and [\(As amended by DOE DC No. 2010-03-0004 dated 21 March 2010\)](#)
- (c) The standards by which the *Market Operator* has been selected in accordance with terms of reference and/or the contract, of its selection as an Independent Market Operator. **(Added as per DOE DC. No. 2010-03-0004 dated 21 March 2010)**

Every year, the PEM Board shall publish a Market Operator Performance Report in accordance with herein clause. **(Added as per DOE DC. No. 2010-03-0004 dated 21 March 2010)**

The Market Operator's performance standards shall be reviewed and approved by the DOE. **(Added as per DOE DC. No. 2010-03-0004 dated 21 March 2010)**

### 1.3.3 Responsibilities of the System Operator

Under these Rules, the *System Operator* shall have the following functions and responsibilities:

- (a) Be responsible for and operate the *power system* in accordance with the *WESM Rules*, the *Grid Code* and any instruction issued by the *Market Operator* or the *ERC*.
- (b) Provide *central dispatch* to all generation facilities and loads connected, directly or indirectly, to the transmission system in accordance with the *dispatch schedule* submitted by the *Market Operator*.
- (c) Contribute towards the development of procedures, processes or systems, or to assist with any aspect of the operation of the *spot market*, in coordination with the *Market Operator*.
- (d) Implement the transitory provisions specified in Chapter 10; and
- (e) Perform those actions that are required to be taken prior to the *spot market commencement date* as specified in the *WESM Rules* and clause 10.4.

## 1.4 GOVERNANCE OF THE MARKET

The *WESM* governance is the process by which decisions are made and implemented within the market to ensure attainment of the *WESM* objectives under clause 1.2.5.

### 1.4.1 Philippine Electricity Market (PEM) Board

- 1.4.1.1 The *WESM* shall be governed, and its powers and functions exercised by the *PEM Board*.
- 1.4.1.2 In addition to the powers of a corporation under the Corporation Code and those stated herein, the *PEM Board* shall have all powers necessary, convenient and incidental to the performance of its functions and responsibilities in accordance with the *WESM Rules*.
- 1.4.1.3 In performing its functions, the *PEM Board* shall act in a reasonable, ethical and prudent manner, which facilitates an efficient, competitive, transparent and reliable *spot market* and is consistent with the *WESM* objectives.
- 1.4.1.4 The *PEM Board* may delegate any of its functions, obligations and powers to a committee or other entity in circumstances when it is reasonable, at its judgment, to do so.
- 1.4.1.5 The *PEM Board* shall conduct its business activity in accordance with its Articles and By-laws and other applicable laws, rules or regulations.

### 1.4.2 Composition of the PEM Board

- 1.4.2.1 Composition of the *PEM Board* shall be in accordance with the following criteria:
  - (a) Each sectors of the electric power industry shall be represented in the *PEM Board*;
  - (b) The number of representatives of each sector of the Philippine electric power industry should be such that no one sector of the industry can dominate proceedings or decision-making by the *PEM Board*; and be selected in such a way that deadlocks in decision-making processes should be avoided;

- (c) There should be sufficient independent directors appointed to the *PEM Board* to balance the number of directors representing the Philippines electric power industry; and
- (d) Be set out in detail in clause 1.4.2.4 so as to reflect and be consistent with the criteria stated herein.

1.4.2.2 If at any time the structure or size of the Philippine electric power industry or any sector within it changes so that the detailed composition of the *PEM Board* as set out in clause 1.4.2.4 is no longer reflective of or consistent with clause 1.4.2.1, clause 1.4.2.4 shall be amended in accordance with the Rules change process in chapter 8 and consequential changes to the *PEM Board* shall be made as soon as practicable so that the *PEM Board* reflects and is consistent with the principles set out in clause 1.4.2.1.

1.4.2.3 For the purposes of this clause 1.4.2 the electric power industry is comprised of the following sectors, viz.:

- (a) Distribution;
- (b) Generation;
- (c) Transmission;
- (d) Supply, sale and purchase by entities other than those which undertake activities in the distribution, generation and transmission sectors.

1.4.2.4 The *PEM Board* shall consist of:

- (a) One (1) Director representing the *Market Operator*,
- (b) One (1) Director representing the National Transmission Company(*TRANSCO*);
- (c) Four (4) *Directors* who are nominated by *WESM members* registered under clause 2.3.4 as *Distribution Utilities*, provided that:
  - (1) Two (2) of those *Directors* are representatives of and nominated by *Electric Cooperatives*; and

- (2) Two (2) of those *Directors* are representatives of and nominated by *Distribution Utilities* which are not *Electric Cooperatives*;
- (d) One (1) *Director* who is representative of and nominated by *Customers*, including but not limited to *Suppliers*;
- (e) Four (4) *Directors* who are representatives of and nominated by *Generation Companies* registered under clause 2.3.1;
- (f) Four (4) *Directors* who are:
  - (1) Independent of the Philippines electric power industry and the Government;
  - (2) Not eligible to be appointed as a representative under clauses 1.4.2.3 (a), (b), (c), or (d); and
  - (3) Nominated by *WESM members*;
- (g) A Chairperson who is one of the four independent *Directors* of the *PEM Board* and who is elected by a majority of all members of the *PEM Board*. The first Chairperson of the *PEM Board*, however, shall be the *DOE* Secretary in accordance with the Implementing Rules and Regulations of the *Act*.

All of the above representatives shall formally be appointed in accordance with clause 1.4.3.

1.4.2.5 A *Director* of the *PEM Board* may only serve on the *PEM Board* at any point in time as a representative of one category of representative under clause 1.4.2.4.

1.4.2.6 A company, firm or business, which is represented on the *PEM Board* in one category under clause 1.4.2.4, may not be represented by an individual in any other category under clause 1.4.2.4, regardless of whether the company, firm or business has interests in more than one sector of the Philippines electricity industry.

1.4.2.7 For the purposes of this clause 1.4.2, a person is deemed to be independent of the Philippine electric power industry if that person:

- (a) Is not a director, officer, employee, contractor, agent, manager, or shareholder of a *WESM member*; [\(As amended by DOE DC No. 2006-01-0001 dated 10 January 2006\)](#)
- (b) Is not a relative of a person, within the fourth civil degree of consanguinity or affinity, of a director, officer, manager, shareholder of a *WESM member*; [\(As amended by DOE DC No. 2006-01-0001 dated 10 January 2006\)](#)
- (c) Is not an officer, manager, director or shareholder, agent, employee or contractor of, or is not a person directly or indirectly, through one or more intermediaries controls, is controlled by a company, affiliate or any other entity related to or associated with a *WESM member*, where: [\(As amended by DOE DC No. 2006-01-0001 dated 10 January 2006\)](#)
  - (1) A related company or body, is a parent, holding company subsidiary or affiliate of the *WESM member*; and [\(As amended by DOE DC No. 2006-01-0001 dated 10 January 2006\)](#)
  - (2) An associate is a person who is director, officer, manager or shareholder of that related company or entity or a relative of such a person within the fourth civil degree of affinity or consanguinity; [\(As amended by DOE DC No. 2006-01-0001 dated 10 January 2006\)](#)
- (d) Has not been employed as an officer, or any supervisory or managerial capacity, by any electric power industry participant, or a company or body related to or associated with a *WESM member* within one year prior to the nomination date; and [\(As](#)

amended by DOE DC No. 2005-11-010 dated 11 November 2005 and further amended by DOE DC No. 2006-01-0001 dated 10 January 2006)

- (e) Agrees not to be employed by and does not accept employment with any electric power industry participant, or a company or body related to or associated with a *WESM member* (as defined in clause 1.4.2.7 (c)) within one year after the person ceases to be a Director.

The term shareholder as used in this Clause 1.4.2.7 (a), (b) and (c) shall be understood to exclude **(Added as per DOE DC No. 2006-01-001 dated 10 January 2006)**

- (a) A member of an Electric Cooperative who is not involved in the operation and management of the same Electric Cooperative; and
- (b) an End-user who is required to subscribe to, or to purchase, a share in a Distribution Utility as an incident to the provision of service by the same Distribution Utility; provided that the interest of the End- user be not more than the minimum required to avail of the Distribution Utility's services.

#### **1.4.3 Appointment to the PEM Board**

1.4.3.1 The *directors* of the *PEM Board* shall be appointed by the *DOE* in accordance with the required composition of the *PEM Board* as set out in clause 1.4.2, having regard to the expertise necessary for the *PEM Board* to carry out its functions and any relevant provisions of the Corporation Codes of the Philippines in relation to the appointment of directors.

1.4.3.2 With effect from the date on which the Independent *Market Operator* assumes the duties, functions and responsibilities of the *AGMO*, all new appointments or re-appointments of *Directors* and the *Chairperson* of the *PEM Board* are to be made in accordance with the required composition of the *PEM Board* as set out in clause 1.4.2.



#### 1.4.4 Voting Rights

1.4.4.1 Unless, expressly stated otherwise herein, provisions of the Corporation Code shall apply, provided that:

- (a) A majority of the total number of *Directors*, each having one vote, shall constitute a quorum for the transaction of business of the *PEM Board*.
- (b) Every decision of at least a majority of votes of *Directors* present in meeting shall be valid as a *PEM Board* act. If voting is equal, the *Chairperson* has a casting vote;
- (c) *Directors* cannot attend or vote by proxy at board meetings.

1.4.4.2 A *Director* or the sector or company that he represents, who:

- (a) Has a direct or indirect material pecuniary interest in a matter being considered, or is about to be considered by the *PEM Board*; and
- (b) The interest may, or may reasonably, be considered to be in conflict with the proper performance of the *Director's* duties in relation to the consideration of the matter, shall, as soon as practicable after the relevant facts become known, or ought reasonably to have been known, shall disclose the nature of the interest at a meeting of the *PEM Board*.

1.4.4.3 A disclosure under clause 1.4.4.2 shall be recorded in the minutes of the meeting and, unless the *PEM Board* otherwise determines, the *Director*.

- (a) Shall not be present during any deliberation of the *PEM Board* in relation to that matter; and
- (b) Shall not take part in any decision of the *PEM Board* in relation to that matter.

1.4.4.4 Notwithstanding clause 1.4.4.2, a *Director* appointed to the *PEM Board* as a representative of a sector of the Philippine electric power industry is permitted to take into consideration matters relevant to that sector of the industry

when considering and deciding on matters before the *PEM Board*.

#### **1.4.5 Obligations of the PEM Board**

##### **1.4.5.1 The PEM Board shall at all times:**

- (a) Fulfill its obligations under the *WESM Rules*;
- (b) Act in a manner that is consistent with the *WESM Rules*;
- (c) Perform all things reasonably necessary to contribute toward the achievement of the *WESM* and the *Act's* objectives;
- (d) Duly consider and take into account the provisions of the *WESM Rules*, when deciding whether or not to approve any matter for which the *PEM Board's* approval or agreement is required under the *WESM Rules*;
- (e) Promptly notify the *ERC* of all relevant information relating to potential breach with a recommendation on action to be taken; and
- (f) Perform all other things that the *PEM Board* considers reasonably necessary to promote the *WESM* objectives and improve the operation of the *WESM* as well as the *WESM Rules*.

##### **1.4.5.2 The following are the powers and duties of the PEM Board:**

- (a) Oversee and monitor the activities of the *Market Operator* and the *System operator* to ensure that they fulfill their responsibilities under the *WESM Rules*, and acting in a manner consistent with the *WESM Rules*;
- (b) Form Committees in accordance with clause 1.4.6;
- (c) Oversee and monitor the activities of the working groups established under clause 1.4.6 to ensure that they fulfill their responsibilities under and in accordance with the *WESM Rules*;

- (d) Oversee and monitor the activities of *WESM members* to ascertain and determine compliance or non-compliance with the *WESM Rules*; and
- (e) Oversee the process by which changes to the *WESM Rules* are proposed and made in accordance with clause 8.2 and other clauses contained herein.
- (f) Review and recommend changes to the *WESM Rules* and *Market Manuals*, as well as the adoption of new *Market Manuals*; and (Added as per DOE DC No.2006-11-0013 dated 09November 2006 and further amended by DOE DC No. DC2015-07-0013 dated 29 June 2015)
- (g) Issue resolutions or advisories on any matter related to the WESM. (Added as per DOE DC No.2006-11-0013 dated 09November 2006)

#### 1.4.6 Formation of Committees

The *PEM Board* shall form working groups and appoint qualified personnel who shall act as the following:

- (a) The *PEM Auditor* to conduct audits of the operation of the *spot market* and of the *Market Operator* in accordance with clause 1.5;
- (b) A *Market Surveillance Committee* to monitor and report on activities in the *spot market* in accordance with clause 1.6;
- (c) A *Technical Committee* to monitor and review technical matters under and in relation to the *WESM Rules*, the *Grid Code* and *Distribution Code* in accordance with clause 1.7;
- (d) A *Rules Change Committee* to assist the *PEM Board* and the *DOE* in relation to the revision and amendment of the *WESM Rules* in accordance with chapter 8, and the formulation, revision and amendment of market manuals, procedures and guidelines; and (As amended by DOE DC No. 2006-01-0001 dated 10 January 2006)
- (e) A *Dispute Resolution Administrator* to facilitate the resolution of the dispute between and among the parties within a specified period of time in accordance with the dispute resolution process under clause 7.3.(As amended by DOE DC No. 2006-01-0001

dated 10 January 2006 and further amended by DOE DC No. 2012-02-0001 dated 15 February 2012)

1.4.7.1 The *PEM Board* shall establish a Market Assessment Group which shall have the following powers and functions: (Added as per DOE DC No. 2006-01-0001 dated 10 January 2006)

- (a) Serve as the primary support unit of the *PEM Committees*;
- (b) Assist the *PEM Board* or the *Market Surveillance Committee* to establish the procedures for monitoring and assessing the performance of the *WESM* and the activities conducted by the *WESM members* with the end view of ensuring the effective functioning or overall efficiency of the *WESM*;
- (c) Regularly collect and process market monitoring data and indices;
- (d) Prepare periodic assessment reports on overall market performance and competitiveness;
- (e) Provide support and assistance to the different *PEM Committees* formed in accordance with clause 1.4.6 when requested and in a manner as deemed necessary by the respective Committee Chairmen; and
- (f) Perform such other tasks as assigned by the *PEM Board*, the *PEM Committees* or the President of the *Philippine Electricity Market Corporation*.

1.4.7.2 The Market Assessment Group shall be composed of an adequate number of personnel with the appropriate knowledge, experience and qualifications necessary to provide timely and effective support and assistance to the *PEM Committees*. (Added as per DOE DC. No. 2006-01-0001 dated 10 January 2006)

1.4.7.3 The Market Assessment Group shall be a unit under the Office of the President of the *PEMC*. (Added as per DOE DC. No. 2006-01-0001 dated 10 January 2006)

1.4.8 The *PEM Board* shall create an *Enforcement and Compliance Officer* to investigate alleged breaches of and enforce sanctions against the *System operator, Market Operator*, and other *WESM members*.

To assist the *Enforcement and Compliance Officer*, an Enforcement and Compliance Office shall be created to perform the following functions: (Added as per DOE DC. No. 2006-01-0001 dated 10 January 2006)

- (a) Serve as a technical and investigative support unit of the *Enforcement and Compliance Officer*;
- (b) Establish a mechanism to promote consultation and voluntary compliance of industry participants; and,
- (c) Continuously develop systems and procedures to deter breaches of the *WESM Rules* and further evolve enforcement of penalties consistent with the objectives of the *WESM*.

1.4.9 The members of the *PEM Board* are not liable for any loss or damage suffered or incurred by a Participant or any other person unless the *PEM Board* or any of its members, as the case may be, acted with malice, manifest partiality, bad faith, gross incompetence or gross negligence.

(Added as per DOE DC No. 2006-07-0010 dated 20 July 2006)

1.4.10 Notwithstanding clause 1.4.9, except for liability arising out of conduct involving malice, manifest partiality, bad faith, gross incompetence or gross negligence, if the *PEM Board* is or the members thereof are made liable to pay any amount for loss or damage suffered or incurred in the exercise of its functions under the *WESM Rules* and *WESM Manuals*, the *PEM Board* or the members thereof shall be indemnified for the full amount adjudged; and, for costs or expenses incurred by that person defending himself in the related proceedings.

(Added as per DOE DC No. 2006-07-0010 dated 20 July 2006)

## 1.5 THE PHILIPPINES ELECTRICITY MARKET AUDITOR

### 1.5.1 Appointment of the *PEM Auditor*

- 1.5.1.1 The *PEM Board* shall appoint a *PEM Auditor* with such skills and expertise, and on such terms and conditions, as the *PEM Board* reasonably deems to be appropriate, taking into consideration the nature of the obligations and functions of

the PEM Auditor, as set out in clause 1.5.2 and clause 5.2.6.  
(Added as per DOE DC. No. 2010-03-0004 dated 21 March 2010)

- 1.5.1.2 The PEM Auditor shall not currently or has not been employed within one year prior to the nomination date by any Philippine electric power industry participants.(Added as per DOE DC. No. 2010-03-0004 dated 21 March 2010)
- 1.5.1.3 The PEM Auditor must have sufficient relevant experience in one or more of the following fields:(Added as per DOE DC. No. 2010-03-0004 dated 21 March 2010)
- (a) Power industry;
  - (b) Economics;
  - (c) Risk management;
  - (d) Information technology and information systems; and/or
  - (e) In such other fields as may be relevant to and required in the performance of audits.

#### **1.5.2 Responsibilities of the Auditor**

(Amended as per DOE DC. No. 2010-03-0004 dated 21 March 2010)

The *PEM* Auditor shall:

- (a) Conduct annual audits of the *Market Operator* and the settlement system and any other procedures, persons, systems or other matters relevant to the *spot market*,
- (b) Test and check any new items or versions of software provided by the *Market Operator* for use by *WESM members*;
- (c) Review any procedures and practices which are covered by the *WESM Rules* at the direction of the *PEM Board*;
- (d) Recommend changes to the *WESM Rules* where the *PEM Auditor* detects deficiencies as a consequence of an audit, review, test, check or other form of review; and
- (e) Publish on the market information website the results of any findings and recommendations under this clause 1.5.1.

### 1.5.3 Review of WESM Rules

The *PEM Auditor* may appoint a qualified team of auditors to carry out a review of the scheduling and *central dispatch* processes under the *WESM Rules*. [\(Added as per DOE DC. No. 2010-03-0004 dated 21 March 2010\)](#)

## 1.6 MARKET SURVEILLANCE COMMITTEE

### 1.6.1 Appointment to the Market Surveillance Committee

1.6.1.1 The *PEM Board* shall appoint persons to form a *Market Surveillance Committee* in such number and with such skills and expertise, and on such terms and conditions, as the *PEM Board* reasonably deems to be appropriate, taking into consideration the nature of the obligations and functions of the *Market Surveillance Committee*, as set out in clause 1.6.2.

1.6.1.2 The members of the *Market Surveillance Committee* shall be independent of the Philippine electric power industry and the Government.

### 1.6.2 Responsibilities of the Market Surveillance Committee

The Market Surveillance Committee shall from time to time as necessary and appropriate, and whenever the *PEM Board* directs:

- (a) Monitor activities conducted by WESM Participants in the *spot market*;
- (b) Prepare periodic reports, which outline:
  - (1) Activities of WESM Participants in the *spot market*;
  - (2) Apparent or suspected incidents of anti-competitive behavior by any WESM Participant; and
  - (3) Matters concerning the operation of the *spot market* generally, which reports shall be submitted to the *PEM Board*, the DOE and ERC upon completion;
- (c) Deleted and intentionally left blank [\(As per DOE DC No. 2005-11-010 dated 11 November 2005\)](#)
- (d) Assist the PEM Board or the *Enforcement and Compliance Officer* to investigate and gather evidence of: [\(As Amended by DOE DC No. 2006-01-001 dated 10 January 2006\)](#)

- (1) Unusual or suspicious behavior or activities of *WESM members* in the spot market;
  - (2) Suspected or alleged breaches of the *WESM Rules* by *WESM Members*; and
  - (3) Suspected or alleged *anti-competitive behavior*,
- (e) From time to time if the *Market Surveillance Committee* in its discretion deems necessary or appropriate, propose amendments to the *WESM Rules* in accordance with chapter 8 with a view to:
- (1) Improving the efficiency and the effectiveness of the operation of the *WESM*; and
  - (2) Improving or enhancing the prospects for the achievement of the *WESM* objectives;
- (f) Assist the *Rules Change Committee* in relation to its assessment of proposals to amend the *WESM Rules* under chapter 8.

#### **1.6.3 Design and Promulgation of Penalties**

**(Added as per DOE DC No.2006-11-0013 dated 09November 2006)**

The Market Surveillance Committee (MSC) will design and promulgate the penalty levels and the appropriate range of penalties, for breaches and non-compliance of *WESM Rules*, anti-competitive behavior, and abuse of market power.

The MSC will conduct consultations with the Rules Change Committee and the PEM Board in its formulation of the penalty levels and appropriate range of penalties.

The penalty scheme and any changes made by the MSC will be published in the Market Information Website and a copy furnished to the PEM Board and the Rules of Change Committee. The MSC shall specify the date when the penalties become effective, which shall in no case be earlier than the date of its publication.

The penalty scheme will be reviewed by the MSC annually.

The amount of the financial penalty shall be determined in consideration of:

- 1. the circumstances in which the Breach occurred;
- 2. the severity of the Breach;
- 3. the duration of the Breach and the rate of recurrence;



4. the extent to which the Breach was caused by inadvertence, negligence, or its deliberateness;
5. the actions of the party upon becoming aware of the Breach;
6. whether the party disclosed the matter to the MSC or ECO on its own accord or only when prompted to do so;
7. whether the party complied with all preventive actions remedial measures prescribed by the ECO;
8. any benefit that the party obtained or expected to obtain as a result of the Breach;
9. the impact of the Breach on other WESM Members and the WESM as a whole; and
10. other factors as the eco or PEM Board considers appropriate.

## 1.7 TECHNICAL COMMITTEE

### 1.7.1 Appointment to the Technical Committee

The *PEM Board* shall appoint persons to form a Technical Committee, taking into consideration the nature of the obligations and functions of the Technical Committee, as set out in clause 1.7.2.

### 1.7.2 Responsibilities of the Technical Committee

The *Technical Committee*, from time to time as necessary and appropriate and whenever the *PEM Board* directs, shall:

- (a) Monitor technical matters relating to the operation of the *spot market*; [\(As amended by DOE DC No. 2016-04-0003 dated 12 April 2016\)](#)
- (b) Provide a report to the *PEM Board* on any matter of a technical nature relating to any *WESM member* which in the reasonable opinion of the Technical Committee, causes:
  - (1) That *WESM Participant* to be unable to comply with the *WESM Rules*; or
  - (2) Unintended or distortionary effects to the operation of the *WESM*;
- (c) Assist the *PEM Board* by providing expertise in relation to:
  - (1) Information technology;
  - (2) *Metering* technology and *metering data*; and

- (3) Any other matter of a technical nature relating to the *spot market*;
- (d) From time to time if the Technical Committee in its discretion deems necessary or appropriate, propose amendments to the *WESM Rules* in relation to technical matters, in accordance with chapter 8 with a view to:
  - (1) Improving the efficiency and the effectiveness of the operation of the *spot market*; and
  - (2) Improving or enhancing the prospects for the achievement of the *WESM* objectives; and
- (e) Assist the *Rules Change Committee* in relation to its assessment of proposals of a technical nature to amend the *WESM Rules* under chapter 8.

## **1.8 ENFORCEABILITY AND AMENDMENT OF THESE RULES**

### **1.8.1 Enforceability**

These Rules are enforceable in accordance with chapter 7.

### **1.8.2 Changes to the WESM Rules**

Amendments to the *WESM Rules* shall be made in accordance with chapter 8.

## **1.9 PUBLIC CONSULTATION PROCEDURES**

Where the *WESM Rules* identify matters that are subject to review or consultation in accordance with the public consultation procedures, the *PEM Board* shall ensure that, as a minimum, the following procedures are followed:

- (a) The *PEM Board* shall publish in the market information website particulars of the matter to *WESM Participants* and other interested persons, inviting written submissions concerning the matter to be made by a specified date;

[\(As amended by DOE DC No. 2005-11-010 dated 11 November 2005\)](#)

- (b) Where, in the reasonable opinion of the *PEM Board*, there is a diversity of views expressed in the written submissions received under clause 1.9(a), the *PEM Board* shall invite WESM Participants and other interested persons to a meeting or meetings at which those views may be presented and discussed. Non-members, who may be deemed interested persons may be invited to attend subject to the discretion of the *PEM Board*;
- (c) Following its consideration of the matter under consultation, the *PEM Board* shall prepare a report setting out:
  - (1) The matter under consultation;
  - (2) The *PEM Board's* decision in relation to the matter;
  - (3) The reasons for the *PEM Board's* decision;
  - (4) The findings on material questions of fact, referring to evidence or other material on which those findings were based; and
  - (5) The procedures followed in considering the matter.
- (d) The *PEM Board* shall provide a copy of the report referred to in clause 1.9(c) to:
  - (1) The *DOE* and the *ERC* on completion of the report; and
  - (2) *WESM Participants* and interested persons on request.

## CHAPTER 2

### REGISTRATION

#### 2.1 SCOPE OF CHAPTER 2

This chapter 2 sets out:

- (a) The categories of *WESM members*;
- (b) The procedure for registration as a *WESM member*, including registration as an Intending *WESM member*,
- (c) The procedure for ceasing to be a *WESM member*,
- (d) The procedure for suspension of a *WESM member* and liability of Deregistered *WESM members*; and
- (e) The procedure for recovery of the *Market Operator's* costs and expenses.

#### 2.2 GENERAL

##### 2.2.1 Scope of Application

Other than the *Market Operator*, the *WESM Rules* apply to:

- (a) *System operator*,
- (b) *Generation Companies*;
- (c) *Ancillary Services Provider*,
- (d) *Distribution Utilities*;
- (e) *Suppliers*;
- (f) *Metering Services Providers*;
- (g) Bulk consumers/End-users; and
- (h) Other similar entities authorized by the ERC to become members of the *WESM*.

All of which are *WESM Participants*.

##### 2.2.2 Registration

###### 2.2.2.1 Trading Participants:

- (a) Shall register with the *Market Operator* under clauses 2.3.1, 2.3.2 or 2.4 as either a *Direct WESM member* or an *Indirect WESM member*, and
- (b) Are bound by the *WESM Rules* upon registration with the *Market Operator*.

- 2.2.2.2 *Network Service Providers* registered by the *Market Operator* under clause 2.3.4 are bound by the *WESM Rules*.
- 2.2.2.3 *Ancillary Services Providers*:
- (a) Shall register with the *Market Operator* under clauses 2.3.5 or 2.4 as either a *Direct WESM member* or an *Indirect WESM member*, and
  - (b) Are bound by the *WESM Rules* upon registration with the *Market Operator*.
- 2.2.2.4 *Metering Services Providers* registered by the *Market Operator* under clause 2.3.6 are bound by the *WESM Rules*.
- 2.2.2.5 A *System operator* registered by the *Market Operator* under clause 2.3.7 is bound by the *WESM Rules*. Other similar entities shall secure authorization from *ERC* to become eligible as members of the *WESM*.

### **2.2.3 Registration in Multiple Categories**

If a person or an entity undertakes activities in two or more of the categories listed in clause 2.2.1, that person or entity shall register in each of those categories in accordance with the procedures in clause 2.5.

### **2.2.4 WESM members**

- 2.2.4.1 A *WESM member* is person or an entity registered with the *Market Operator* in any one or more of the above categories, whether registered as a *Direct WESM member* or an *Indirect WESM member*, if applicable.
- 2.2.4.2 No person or entity shall be allowed to inject or withdraw electricity from the grid unless that entity or person is a registered member of the *WESM*. 2.2.4.3.
- 2.2.4.3 An *Intending Participant* is not considered to be a *WESM member*.

## **2.3 CATEGORIES OF WESM MEMBER**

### **2.3.1 Generation Company**

- 2.3.1.1 A *Generation Company* with facilities connected to a *transmission or distribution system* shall register with the *Market Operator* as a *WESM member*.

2.3.1.2 To register as a *WESM member*, a *Generation Company* shall:

- (a) Classify each of the *generating units* which form part of the *generating system* it owns, operates or controls or from which it otherwise sources electricity as either a:
  - (i) *scheduled generating unit*; or
  - (ii) *non-scheduled generating unit*; or
  - (iii) *must dispatch generating unit*; or
  - (iv) *priority dispatch generating unit*;

[\(As amended by DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

- (b) Satisfy the *Market Operator* that those *generating units* and the connection points for those *generating units* comply with the relevant technical requirements set out in the *WESM Rules*, the *Grid Code* and *Distribution Code*; and
- (c) Satisfy the membership criteria specified in clause 2.3.3.4.

2.3.1.3 Subject to Clauses 2.3.1.5 and 2.3.1.6, a *generating unit* or a group of *generating units* connected at a common connection point with a nameplate rating or a combined nameplate rating of greater than or equal to one tenth of one percent ( $> 0.1\%$ ) of the peak load in a particular reserve region shall be classified as a *scheduled generating unit*.

[\(As amended by DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

2.3.1.4 Subject to Clauses 2.3.1.5 and 2.3.1.6, a *generating unit* or a group of *generating units* connected at a common connection point with a nameplate rating or a combined nameplate rating of less than one tenth of one percent ( $< 0.1\%$ ) of the peak load in a particular reserve region, or less than ten percent ( $< 10\%$ ) of the size of interconnection

facilities, whichever is lower, shall be classified as a *non-scheduled generating unit*, but may at its option be classified as a *scheduled generating unit*.

[\(As amended by DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

- 2.3.1.5 A *generating unit* or group of *generating units* connected at a common connection point that is *intermittent renewable energy resource*-based, whether or not under the *Feed-In Tariff system*, such as wind, solar, run-of-river hydro or ocean energy with the corresponding *DOE* certification shall be classified as a *must dispatch generating unit*, but may at its option be classified as a *scheduled generating unit* or a *non-scheduled generating unit* subject to Clause 2.3.1.4.

[\(As amended by DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

- 2.3.1.6 A *generating unit* or group of *generating units* connected at a common connection point that uses biomass as fuel, that is under the *Feed-In Tariff system*, with the corresponding *Feed-In Tariff Certificate of Compliance* shall be classified as a *priority dispatch generating unit*, but may at its option be classified as a *scheduled generating unit* or a *non-scheduled generating unit* subject to Clause 2.3.1.4.

[\(Added pursuant to DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

- 2.3.1.7 A *Generation Company* is taken to be a *Scheduled Generation Company* only so far as its activities relate to any *scheduled generating unit*.

[\(As amended by DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

- 2.3.1.8 A *Generation Company* is required to operate *scheduled generating units* and *priority dispatch generating units* in accordance with the scheduling and dispatch

procedures described in Chapter 3, within the *dispatch tolerances* specified in accordance with Clause 3.8.7.

[\(As amended by DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

### **2.3.2 Customer**

2.3.2.1 A person or an entity that engages in the activity of purchasing electricity supplied through the *transmission system* or a *distribution System* to a *connection point* may register with the *Market Operator* as a *Customer*.

2.3.2.2 To register as a *Customer*, a person or an entity shall satisfy the membership criteria specified in clause 2.3.3.4.

2.3.2.3 A *Customer* shall comply with the scheduling and dispatch procedures described in chapter 3.

### **2.3.3 Trading Participant**

2.3.3.1 A *Trading Participant* is a person or an entity registered with the *Market Operator* as either:

(a) A *Customer*; or

(b) A *Generation Company*,

and may be registered either as a *Direct WESM member* or an *Indirect WESM member* in respect of its activities relating to trading in the *spot market* subject to compliance with the relevant prerequisites set out in clauses 2.3 and 2.4.

2.3.3.2 Subject to clauses 2.3.3.3 and 2.3.3.4, a *Trading Participant* registered as a *Direct WESM member* is permitted to participate in the *spot market* for each category in which that *Trading Participant* is registered.

2.3.3.3 A person or an entity shall not undertake activities or participate in or in relation to the *spot market* unless the person or entity is a *Direct WESM member* registered as a *Customer* or *Generation Company* with the *Market Operator*.

#### **2.3.3.4 Membership Criteria**

A person or an entity is not eligible to be registered as a *Trading Participant* unless that person or entity:



- (a) Is a resident in, or is permanently established in, the Philippines;
- (b) Is not under external administration (as defined in the [Philippines Companies Act/Code]) or under a similar form of administration under any laws applicable to that person or entity in any jurisdiction;
- (c) Is not immune from suit in respect of the obligations of a *WESM member* under the *WESM Rules*;
- (d) Is capable of being sued in its own name in a court of the Philippines; and
- (e) Satisfies the *prudential requirements*.

2.3.3.5 Prior to registration of a *Trading Participant* in respect of a *scheduled generating unit* or a *priority dispatch generating unit* or *scheduled load facility*, an *Intending WESM Member* may seek a ruling from the *System Operator* with respect to the *dispatch tolerances* to be applied.

[\(As amended by DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

2.3.3.6 If no prior ruling is sought under clause 2.3.3.5, the *System operator* shall make a ruling with respect to *dispatch tolerances* upon registration of that *Trading Participant*.

2.3.3.7 The *System operator* may, at any time, review any ruling made under clause 2.3.3.5 or 2.3.3.6 in the light of further information or experience

2.3.3.8 A *Generation Company* may appeal to the *PEM Board* in respect of a ruling provided under Clauses 2.3.3.5, 2.3.3.6 or 2.3.3.7 that is relevant to that person or entity.

[\(As amended by DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

2.3.3.9 If at any time a *Trading Participant* ceases to be eligible to be registered as a *Trading Participants* accordance with clause 2.3.3.4, that *Trading Participant* shall inform the *Market Operator* accordingly and, as soon as practicable

after the *Market Operator* becomes aware that a *Trading Participant* is no longer eligible to be registered, the *Market Operator* shall issue a suspension notice in respect of that *Trading Participant* in accordance with clause 3.15.7.

#### **2.3.4 Network Service Provider**

2.3.4.1 The *TRANSCO* or the *Grid Owner* as defined in the *Grid Code* shall register with the *Market Operator* as a *Network Service Provider*.

2.3.4.2 A *Distribution Utility* shall register with the *Market Operator* as a *Network Service Provider*.

#### **2.3.5 Ancillary Services Provider**

2.3.5.1 A *Trading Participant* or *Network Service Provider* providing *ancillary services* in accordance with clause 3.3:

(a) Shall register with the *Market Operator* as an *Ancillary Services Providers* respect of:

- (1) Each *reserve facility* it operates;
- (2) Each *reserve category* it intends to provide from the *reserve facilities* registered under clause 2.3.5.1 (a) (1) and as authorized by the *System operator* under clause 2.3.5.3; and
- (3) The *reserve facility category* applicable to the *reserves* intended to be provided by each of the *reserve facilities* registered under clause 2.3.5.1 (a) (1) and as authorized by the *System operator* under clause 2.3.5.3.

(b) May be registered either as a *Direct WESM member* or an *Indirect WESM member* in respect of its activities relating to the provision of *ancillary services*, subject to satisfying the relevant prerequisites set out in clause 2.3.

2.3.5.2 Only an *Ancillary Services Provider* registered as a *Direct WESM member* may enter into an *ancillary services* agreement with the *System operator* under clause 3.3.3.

2.3.5.3 Prior to the registration of a *Trading Participant* or a *Network Services Provider* as an *Ancillary Services Provider* eligible to provide *reserves* in accordance with clause 2.3.5.1, the *System operator* shall:

- (a) Certify that the relevant *reserve facility* is capable of providing the *reserve category* for which registration is sought, in accordance with the *Grid Code* and *Distribution Code*;
- (b) Classify each *reserve facility* for which registration is sought into a *reserve facility category* in respect of each *reserve category* that is intended to be provided by that *reserve facility*;
- (c) Determine to which *reserve region* each *reserve facility* for which registration is sought may belong, depending on the ability of that *reserve facility* to apply *reserve* to meet the corresponding locationally specific *reserve requirement*; and
- (d) Provide written authorization to the *Market Operator* which sets out the relevant information determined under clauses 2.3.5.3 (a), (b) and (c).

2.3.5.4 A *Trading Participant* and a *Network Services Provider* shall not be paid or compensated for providing ancillary services or reserves unless:

- (a) Registered as an *Ancillary Services Provider* in respect of the relevant facility in accordance with clause 2.3.5.1; or
- (b) Registered as an *Ancillary Services Provider* for provision of the relevant *reserve category* in that relevant *reserve region* in accordance with clause 2.3.5.1.

## **2.3.6 Metering Services Provider**

2.3.6.1 A person or an entity intending to provide *metering services* in accordance with chapter 4 shall secure an authorization from the *ERC*.

2.3.6.2 A person or an entity authorized by the *ERC* to provide *metering services* shall register with the *Market Operator* as a *Metering Services Provider*.

2.3.6.3 Initially, the *TRANSCO* shall provide the services required of the *Metering Services Provider*, but this will not exclude other entities from doing the same, provided they meet the requirements of chapter 4.

#### 2.3.7 System operator

The *System operator* of the *TRANSCO* shall register with the *Market Operator* as a *System operator*.

### 2.4 INDIRECT WESM MEMBERS

A person or an entity who wishes to indirectly trade in the *spot market* shall register with the *Market Operator* as an *Indirect WESM member*. However, an *Indirect WESM member* may only transact through a direct *WESM member*.

### 2.5 APPLICATIONS FOR REGISTRATION

#### 2.5.1 Application process

An application for registration shall be submitted to the *Market Operator* in the form prescribed by the *Market Operator* and shall be accompanied by a registration fee *published* by the *Market Operator*.

#### 2.5.2 Prerequisites for applicants

If an applicant applies for registration either as a *Direct WESM member* or as an *Indirect WESM member* that applicant shall:

- (a) Have an appropriate and current authorization required under the *Act*; and
- (b) Satisfy the relevant requirements of clause 2.3, for *Direct WESM members*.

#### 2.5.3 Further information to assess application

2.5.3.1 Within five *Working Days* of receiving an application, the *Market Operator* shall advise the applicant of any further information which the *Market Operator* reasonably considers to be required to enable the *Market Operator* to properly assess the application. (As amended by DOE DC No. 2013-03-0005 dated 22 March 2013)

2.5.3.2 If the *Market Operator* has not received any further information as required under clause 2.5.3.1 within the next fifteen *Working Days*, the *Market Operator* may treat the application as withdrawn. [\(As amended by DOE DC No. 2013-03-0005 dated 22 March 2013\)](#)

2.5.3.3 If the *Market Operator* incurs additional costs as a result of requesting and assessing any further information required under clause 2.5.3.1, the *Market Operator* may require the applicant to pay the actual amount incurred to cover those additional costs.

#### **2.5.4 Approval of applications**

If an application for registration has been received by the *Market Operator* and:

- (a) All relevant prerequisites have been satisfied;
- (b) The applicant is eligible to be registered in the category or categories in which registration is sought; and
- (c) The *Market Operator* reasonably considers that the applicant will be able to comply and maintain compliance with the *WESM Rules*, Then subject to clause 2.5.5, the *Market Operator* shall approve the application and register the applicant in that category or categories.

#### **2.5.5 Notice of approval of application**

2.5.5.1 If the *Market Operator* approves an application under clause 2.5.4, the *Market Operator* shall send written notice of approval to the applicant within fifteen *Working Days* from receipt of: [\(As amended by DOE DC No. 2013-03-0005 dated 22 March 2013\)](#)

- (a) The application under clause 2.5.1; or
- (b) The additional information or fees, if further information or fees are required under clause 2.5.3.

2.5.5.2 The registration of the applicant shall take effect on the date specified in the notice of approval which shall be a date not more than seven *Working Days* after the date on which the *Market Operator* sends the notice of approval

under clause 2.5.5.1. (As amended by DOE DC No. 2013-03-0005 dated 22 March 2013)

## **2.5.6 Notice of non-approval of application**

2.5.6.1 If the *Market Operator* does not approve an application for registration, the *Market Operator* shall send within fifteen (15) *Working Days* written notice to the applicant advising the applicant that the application is not approved and the *Market Operator* shall give reasons for its decision. (As amended by DOE DC No. 2012-08-008 dated 13 August 2012) (As further amended by DOE DC No. 2013-03-0005 dated 22 March 2013)

2.5.6.2 The *DOE* and the *ERC* shall, in all instances, be provided a copy of such written notice within five (5) *Working Days* after issuance to the applicant. (As amended by DOE DC No. 2012-08-008 dated 13 August 2012) (As further amended by DOE DC No. 2013-03-0005 dated 22 March 2013)

2.5.6.3 The applicant, upon being notified by the *Market Operator* that its application has been disapproved under Clause 2.5.6.1 and the grounds therefor, may, at its option, rectify the defects and re-submit a corrected application. (As amended by DOE DC No. 2017-04-0004 dated 20 April 2017)

## **2.5.7 Market Operator to maintain a list**

The *Market Operator* shall *publish* and keep current a list of registered *WESM members*, the categories in which they are registered and details of the current status of applications to become a *WESM member* in accordance with clause 5.2.3.

## **2.6 CEASING TO BE A WESM MEMBER**

### **2.6.1 Notifying the Market Operator**

If a person or an entity wishes to cease to be registered:

- (a) In any one or more categories of *WESM member* set out in clause 2.3; or

- (b) As an Indirect *WESM member*, it shall notify the *Market Operator* in writing.

#### **2.6.2 Date of cessation**

In a notice given under clause 2.6.1, a *WESM member* shall specify:

- (a) A date upon which it wishes to cease to be registered, which date should not be less than thirty (30) *business days* after the date on which the *WESM member* sends the notice; and
- (b) The category or categories in which the *WESM members* no longer wishes to be registered.

#### **2.6.3 Notifying all WESM members**

On receipt of a notice under clause 2.6.1, the *Market Operator* shall notify all *WESM members* that the person or entity who gave the notice shall cease to be registered as a *WESM member* in the relevant category and the date on which that will occur.

#### **2.6.4 Market Operator notification of cessation**

If the *Market Operator* provides notice under clause 2.6.3 that a *WESM member* shall cease to be registered in the relevant category on a specified date, that *WESM member* shall cease all activities relevant to that category that it was permitted to undertake before it ceased to be registered as a *WESM member* in that relevant category, including but not limited to trading in the *spot market* if that *WESM member* ceases to be registered as a *Trading Participant*, from that date.

### **2.7 SUSPENSION**

#### **2.7.1 Grounds for Suspension**

The *Market Operator* may issue a suspension notice to *WESM Participants* based on the following grounds:

- (a) Breach of the *WESM Rules* subject to clause 7.2.2; and
- (b) Payment default subject to 3.14.11.

#### **2.7.2 Effect of a suspension notice**

If a *Trading Participant* who is either a *Direct WESM member* or an *Indirect WESM member* receives a suspension notice from the *Market Operator* in accordance with any provision of the *WESM Rules*, that *Trading Participant* is suspended from participation in the *spot market* unless and

until the *Market Operator* declares the suspension notice to be revoked in accordance with clause 3.15.7.

## **2.8 DEREGISTRATION**

### **2.8.1 Deregistration of a Trading Participant**

2.8.1.1 If the *Market Operator* issues a deregistration notice to any *Trading Participant* under the deregistration process, the *Trading Participant* is deemed to be deregistered as a *Trading Participant* from the date specified in the deregistration notice.

2.8.1.2 A *Trading Participant* who is deregistered shall not be allowed to re-register within a certain prescriptive period and until it has demonstrated that such infraction will not occur again.

### **2.8.2 Obligations and liabilities following deregistration**

Notwithstanding that a person or an entity is no longer registered as a *WESM member* for any reason including ceasing to be a *WESM member* or being suspended from the *spot market*, that person's or entity's obligations and liabilities which arose under the *WESM Rules* prior to the date on which that person or entity was deregistered remain unaffected by the deregistration.

### **2.8.3 Deregistration procedure development**

Prior to *spot market commencement date*, the *Market Operator* shall develop procedures for deregistration including grounds for deregistration and prescriptive period referred to in clause 2.8.1.2 to be approved by the *PEM Board*.

## **2.9 INTENDING WESM MEMBERS**

### **2.9.1 Registration as an Intending WESM member**

Any person or entity who intends to register as a *WESM member* may register with the *Market Operator* as an Intending *WESM member* if that person or entity can satisfy the *Market Operator* of its bona fide intent to commence an activity, within a reasonable timeframe, which would



entitle or require that person or entity to be registered as a *WESM member* once that activity is commenced.

#### **2.9.2 Applications for registration**

Applications for registration as an *Intending WESM member* shall be submitted to the *Market Operator* in the form prescribed by the *Market Operator* and shall be accompanied by the registration fee (if any) published by the *Market Operator* from time to time.

#### **2.9.3 Notice of cessation of registration**

The *Market Operator* may from time to time require an *Intending WESM member* to satisfy the *Market Operator* that it continues to meet the criteria for registration in clause 2.9.1 and if the *Intending WESM member* is unable to satisfy the *Market Operator* that it remains entitled to be registered as an *intending WESM member*, then the *Market Operator* shall send written notice to the relevant *Intending WESM member* to advise the relevant *Intending WESM member* that it will cease to be registered as an *Intending WESM member* on the date specified by the *Market Operator* in that notice.

#### **2.9.4 Activities of Intending WESM members**

An *Intending WESM member* is taken to be an *Intending WESM member* only insofar as its activities relate to its intention to commence an activity that would entitle or require that person or entity to be registered as a *WESM member*.

#### **2.9.5 Rights and obligations of Intending WESM members**

To the extent relevant and applicable, an *Intending WESM member* acquires only the following rights and obligations under the *WESM Rules*:

- (a) The right to obtain information that would be made accessible to *WESM members* in the category in which the *Intending WESM member* intends to be registered;
- (b) The right to refer matters for resolution according to the dispute resolution process in clause 7.3; and
- (c) The obligation to keep certain information confidential in accordance with clause 5.3.

## **2.10 MARKET FEES**

### **2.10.1 Imposing Market Fees**

The cost of administering and operating the WESM shall be recovered by the *Market Operator* through a charge imposed on all *WESM members* or *WESM transactions*, provided such charge shall be filed by the *Market Operator* with the *ERC* for approval, consistent with the *Act*.

### **2.10.2 Structure and Level of Market Fees**

2.10.2.1 Prior to the commencement of the *spot market*, the *Market Operator* shall develop the structure and level of market fees in consultation with *WESM Participants*.

2.10.2.2 In developing the structure and level of *market fees*, the *Market Operator* shall take into consideration the manner in which it intends to charge each category of *WESM member*, and whether that charging proposal is reasonable given the relative involvement of each category of *WESM member* in the *spot market*.

2.10.2.3 Upon the approval of the *PEM Board*, the *Market Operator* shall file the proposed structure and level of *market fees* with the *ERC* for approval.

### **2.10.3 Guiding Principles**

The structure of *market fees* should, to the extent practicable, be consistent with the following principles:

- (a) The structure of *market fees* should be transparent;
- (b) Market fees shall consider the budgeted revenue requirements for the *Market Operator* and the *PEM Board* determined under clause 2.11; and
- (c) The structure and level of *market fees* should not favor or discriminate against a category or categories of *WESM member*.

### **2.10.4 Components of Market Fees**

The components of the *market fees* shall include, but are not limited to:

- (a) Registration fees, comprising an annual fee payable by each *WESM member* for the category or categories in which they are registered;

- (b) *Metering fees* to recover the *Market Operator's* budgeted revenue requirements for the collection, storage and processing of *metering data*;
- (c) Billing and *settlement* fees, to recover the *Market Operator's* budgeted revenue requirements for providing the billing and *settlements* service, as described in chapter 3;
- (d) Administration fees, to recover the remainder of the *Market Operator's* budgeted revenue requirements not covered by (a), (b), (c) and (d); and
- (e) Costs reasonably incurred by the *PEM Board* and the committees and working groups that the *PEM Board* appoints under the *WESM Rules*.

#### **2.10.5 Publication of Market Fees Structure**

Upon the approval of *ERC*, the *Market Operator* shall *publish* the structure and level of *market fees* and the methods used in determining the structure prior to commencement of the *spot market*.

## **2.11 BUDGET**

### **2.11.1 Submission of annual statements and other documents**

- 2.11.1.1 No later than four months prior to the start of each financial year, the *Market Operator* shall submit an annual statement of expected income and expenses to the *PEM Board* for approval, setting out, among others, the following:
- (a) Budgeted expenditures and revenues for the next *financial year* for the *Market Operator* and the *PEM Board*;
  - (b) Amount of market fees proposed to be charged for the next *financial year*, and
  - (c) Method used in determining the amount of proposed *market fees* in respect of each of the *Market Operator's* activities and the *PEM Board's* activities referred to in clause 2.10.4 including but not limited to the *Market Operator's* estimated costs and expenses associated with those activities.

- 2.11.1.2 The *Market Operator* shall submit to the *ERC* a copy of the annual statement approved by the *PEM Board* under clause 2.11.1.1.

## 2.12 FINANCIAL YEAR REPORT

### 2.12.1 Market Operator to prepare report

- 2.12.1.1 No later than four months after the end of each *financial year*, the *Market Operator* shall prepare an annual report, setting out, among others, the following:
- (a) The budgeted and actual expenditures and revenues of the *Market Operator* and the *PEM Board*, clearly categorizing each group of expenses and revenues into the key functions and activities undertaken by the *Market Operator* and the *PEM Board*; and
  - (b) An explanation of any significant variation between budgeted and actual expenditures and revenues, in respect of the previous *financial year*.
- 2.12.1.2 The annual report prepared under clause 2.12.1.1 shall be duly certified by an independent auditor and approved by the *PEM Board*.

### 2.12.2 Providing copy of report

The *Market Operator* shall provide a copy of the annual report prepared under clause 2.12.1 to:

- (a) The *ERC* and the *DOE* on completion of the report;
- (b) The *PEM Board*; and
- (c) *WESM members* and interested entities on request.

## CHAPTER 3

### THE MARKET

#### 3.1 SCOPE OF CHAPTER 3

This chapter 3 sets out the rules which govern operation of the *spot market*, and related matters, including but not limited to:

- (a) The definition of the *market network model*, *pricing zones*, *reserve categories* and *reserve regions*, *trading interval* and *timetable*;
- (b) The procedures to be followed by *WESM members* in submitting offers, *demand bids* and data into the *spot market*;
- (c) The structure and use of the *market dispatch optimization model*;
- (d) The procedures for provision of *ancillary services* and for determining payment for those services;
- (e) The procedures for preparing *week ahead projections* and *day ahead projections*;
- (f) The procedures for *scheduling* and *dispatch*, *load shedding* and *excess generation*;
- (g) The determination of *market prices*;
- (h) The requirement relating to the publication of information, in accordance with the *timetable*;
- (i) The procedures for determining *settlements amounts* and for paying and receiving *settlements*;
- (j) The determination of *prudential requirements*; and
- (k) The procedures for supporting *transmission rights*.

#### 3.2 MARKET NETWORK MODEL, TRADING NODES, AND PRICING ZONES

The *price determination methodology* contained in this *WESM Rules* shall be subject to the approval of *ERC*.

##### 3.2.1 Market Network Model

- 3.2.1.1 The *Market Operator* shall maintain and *publish* a *market network model*, which will be used for the purpose of central scheduling and dispatch, pricing and settlement.

- 3.2.1.2 The *market network model* shall represent fairly, and in a manner which will facilitate consistent and reliable operation of the power system:
- (a) The *transmission network* under the control of the *System Operator*, and
  - (b) Such other aspects of the *power system* which, when *connected*, may be capable of materially affecting *dispatch* of *scheduled generating units* or pricing within the *spot market*.
- 3.2.1.3 The *market network model* may contain such simplifications, approximations, equivalencies or adaptations as may facilitate the *dispatch*, pricing, or *settlement* processes.
- 3.2.1.4 Where appropriate, the *Market Operator* in coordination with the *System Operator* shall make alterations to the *Market Network Model* (As amended by DOE DC No. 2014-08-0016 dated 22 August 2014), so as to maintain:
- (a) The relationship between the *market network model* and the *transmission network*; and
  - (b) Consistency with *market* requirements, in accordance with clauses 3.2.1.2 and 3.2.1.3.
- 3.2.1.5 Any alteration under Clause 3.2.1.4 shall be implemented in accordance with the established *Information and Communications Technology Change Management Process (ICMP)* of the *Market Operator*. The *Market Operator* shall regularly inform the *PEM Board* of any changes made to the *Market Network Model* (As amended by DOE DC No. 2014-08-0016 dated 22 August 2014).
- 3.2.1.6 The *Market Operator* shall continuously adapt or adjust the representation of the *market network model* to accurately reflect *power system* conditions, within the relevant *market* time frames, as advised by the *System operator* under clause 3.5.3.

### 3.2.2 Market Trading Nodes

3.2.2.1 A *market trading node* is a designated point in the *market network model* where *energy* is bought or sold based on the schedules and prices determined by the *Market Dispatch Optimization Model*. A *market trading node* where *energy* is primarily sold into the WESM is referred to as the *generator node* while a *market trading node* where *energy* is primarily bought from the WESM is referred to as a *customer node*. [\(As amended by DOE DC No. 2006-01-0001 dated 10 January 2006\).](#)

3.2.2.2 Each *market trading node* defined under clause 3.2.2.1 shall:

[\(As amended by DOE DC No. 2006-01-0001 dated 10 January 2006\)](#)

- (a) Be assigned to a *Trading Participant* that intends to buy or sell *energy* and is capable of complying with the *dispatch* and *settlement* requirements in the WESM;
- (b) Be associated with a revenue *metering* and remote *telemetering* facilities capable of measuring all relevant incoming and outgoing *energy* deliveries for the purpose of *dispatch* and *settlement* in the WESM; and
- (c) As much as possible, represent the *connection point* between the *Network Service Provider* and the *Trading Participant*.

3.2.2.3 If the connection point of the *Trading Participant* could not be represented in the *market network model* or if a particular *market trading node* must be assigned to more than one *Trading Participant* because the conditions set in clause 3.2.2.2 are not met, the affected *Trading Participants*, the *Metering Services Provider* and the *Network Service Provider* will mutually agree on adjustments that will be implemented by the *Market*

*Operator* and the *System operator*. [\(As amended by DOE DC No. 2006-01-0001 dated 10 January 2006\)](#)

3.2.2.3(A) Nodal Prices at Market Trading Nodes shall be used for the settlement of energy for both generators and customers.

[\(Added as per DOE DC No.2004-07-008 dated 7 July 2004\)](#)

3.2.2.4 The *Market Operator* shall maintain, publish, and continuously update a register of *market trading nodes*, defined in accordance with clause 3.2.2.1 so as to accurately reflect changes in the market network model and the *WESM member* responsible for each *market trading node*.

### 3.2.3 Customer Pricing Zones

3.2.3.1 Customer nodes may be grouped into customer pricing zones in accordance with the procedures to be developed by the Market Operator and subject to the approval of the PEM Board. The Market Operator shall maintain and publish the customer pricing zones to be used for the settlement of energy for customers.[\(As amended by DOE DC No. 2004-07-008 dated 7 July 2004\)](#)

3.2.3.2 All customers within a customer pricing zone shall face the same price for electricity consumed.[\(As amended by DOE DC No. 2004-07-008 dated 7 July 2004\)](#)

3.2.3.3 As long as customer-pricing zones are employed, the *Market Operator* shall conduct a periodic review and evaluation of existing customer pricing zones, and shall:

- (a) Submit revised customer *pricing zones*, to the *PEM Board* for approval; and
- (b) *Publish* any revised customer *pricing zones* approved by the *PEM Board*.

3.2.3.4 The *Market Operator* shall, in consultation with *WESM Participants*, continuously review the procedures for determining the *market network model*, *market trading nodes*, and *customer pricing zones* set out in this chapter 3 and, to the extent the *Market Operator* considers it to be reasonably necessary to promote the *WESM* objectives, the



*Market Operator* may recommend changes to these procedures in accordance with the rule change process set out in chapter 8.

### 3.3 ANCILLARY SERVICES

#### 3.3.1 Introduction

3.3.1.1 *Ancillary services* are services that are essential to the management of *power system* security, that facilitate orderly trading in electricity and ensure that electricity supplies are of an acceptable quality.

3.3.1.2 Without limitation, *ancillary services* may include

- (a) The provision of sufficient regulating *reserve* to meet fluctuations in load occurring within a *trading interval*;
- (b) The provision of sufficient contingency *reserve* to maintain *power system frequency*;
- (c) The provision of dispatchable reserve available to respond to a re-dispatch performed during a *trading interval*, on either a regular or an ad hoc basis;
- (d) The provision of reactive support to guard against *power system* failure; and
- (e) The provision of black start capability to allow restoration of *power system* operation after a complete failure of the *power system* or part of the *power system*.

3.3.1.3 The requirements for *ancillary services* are to be met in the following ways:

- (a) By the *System Operator*, in consultation with the *Market Operator* and *WESM Participants*, setting minimum standards in relation to technical performance specified in the *Grid Code* and *Distribution Code* which requires some level of *ancillary services* to be provided by *Ancillary Services Providers*;

- (b) By the *System Operator* purchasing *ancillary services* in accordance with clause 3.3.3.

### **3.3.2 Ancillary Services Contracting by the System operator**

3.3.2.1 The *System operator* shall use reasonable endeavors to ensure that sufficient facilities are available and operable to provide for:

- (a) The maintenance or restoration of *power system security* under *emergency* conditions;
- (b) The restoration of all or any part of the *power system* to its satisfactory operating state, following an *emergency*, threat to *system security* or *force majeure* event; and
- (c) The availability, at all times, of the number of independent power sources able to provide black start-up facilities, determined in accordance with the procedures developed by the *Market Operator* to ascertain the quantities of *ancillary services* which the *System operator* shall purchase.

3.3.2.2 The *System operator* shall use reasonable endeavors to enter into *ancillary services* agreements to provide sufficient *ancillary services* to meet the requirements of clause 3.3.2.1, subject to clause 3.3.3.

### **3.3.3 Ancillary Services Agreements**

3.3.3.1 The *System operator* shall arrange for the provision of adequate *reserves* for each region in accordance with clause 3.3.3.2.

3.3.3.2 The *System operator* shall arrange for the provision of adequate *ancillary services* for each region either:

- (a) By competitive tendering process, administered by the *Market Operator*, whereby a number of *Ancillary Services Providers* can provide a particular category of *ancillary services*; or

- (b) By negotiating contracts directly with an *Ancillary Services Provider* who is a *Direct WESM member*, where only one *Ancillary Services Provider* can provide the required *ancillary services*; or
  - (c) Where applicable, by competitive *spot market* trading in accordance with clause 3.3.4.
- 3.3.3.3 The *System operator* shall negotiate any *ancillary services* agreements with *Ancillary Services Providers* who are *Direct WESM members* on commercial terms acceptable to the parties and at arms length, subject to clause 3.3.3.2.
- 3.3.3.4 Payment for *ancillary services* purchased under an *ancillary services* agreement may include:
  - (a) A payment for both contracted capabilities and a measure of the *ancillary services* provided;
  - (b) A demonstrable *spot market* opportunity cost, that is lost *spot market* revenue or opportunity costs incurred by the *Ancillary Services Provider* as a result of providing the *ancillary services*;
  - (c) A fair return to the *Ancillary Services Provider* in respect of any additional direct costs associated with providing the *ancillary service*;
  - (d) When applicable, subject to clause 3.3.4.1, a price for that *ancillary service* established by a competitive *spot market* mechanism.
- 3.3.3.5 Payments for *ancillary services* that are provided are to be made by the *Market Operator* via the *settlements* system in accordance with clause 3.13.14.
- 3.3.3.6 *Ancillary services* agreements shall contain a provision pursuant to which the capability of the relevant *Ancillary Services Provider* to provide *ancillary services* shall be demonstrated from time to time to the satisfaction of the *System operator* according to the standard test procedures established under the *Grid Code* and *Distribution Code*.
- 3.3.3.7 Any dispute between the *System operator* and the *Ancillary Services Provider* in relation to the determination of a

payment for spot market *ancillary services* shall be determined by the *Dispute Resolution Administrator* in accordance with clause 7.3, unless otherwise provided in the *Ancillary Services Procurement Agreement (ASPA)*. (As amended by DOE DC No. 2012-02-0001 dated 15 February 2012)

### **3.3.4 Reserve Market Arrangements**

3.3.4.1 When reasonably feasible, the *Market Operator*, in coordination with the *System operator*, shall establish and administer a *spot market* for the purchase of certain reserve categories.

3.3.4.2 The *reserve* categories to be traded in the *spot market* shall include:

- (a) *Regulating reserve*, being the ability to respond to small fluctuations in system frequency including but not limited to fluctuations caused by load fluctuations;
- (b) *Contingency reserve*, being the ability to respond to a significant decrease in system frequency including but not limited to a decrease in system frequency in an interconnected AC network as a result of a credible contingency affecting one (or more) *Generation Companies* within that *network*, or *transmission* flows into that *network*; and
- (c) Such other *reserve* categories as may from time to time be proposed by the *Market Operator*, in consultation with the *System operator*, and with *WESM members*, and approved by the *PEM Board*.

### **3.3.5 Ancillary Services Cost Recovery**

3.3.5.1 The *System operator* shall maintain and *publish reserve cost recovery zones* within which *reserve cost recovery charges* may be recovered to meet each locationally specific requirement.

- 3.3.5.2 The costs of ancillary *services* are to be recovered through the settlement amounts calculated by the *Market Operator* under clause 3.13.10:
- (a) In accordance with the cost recovery formula to be developed by the *System operator* for the categories of reserve which are defined in clause 3.3.4.2; and
  - (b) From those *WESM members* or others on whose behalf the *System operator* is deemed to purchase each *ancillary service*, in proportion to the benefits which are considered to be derived by those *WESM members*, in respect of *ancillary services* not included in clause 3.3.5.2 (a).
- 3.3.5.3 The costs of providing each locationally specific reserve requirement shall be allocated by the *Market Operator* to those *Trading Participants* in the relevant *reserve cost recovery zone* in the form of *reserve cost recovery charges* to be determined in accordance with the principles set out in clause 3.3.5.4.
- 3.3.5.4 When allocating *reserve cost recovery charges* to *Trading Participants* in a particular *reserve cost recovery zone* as published in clause 3.3.5.1 the *Market Operator* may recover:
- (a) The cost of *regulating reserve*, in each *reserve cost recovery zone*, from:
    - (1) *Customers* with load *facilities* connected in that *reserve cost recovery zone*, under a formula which shall account for both the relative size of the *customer loads*, and the degree to which they contribute to deviations from their schedule within the *trading interval*; and
    - (2) *Scheduled Generation Companies* with *generating systems* connected in that *reserve cost recovery zone* under a formula which shall account for both the relative size

of the *generating systems*, and the degree to which they deviate from dispatch instructions,

- (b) The cost of *contingency reserve*, in each *reserve cost recovery zone*, from:
  - (1) *Generation Companies* with *generating systems* connected in that *reserve cost recovery zone*; and
  - (2) *Network Service Providers* serving that *reserve cost recovery zone*, under a formula which accounts for the relative size of the relevant *generating system* and *distribution network*, their *reliability*, and the impact which failure may have on conditions within that *reserve cost recovery zone*.

### **3.3.6 Provision of Ancillary Services**

3.3.6.1 An *Ancillary Services Provider* shall not unreasonably refuse to provide *ancillary services*.

3.3.6.2 When justifiable in terms of *power system security*, the *System operator* may direct any *Ancillary Services Provider* to provide an *ancillary service* in accordance with the *Grid Code*.

### **3.3.7 Approval, Periodic Review and Evaluation of Ancillary Service Arrangements**

3.3.7.1 The *System operator* of TRANSCO shall charge user fees for *ancillary services* to all electric power industry participants or self-generating entities connected to the grid. Such fees shall be fixed by the *ERC* after due notice and public hearing.

3.3.7.2 The *System operator*, in consultation with *Market Operator* and *WESM Participants* shall conduct a periodic review and evaluation of the following:

- (a) *Ancillary services* categories, *ancillary services* arrangements and *ancillary services cost recovery formula*;

- (b) *Reserve categories, reserve regions*, and locationally specific *reserve* requirements; and
  - (c) Procedures developed under this clause 3.3 with a view to refining these procedures to promote the WESM objectives and better meet the requirements of the *power system* operation.
- 3.3.7.3 Any proposed changes to the *ancillary service* categories, *ancillary services* arrangements, *ancillary services cost recovery formula*, *reserve categories*, *reserve regions* or locationally specific *reserve* requirements that will affect the fees of *ancillary services* shall be filed by the *System operator* of *TRANSCO* with the *ERC* for approval.
- 3.3.7.4 The *System operator* shall continuously adjust the reserve effectiveness factors for each *reserve facility category*, and the quantum of *reserve* to be scheduled to meet each locationally specific *reserve requirement* by the *market dispatch optimization model*, so as to accurately reflect the *power system* under existing or future conditions, within the relevant *market* time frames, as advised by the *System operator* under clause 3.5.3.1.
- 3.3.7.5 Any proposed changes in the procedures reviewed under this clause 3.3.7 shall be approved by the *PEM Board* in accordance with the rule change process set out in chapter 8.

## 3.4 MARKET TRADING INTERVAL AND TIMETABLE

### 3.4.1 Trading Intervals

- 3.4.1.1 For the purpose of trading in *energy* and *ancillary services*, *trading intervals* one (1) hour, commencing on the hour.
- 3.4.1.2 Only *energy* shall be traded during the interim WESM. Trading in *ancillary services* shall be implemented upon commencement of the *spot market* for *ancillary services* established under clause 3.3.4.

### **3.4.2 Timetable**

- 3.4.2.1 The *Market Operator* shall operate the *spot market* in accordance with the *timetable*.
- 3.4.2.2 The *timetable* shall include the schedule and procedure for the following:
  - (a) Determining and *publishing week ahead projections* including precise specification of the *market horizon* to be used for such projections;
  - (b) Determining and *publishing day ahead projections* including precise specification of the *market horizon* to be used for such projections;
  - (c) Submitting offers, bids and data; and
  - (d) If necessary, for any other action to be taken by the *Market Operator*, the *System operator*, or any *WESM member* during the operation of the *spot market*.
- 3.4.2.3 The *Market Operator* shall maintain, *publish* and continuously update the *timetable*.
- 3.4.2.4 Any proposed changes in the *timetable* and related procedures shall be approved by the *PEM Board* in accordance with the rule change process set out in chapter 8.

## **3.5 SUBMISSION OF OFFERS, BIDS, AND DATA**

### **3.5.1 Communications of Offers and Bids**

Each *Trading Participant* shall provide to the *Market Operator* the information required under this clause 3.5 in accordance with the electronic communication procedures.

### **3.5.2 Network Service Provider Data**

- 3.5.2.1 Each *Network Service Provider* shall submit to the *System operator* standing *network data* relating to all network elements which are under that *Network Service Provider's* control and included in the *market network model*, in accordance with clause 3.5.2.4 and the *Grid Code and Distribution Code*.



- 3.5.2.2 If there is any material long term change in the status or configuration of a *network* under the control of a *Network Services Provider*, the standing *network data* relevant to that *network* shall be revised by the relevant *Network Service Provider*, and submitted to the *System operator*.
- 3.5.2.3 Each *Network Service Provider* shall submit period-specific *network data* variations to the *System operator* as soon as any material change in previously submitted *network data* becomes apparent with respect to the expected state of any of its *networks* in any *trading interval* of any *trading day* in the current *week-ahead market horizon*.
- 3.5.2.4 The standing *network data* and any variations to that data submitted in accordance with clause 3.5.2.3 shall be provided by *Network Service Providers* in a form which allows the *System operator* to readily derive and verify the information specified in Appendix A2, as it may pertain to any *trading interval* of any *trading day* in the *week-ahead market horizon*.
- 3.5.2.5 Each *Network Service Provider* shall immediately advise the *System Operator* of any circumstances which threaten a significant probability of material adverse change in the state of its *network* in any *trading interval* of any *trading day* in the current *week-ahead market horizon*

### **3.5.3 System operator Data**

- 3.5.3.1 The *System operator* shall submit to the *Market Operator* standing *network data* relating to all *network* elements which are under the *Network Service Provider's* control and included in the *market network model*, in accordance with the *timetable*.
- 3.5.3.2 Where necessary, the *System operator* shall, in accordance with the *timetable*, promptly advise the *Market Operator* to:
- (a) Vary the market network model representation employed for any trading interval in the current week-ahead market horizon to take account of

information received from *Network Service Providers*; and

- (b) Apply, or vary, any *system security constraints*, overriding *constraints* or *reserve requirements constraints* to be applied in any *trading interval* in the *current week-ahead market horizon* to take account of current, or projected, system conditions.

3.5.3.3 In determining whether it is reasonably necessary to advise the *Market Operator* under clause 3.5.3.2, the *System operator* shall take into consideration its obligations with respect to maintaining *system security* in accordance with the *WESM Rules*, the *Act*, the *Grid Code* and *Distribution Code*, or any other relevant regulatory instruments.

3.5.3.4 In acting on such advice, the *Market Operator* shall take full account of its obligations to *WESM members* with respect to maintaining the integrity of the market, and the *market network model*, as defined by the *WESM Rules*, the *Act*, or any other applicable regulatory instruments.

3.5.3.5 In accordance with the *timetable*, any revision under clause 3.5.3.2 to the system representation or constraints to be employed with respect to any market *trading interval* shall take effect the next time a market dispatch optimization model run is initiated.

3.5.3.6 The *System operator* shall advise the *Market Operator* of any circumstances which threaten a significant probability of material adverse change in the state of the *network*, or *system*, in any *trading interval* of any *trading day* in the *current week-ahead market horizon*.

3.5.3.7 The *System Operator* shall submit to the *Market Operator* a *variable renewable energy aggregated generation forecast* for each of the next twenty-four (24) *trading intervals* and update the same once every *trading interval* in accordance with the relevant *Market Manuals* and the relevant provisions of the *Grid Code*.

(Added per DOE DC No. 16-01-0002 dated 12 January 2016)

- 3.5.3.8 The *System Operator* shall submit to each *must dispatch generating unit* its evaluated schedule in consideration of actual system conditions including, but not limited to, ancillary services schedules and transmission line constraints.

(Added per DOE DC No. 16-01-0002 dated 12 January 2016)

- 3.5.3.9 The *System Operator* shall submit to the *Market Operator*, forecasts on the *loading levels* of *must dispatch generating units* in accordance with the relevant *Market Manuals*.

(Added per DOE DC No. 16-01-0002 dated 12 January 2016)

#### **3.5.4 Load Forecasting**

- 3.5.4.1 Each *Customer* may submit a forecast in respect of each trading interval for each of its registered load facilities for each trading day of week in accordance with the *timetable*. The forecast submitted by the *Customer* shall be used by the *Market Operator* in the preparation of *Net Load Forecast* if it is within the forecast tolerance range published by the *Market Operator*.

If the *Customer* fails to submit a forecast of his load facilities in accordance with the *timetable* or if the *Customer* forecast submitted is not within the published forecast tolerance range, the forecast prepared by the *Market Operator* at the node where the *Customer* is located shall be used.

Prior to the commencement of the spot market, the *Market Operator*, in consultation with *WESM Participants*, shall determine and publish the forecast tolerance range. The forecast tolerance range may be varied from time to time by the *Market Operator*.

(As amended by DOE DC No. 2004-07-008 dated 7 July 2004 and further amended by DOE DC No. 2005-11-010 dated 11 November 2005)

- 3.5.4.2 Each *net load forecast* shall be prepared in such a way as to represent the *net load* to be met by *generation* from *scheduled generating units*, *must dispatch generating units*, *priority dispatch generating units*, and *non-scheduled generating units* including losses occurring outside the system represented by the *market network model*, but excluding any *scheduled load*.

(As amended by DOE DC No. 16-01-0002 dated 12 January 2016)

- 3.5.4.3 The unrestrained net load forecast for any trading interval shall be prepared so as to represent the net load as it would be, or would have been, in the absence of load shedding.

- 3.5.4.4 If load shedding is expected to occur in any trading interval, a restrained *net load forecast* for that *trading interval* shall be prepared on the same basis, but accounting for *load shedding* to the extent that it is expected to occur.

### **3.5.5 Generation Offers and Data**

- 3.5.5.1 Each *Scheduled Generation Company* including *Generation Companies* with *bilateral contracts* shall submit a standing *generation offer* for each of its *scheduled generating units* for each *trading interval* in each *trading day* of the week in accordance with the *timetable*. The standing *generation offer* shall apply until revised or updated by the *Scheduled Generation Company*.

(As amended by DOE DC No. 16-01-0002 dated 12 January 2016)

- 3.5.5.2 Each *generation offer* shall include the information specified in Appendix A1.1.

- 3.5.5.3 Each *Generating Company* shall, in consultation with the *System operator*, submit check data to be used by the *Market Operator*, in accordance with clause 3.5.12, to assist

in determining the validity of any generation offer which may be submitted by the Scheduled Generator.

- 3.5.5.4 Each *Non-Scheduled Generation Company* shall submit a standing nomination of *loading levels* for each of its *non-scheduled generating units* for each *trading interval* in each *trading day* of the week in accordance with the *timetable*. The standing nomination of *loading levels* shall apply until revised or updated by the *Non-Scheduled Generation Company*.

[\(As amended by DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

- 3.5.5.5 *Generation Companies* shall provide to the *Market Operator* and the *System Operator* standing *projected outputs* in respect of their *must dispatch generating units* and *priority dispatch generating units* for each *trading interval* in each *trading day* of the week in accordance with the relevant *Market Manuals* and provisions of the *Grid Code*. The standing *projected outputs* shall apply until revised or updated by the relevant *Generation Company*.

[\(As amended by DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

- 3.5.5.6 A *Trading Participant* who fails to submit *projected outputs* for its *must dispatch generating unit* or *priority dispatch generating unit* as provided under Clause 3.5.5.5 may be liable for sanctions imposed under Clause 7.2.

[\(Added per DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

- 3.5.5.7 Each *Generation Company* shall submit check data to be used by the *Market Operator*, in accordance with the relevant *Market Manuals*, to assist in determining the validity of any *projected output* submitted in respect of a *must dispatch generating unit* or a *priority dispatch generating unit* under Clause 3.5.5.5.

[\(Added per DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

- 3.5.5.8 *Must dispatch generating units* shall comply with forecast accuracy standards, in respect of their *projected outputs* submitted under Clause 3.5.5.5, consistent with the *Grid Code*.  
[\(Added per DOE DC No. 16-01-0002 dated 12 January 2016\)](#)
- 3.5.5.9 The *Market Operator* shall review annually the forecast accuracy standards complied with by *must dispatch generating units* in accordance with Clause 3.5.5.8.  
[\(Added per DOE DC No. 16-01-0002 dated 12 January 2016\)](#)
- 3.5.5.10 A *Trading Participant* who fails to meet the requisite forecast accuracy standards set out in accordance with Clause 3.5.5.8 in respect of *projected outputs* for a *must dispatch generating unit* submitted under Clause 3.5.5.5 may be liable for sanctions imposed under Clause 7.2.  
[\(Added per DOE DC No. 16-01-0002 dated 12 January 2016\)](#)
- 3.5.5.11 The *Market Operator* shall report to the *PEM Board* and the *DOE* the monthly and annual compliance of each *must dispatch generating unit* to the forecast accuracy standards with respect to its *projected outputs*.  
[\(Added per DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

### **3.5.6 Customer Demand Bids**

- 3.5.6.1 Each *Customer* may submit a standing *demand bid* in respect of each *trading interval* for each of its *registered scheduled load facilities* for each *trading day* of the week in accordance with the *timetable*.
- 3.5.6.2 Each *demand bid* submitted under clause 3.5.6.1 shall:
- (a) Correspond to load which has been certified as dispatchable, in accordance with the *Grid Code* and *Distribution Code*; and
  - (b) Include the information specified in Appendix A1.3.

- 3.5.6.3 Each *Customer* shall, in consultation with the *System operator*, submit check data for each of its *registered scheduled load facilities* to be used by the *Market Operator* in accordance with clause 3.5.12, to assist in determining the validity of any *demand bid* which it may submit.

### 3.5.7 Generation Company Reserve Offers

- 3.5.7.1 This section shall apply only upon commencement of the *spot market* for *ancillary services* established under clause 3.3.4.

- 3.5.7.2 When applicable, subject to Clause 3.3.4.2, each *scheduled generator* registered as an *Ancillary Services Provider* in respect of a *reserve facility* in a particular *reserve region* shall submit a standing *reserve offer* for each of its relevant *reserve facilities* in respect of that *reserve region* for each *trading interval* for each day of the week in accordance with the *timetable*. The standing *reserve offer* shall apply until revised or updated by the *scheduled generator* registered as an *Ancillary Services Provider*.

[\(As amended by DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

- 3.5.7.3 Each *reserve offer* submitted by a *Generation Company* under clause 3.5.7.2 shall:

- (a) Correspond to response capability of the relevant *reserve facility* which has been certified as meeting the relevant reserve response standards, for that *reserve facility category*, in accordance with the *Grid Code and Distribution Code*; and
- (b) Include the information specified in Appendix A1.2.

- 3.5.7.4 Each *Generation Company* registered as an *Ancillary Services Provider* in respect of a *reserve facility* shall, in consultation with the *System operator*, submit check data to be used by the *Market Operator*, in accordance with clause 3.5.12, to assist in determining the validity of any *reserve offer* which it submits.

### 3.5.8 Customer Reserve Offers

- 3.5.8.1 This section shall apply only upon commencement of the *spot market* for *ancillary services* established under clause 3.3.4.
- 3.5.8.2 When applicable, subject to clause 3.3.4.2, each Customer registered as an Ancillary Services Provider in respect of a reserve facility in a particular reserve region may submit a standing reserve offer for each of its interruptible load facilities in respect of that reserve region for each trading interval for each day of the week in accordance with the timetable.
- 3.5.8.3 Each reserve offer submitted by a *Customer* under clause 3.5.8.2 shall:
- (a) Correspond to a load for that *Customer* which has been certified as *interruptible* in accordance with the *Grid Code* and *Distribution Code*;
  - (b) Correspond to the response capability of the relevant *reserve facility* registered for the provision of *interruptible load* which has been certified as meeting the relevant reserve response standards for that *reserve facility category* in accordance with the *Grid Code* and *Distribution Code*; and
  - (c) Include the information specified in Appendix A2.
- 3.5.8.4 Each *Customer* registered as an *Ancillary Services Provider* in respect of a *reserve facility* shall, in consultation with the *System operator*, submit to the *Market Operator* a check data for each of its *reserve facility*, to be used in accordance with clause 3.5.12, to assist in determining the validity of its *reserve offer*.

### 3.5.9 Revision of Standing Offers/Bids

- 3.5.9.1 A standing *generation offer*, a standing *reserve offer*, a standing nomination of *loading levels*, a standing *projected output*, or a standing *demand bid* for any *trading interval* in any day of the week may be revised by the relevant



*Generation Company or Customer in accordance with the timetable.*

[\(As amended by DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

3.5.9.2 A standing *generation offer*, a standing *reserve offer*, a standing nomination of *loading levels*, a standing *projected output*, or a standing *demand bid* which is revised under Clause 3.5.9.1:

[As amended by DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

- (a) Shall take effect the next time a *week ahead projection* is initiated, in accordance with the *timetable*; and
- (b) Shall only affect the offers employed in *market dispatch optimization model* runs used to determine *projections, dispatch, or pricing* for periods not already covered by *week-ahead projections* which have already been *published*, or whose preparation has already been initiated at the time when the revised offer or bid is accepted.

#### **3.5.10 Initial setting of Market Offers/Bids**

When the *Market Operator* updates a *market projection* under Clause 3.7, the *standing offers*, standing nomination of *loading levels*, standing *projected outputs*, and *standing bids* shall be effective in the absence of revised *market offers*, nomination of *loading levels*, *projected outputs*, and *market bids* for the corresponding *trading interval* and day of the week.

[\(As amended by DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

#### **3.5.11 Revision of Market Offers/Bids, Nomination of Loading Levels, and Projected Outputs**

3.5.11.1 Each scheduled *Trading Participant* which has submitted standing offers or bids may revise any of its *market offers* or *market bids* for any *trading interval* in any trading day of the current week-ahead market horizon in accordance with the *timetable*, and subject to Clause 3.5.11.4 and each

revised market offer or market bid submitted shall provide the information set out in Appendix A1.

[\(As amended by DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

- 3.5.11.2 Each *Generation Company* which has submitted a nomination of *loading levels* for its *non-scheduled generating units* shall revise its nomination of *loading levels* if it reasonably expects that any of its anticipated *loading levels* will differ materially from those previously submitted.

[\(As amended by DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

- 3.5.11.3 Each *Generation Company* which has submitted *projected outputs* for its *must dispatch generating units* or *priority dispatch generating units* shall revise its *projected outputs* if it reasonably expects that any of its *projected outputs* will differ materially from those previously submitted.

[\(Added per DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

- 3.5.11.4 In accordance with the *timetable*, a revised *market offer* or *market bid* submitted under Clause 3.5.11.1, a revised nomination of *loading level* submitted under Clause 3.5.11.2, or a revised *projected output* submitted under Clause 3.5.11.3 shall take effect the next time a *dispatch*, *pricing* or *day-ahead projection* run is initiated.

[\(As amended by DOE DC No. 2013-10-0025 dated 08 October 2013 and further amended by DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

- 3.5.11.5 *Market bids or market offers* for any *trading interval* may be revised by *Trading Participants* prior to gate closure if they no longer represent a reasonable estimate of:
- (a) The expected availability of the relevant *generating unit or scheduled load* for that *trading interval*; or

- (b) The demand bids or offers likely to apply for the real time dispatch optimization of that *trading interval*.

[\(As amended by DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

3.5.11.6 In submitting *market bids* or *market offers* for any *trading interval*, *Trading Participants* shall also take into account the following:

- (a) The time remaining until the occurrence of the relevant *trading interval* involved; and
- (b) Provision of reasons or circumstances whenever the submitted *market bids* or *market offers* are cancelled or are less than the registered capacity of its *facility* or *generating unit*.

[\(As amended by DOE DC No. 2013-10-0025 dated 08 October 2013 and further amended by DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

3.5.11.7 *Trading Participants* shall immediately advise the *System Operator* and *Market Operator* of any circumstances which threaten a significant probability of material adverse change in the state of their facilities in any *trading interval* of any trading day in the current *week-ahead market horizon*.

After the occurrence of the significant event referred to above, the *Trading Participant* shall submit a written report to the *Market Operator* with supporting data immediately within the following trading day.

[\(As amended by DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

3.5.11.8 Prior to the spot market commencement date, the *System Operator*, in consultation with *WESM Members*, shall publish a non-exhaustive list of events that will be deemed to be or to cause a material adverse change in circumstances for the purposes of Clause 3.5.11.7.

(As amended by DOE DC No. 16-01-0002 dated 12 January 2016)

- 3.5.11.9 Each *market offer*, nomination of *loading level*, *projected output*, or *market bid* for a particular *trading interval* is deemed to stand with effect from the time it is initiated under Clause 3.5.10 or revised under Clause 3.5.11 and will be used in preparing all *market forecasts*, *dispatch targets* or prices for that *trading interval*, unless and until a valid revision to the *market offer*, nomination of *loading level*, *projected output*, or *market bid* is accepted by the *Market Operator*. (As amended by DOE DC No. 16-01-0002 dated 12 January 2016)

### 3.5.12 Confirmation of Receipt of Valid Offers, Bids, Nomination of Loading Levels, and Projected Outputs

(As amended by DOE DC No. 16-01-0002 dated 12 January 2016)

- 3.5.12.1 To be valid, *generation offers*, *reserve offers*, nomination of *loading levels*, *projected outputs* or *demand bids* shall be submitted by the relevant *Trading Participant*:
- (a) in accordance with Clause 3.5.1;
  - (b) in accordance with the *timetable*; and
  - (c) consistent with the check data submitted by the *Trading Participant* under Clauses 3.5.5.3, 3.5.5.7, 3.5.6.3, and 3.5.7.4 as appropriate.

(As amended by DOE DC No. 16-01-0002 dated 12 January 2016)

- 3.5.12.2 The *Market Operator* shall send to each *Trading Participant* from whom it has received a valid *generation offer*, valid nomination of *loading level*, valid *reserve offer*, valid *demand bid* or valid *projected output*, an electronic confirmation of receipt and acceptance of that *generation offer*, nomination of *loading level*, *reserve offer*, *demand bid* or *projected output* in accordance with the *timetable* prescribed in the relevant *Market Manuals*. (As amended by DOE DC No. 16-01-0002 dated 12 January 2016)

3.5.12.3 If a *Trading Participant* does not receive confirmation of receipt under Clause 3.5.12.2, from the *Market Operator*, the *Trading Participant* shall contact the *Market Operator* to determine whether or not the *generation offer*, nomination of *loading level*, *reserve offer*, *demand bid*, or *projected output* was received.

[\(As amended by DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

3.5.12.4 If the *generation offer*, *reserve offer*, *demand bid*, or *projected output* is invalid, the *Market Operator* shall promptly inform the *Trading Participant* to resubmit a corrected *generation offer*, *reserve offer*, *demand bid* or *projected output* in accordance with Clause 3.5.11.

[\(As amended by DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

### 3.5.13 Over-riding Constraints

3.5.13.1 Subject to Clause 3.5.13.3, the *System Operator* may require the *Market Operator* to impose *constraints* on the power flow, *energy generation* of a specific *facility* in the *grid* to address *system security* threat, to mitigate the effects of a *system emergency*, or to address the need to *dispatch generating units* to comply with systems, regulatory and commercial tests requirements. [\(As amended by DOE DC NO.2014-10-0021 dated 24 October 2014, and further amended by DOE DC NO.2015-11-0016 dated 12 November 2015\)](#)

The *System Operator*, in consultation with the *Market Operator* and the *Trading Participants*, shall develop the criteria and procedures for dispatch of generating units that are required to run as a result of the imposition or relaxation of constraints stated in the preceding paragraph, and the manner for compensating said units. [\(As amended](#)

by DOE DC NO.2006-01-0001 and further amended by DOE DC No. 2006-05-0006 dated 5 May 2006)

The *System Operator* shall advise the *Market Operator* of the actions it has taken in relation to the foregoing, including but not limited to information necessary for the proper settlement of affected *generating units*, and the *Market Operator* shall *publish* the said information no later than one (1) week from the relevant *trading day*. For proper settlement of *must-run units* and *must-stop units*, *Trading Participants* shall review the information and notify the *Market Operator* of any discrepancies no later than two (2) weeks from the date of *publication*, otherwise the information contained in the report shall be deemed final for use in the settlement of *must-run units* and *must-stop units*. (As amended by DOE DC NO.2015-11-0016 dated 12 November 2015)

The procedure and process for claiming additional compensation, contesting the claims, and timeline or approval/disapproval of claims, including the consequences thereof, among others, are determined in the relevant *Market Manuals*. (Added per DOE DC NO.2017-04-0006 dated 20 April 2017)

- 3.5.13.2 In situations where offers are structured in such a way that provision of any level of reserve services prohibits the simultaneous provision of very low or high levels of generation, the *System operator* may also recommend to the *Market Operator* that constraints should be imposed or relaxed so as to allow *generating systems* to operate in a range which allows increase of either reserve allocation or energy generation, as appropriate, having regard to:  
(As amended by DOE DC No. 2006-05-0006 dated 5 May 2006)

- (a) The commercial interests of *Trading Participants*; and
  - (b) Market priorities and objectives, as reflected by the relevant market prices for energy and reserves in the relevant reserve region.
- 3.5.13.3 Prior to the *spot market* commencement date, the *System operator*, in consultation with *Trading Participants* and the *Market Operator*, shall publish a general description of the nature of circumstances which will cause it to recommend imposition or relaxation of *constraints* under clauses 3.5.13.1 or 3.5.13.2 and the type of action which may be taken under those circumstances.
- 3.5.13.4 When acting under clause 3.5.13.1 or 3.5.13.2, the *System operator* shall:
  - (a) Notify the relevant *Trading Participant* of the situation as soon as practicable; and
  - (b) Record appropriate details of the incident.
- 3.5.13.5 At the request of the *Market Operator*, the *System operator* or any *WESM member*, the *market surveillance committee* may review any decision by the *Market Operator* to impose or relax *constraints* under clause 3.5.13.1 or 3.5.13.2.
- 3.5.13.6 If a review conducted under clause 3.5.13.5 concludes that a *Trading Participant* or the *Market Operator* or the *System operator* has acted inappropriately, and has thereby imposed significant costs on other parties, the *market surveillance committee* may refer that matter to the *Enforcement and Compliance Officer* under clause 7.2 or require that *Trading Participant* or the *Market Operator* or the *System operator* (as the case may be) to pay compensation in accordance with clause 7.2. [\(As amended by DOE DC No. 2006-01-0001 dated 10 January 2006\)](#)

## 3.6 MARKET DISPATCH OPTIMIZATION MODEL

### 3.6.1 Model Definition

- 3.6.1.1 The *market dispatch optimization model* simultaneously determines *dispatch* targets for the end of a *trading interval*, *reserve* allocations for the *trading interval*, associated *energy prices* at all *trading nodes* in the *power system* and when applicable *reserve prices* for all *reserve regions*.
- 3.6.1.2 The *Market Operator* shall maintain and *publish* the formulation of the *market dispatch optimization model*, and the performance standards, in accordance with the *WESM* objectives.
- 3.6.1.3 The objective of the *market dispatch optimization model* shall be to maximize the value of *dispatched load* based on *dispatch bids*, minus:
- (a) The cost of *dispatched generation* based on *dispatched offers*;
  - (b) The cost of *dispatched reserves* based on *reserves* contracted for or when applicable *reserve offers*; and
  - (c) The cost of *constraint violation* based on the *constraint violation coefficients*.
- 3.6.1.4 In formulating the *market dispatch optimization model*, the *Market Operator* and *System Operator* shall ensure that the dispatch for each *trading interval* is made subject to:
- (a) Constraints representing limits on *generation offers*, *demand bids*, nomination of *loading levels*, *projected outputs*, and, when applicable, *reserve offers* as specified by *Trading Participants* in accordance with Clause 3.5, except to the extent that as they may be relaxed in accordance with Clause 3.5.13;
- [\(As amended by DOE DC No. 16-01-0002 dated 12 January 2016\)](#)



- (b) Constraints representing the technical characteristics of reserve facility categories, including when applicable reserve effectiveness factors initially set at one (1);
- (c) Energy balance equations for each node in the market network model ensuring that the net load forecast for the end of the trading *interval* at each *market trading node* as determined by the *Market Operator* is met;
- (d) Constraints representing limitations on the ramp rate from the plant status deemed to apply prior to the commencement of the trading interval;
- (e) Constraints defining power system reserve requirements as provided by the System operator under clause 3.5.3;
- (f) Network constraints, as implied by the market network model provided by the *System operator* under clause 3.5.3;
- (g) Loss and impedance characteristics of market network lines, as advised by the System operator under clause 3.5.3, and defined in Appendix A2;
- (h) Constraints on HVDC link operations, as advised by the System operator under clause 3.5.3, and defined in Appendix A2;
- (i) Power flow equations, as defined by a DC approximation to an AC power flow within AC sub-systems, or equivalent mathematical representation; [\(As amended by DOE DC No. 2006-01-0001 dated 10 January 2006\)](#)
- (j) Any overriding constraints imposed on the recommendation of the System operator in accordance with clause 3.5.13; and
- (k) Any additional constraints due to ancillary services or system security requirements.

3.6.1.5 The *market dispatch optimization model* shall be designed so that, subject to the approximations and adjustments provided for by Clause 3.6.4:

- (a) It will produce an optimal dispatch given the objective defined by Clause 3.6.1.4, and the constraint structure defined by Clause 3.6.1.4, and specifying *dispatch* targets for each *scheduled generating unit*, *non-scheduled generating unit*, *must dispatch generating unit*, *priority dispatch generating unit*, *scheduled load* and *reserve facility*;  
[\(As amended by DOE DC No. 16-01-0002 dated 12 January 2016\)](#)
- (b) It will produce a schedule of flows on each transmission line corresponding to the optimal dispatch determined in accordance with clause 3.6.1.5 (a);
- (c) It will produce energy prices for each market trading node, and when applicable reserve price for each reserve region, so that the recommended dispatch targets for each individual Trading Participant would be optimal for that participant at those prices, given their offers and demand bids and after accounting for other constraints which may affect that Trading Participant, and
- (d) It will perform its functions in accordance with the performance standards approved by the *PEM Board*.

3.6.1.6 The *Market Operator* shall include each *non-scheduled generating unit*, *must dispatch generating unit* and *priority dispatch generating unit* in its *market dispatch optimization model* as a price taker - that is, the *generating unit* is deemed to be available to run at the level specified in its nomination of *loading level* or *projected output* submitted in accordance with Clause 3.5.5 regardless of the prevailing market clearing price but subject to Clause 3.6.1.7.

(Added per DOE DC No. 16-01-0002 dated 12 January 2016)

- 3.6.1.7 The *Market Operator* may restrict the *dispatch* target of a *non-scheduled generating unit*, *must dispatch generating unit* or a *priority dispatch generating unit* in relation to a potential system security contingency but only insofar as the constraint forms part of the output of the *market dispatch optimization model* and is in accordance with the hierarchy provided in Clause 3.6.1.8.

(Added per DOE DC No. 16-01-0002 dated 12 January 2016)

- 3.6.1.8 When restricting *dispatch* targets under Clause 3.6.1.7, the *market dispatch optimization model* shall consider the following hierarchy when a combination of the groups are to be restricted:

- (a) *market offers of scheduled generating units* beyond its minimum
- (b) *non-scheduled generating units*
- (c) *priority dispatch generating units*
- (d) *must dispatch generating units*
- (e) minimum stable load of *scheduled generating units*

(Added per DOE DC No. 16-01-0002 dated 12 January 2016)

### 3.6.2 Constraint Violation Coefficients

- 3.6.2.1 The constraint violation coefficients shall:

- (a) Be set so as to ensure that the *market dispatch model* will always find a solution which satisfies all *constraints*, if such a solution exists;
- (b) Be set so as to ensure that binding constraints are prioritized, such that constraints resulting in the lowest reduction in the capability of the network, load or generating units will occur first; and
- (c) Be set so as to ensure that the prices produced by the market optimization algorithm will be appropriate in all the circumstances, taking

into consideration the processes defined in section 3.10 to adjust or override those prices for settlement purposes.

- 3.6.2.2 The *constraint violation coefficients* may:
- (a) Vary according to the time of day, or on any other basis as determined by the Market Operator,
  - (b) Increase progressively as the constraint becomes more severe; and
  - (c) Increase or decrease as a function of the length of time for which the *constraint* has been violated.
- 3.6.2.3 The *constraint violation coefficients* for the nodal *energy balance equations* referred to in clause 3.6.1.4 (c):
- (a) Will be known as the nodal value of lost load (nodal VoLL); and
  - (b) May vary from node to node and/or be set so as to reflect load shedding priorities.
- 3.6.2.4 The *Market Operator*, in coordination with the System Operator, and in consultation with the WESM Members shall regularly review the appropriateness and applicability of constraint violation coefficients levels in accordance with clause 10.4.11.1; and revise as maybe necessary to ensure that it reflects the actual conditions of the network. Such revisions shall be approved by the PEM Board and shall be published in accordance with the timetable. (Added as per DOE DC. No. 2010-03-0004 dated 21 March 2010)

### 3.6.3 Interpretation of Model Outputs

The output of the *market dispatch optimization model* is to be interpreted as providing *energy* and when applicable *reserve dispatch* targets for the end of each *trading interval* to which the *market dispatch optimization model* is applied.

### 3.6.4 Modeling Approximations

- 3.6.4.1 If the *Market Operator* deems it to be appropriate in all the circumstances, the *market dispatch optimization model* may incorporate reasonable approximations so as to render

the optimization problem solvable using an established *optimization methodology* such as linear programming.

3.6.4.2 Any approximations introduced in accordance with clause 3.6.4.1:

- (a) May involve producing a piece-wise linear approximation to a non-linear function;
- (b) May involve producing a convex approximation to a non-convex function;
- (c) May include automated procedures to deal with situations in which a choice shall be made to impose or relax certain *constraints*, as provided for in clause 3.5.13; and
- (d) Shall preserve, under all operating conditions, an accuracy which is generally acceptable to all *WESM members* and particularly to any *Trading Participants* directly affected by such approximations.

### 3.6.5 Model Development

From time to time, the *System operator* and the *Market Operator* shall investigate the scope for further development of the *market dispatch optimization model* beyond the minimum requirements specified in clause 3.6.1 and, submit their recommendations in a report to the *PEM Board* for consultation with *WESM members*.

[\(As amended by DOE DC No.2005-11-010 dated 11 November 2005\)](#)

### 3.6.6 Market Settlement

The market shall be cleared, prices determined, and dispatch determined according to the model results for each *trading interval*, in the form that is written. The model results shall not be challenged ex-post.

In the event that *Trading Participants* identify solution inconsistencies with the stated definition and objectives of the model, the *Market Operator* will formulate a plan to correct the model.

Notwithstanding such model solution errors, the *spot market* shall continue to be cleared according to the model results until a model revision is put into service in accordance with clause 3.6.5.

## 3.7 MARKET PROJECTIONS

The *Market Operator* shall prepare and *publish week ahead projections* and *day ahead projections* using the *market dispatch optimization model*, in accordance with the *timetable*.

### 3.7.1 Week Ahead Projections

3.7.1.1 *Week ahead projections* shall be prepared by the *Market Operator* and *published* daily, in accordance with the *timetable*, to assist *Trading Participants* to anticipate and respond to the range of *spot market* conditions which might reasonably be expected to occur over the forthcoming week.

3.7.1.2 *Market projections* shall be prepared for all *trading intervals* within the relevant *market horizon* as defined in the *timetable*.

### 3.7.2 Day Ahead Projections

3.7.2.1 *Day ahead projections* shall be prepared using the *market dispatch optimization model* by the *Market Operator* and *published* regularly through the day, in accordance with the *timetable*, to assist *Trading Participants* to anticipate and respond to the range of *spot market* conditions which might reasonably be expected to occur over the forthcoming day.

3.7.2.2 *Market projections* shall be prepared for all *trading intervals* within the relevant *market horizon* as defined in the *timetable*.

### 3.7.3 Preparation of Market Projections

3.7.3.1 Each *market projection* shall take into consideration:

- (a) The *network service provider data* prepared in accordance with clause 3.5.2;
- (b) *Reserve requirements*, the anticipated *market network model configuration*, *constraints* and *system security* requirements for each *reserve region*, as advised by the *System operator* in accordance with clause 3.5.3;
- (c) The forecast demand information prepared in accordance with clause 3.5.4;

- (d) The *generation offer* information submitted by each relevant *Trading Participant* in accordance with clause 3.5.5;
  - (e) The nomination of *loading levels* for each *non-scheduled generating unit* and the *projected output* for each *must dispatch generating unit* and *priority dispatch generating units* submitted under Clause 3.5.5; and [\(As amended by DOE DC No. 16-01-0002 dated 12 January 2016\)](#)
  - (f) When applicable, the *reserve offer* information submitted by each relevant *Trading Participant* in accordance with clause 3.5.7 and 3.5.8.
- 3.7.3.2 Prior to the preparation of each set of *market projections*, the *Market Operator* shall, in consultation with the *System operator*, prepare an expected unrestrained net *load forecast* in accordance with the procedures developed under clause 3.5.4, and such number of other load *scenarios* as may be determined in consultation with *WESM Participants* and approved by the *PEM Board*.
- 3.7.3.3 The *Market Operator* shall prepare a market projection corresponding to each load scenario developed under clause 3.7.3.2.
- 3.7.3.4 When a probability of a significant failure in the power system has been advised to the *System operator*, the *Market Operator* may, in consultation with the *System Operator*, also prepare market projections in which the constraint structure is modified to represent a situation in which such failures occur.
- 3.7.3.5 Market projections shall be prepared by the *Market Operator* through the application of the market dispatch optimization model to all trading intervals within the relevant market horizon as defined in the timetable.
- 3.7.3.6 When preparing a *market projection*, the starting conditions for each successive *trading interval* shall be determined:

- (a) In respect of the first *trading interval*, as the actual, or expected, *power system* conditions at the time of the commencement of the *market projection*; and
- (b) In respect of subsequent *trading intervals*, as the projected *power system* conditions determined by the *market dispatch optimization model* for the end of the previous *trading interval* in that *market projection*.

3.7.3.7 The Market Operator shall publish additional updated versions of a market projection in the event of changes which, in the opinion of the Market Operator, are material and which should be communicated to Trading Participants.

3.7.3.8 The *Market Operator* shall document the exact procedure it uses for preparation of *market projections* and make the procedure available to all *Trading Participants*.

#### 3.7.4 Published Information

3.7.4.1 Based on the information referred to in Clause 3.7.3, each *market projection* published by the *Market Operator* in accordance with the *timetable* specified in the relevant *Market Manuals* shall contain the following information for each *trading interval* in the period covered by the *market projection*: [\(As amended by DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

- (a) The assumed *net load forecast* at each *market network node*, plus required *reserves* for each *reserve region*;
- (b) The required level of *reserve* for each *reserve region*;
- (c) Any modifications to *plant or network* availability which the *Market Operator* may have made under clause 3.5.13 in forming this projection;
- (d) Projected aggregate dispatch of *scheduled generating units*, *must dispatch generating units*, *priority dispatch generating units*, *non-scheduled generating units*, and *scheduled load* at each *market*



*network node; [\(As amended by DOE DC No. 16-01-0002 dated 12 January 2016\)](#)*

- (e) Projected aggregate cleared *reserve quantities* for reserve regions and *reserve facility categories*;
- (f) The projected *market price* for each *market trading node*;
- (g) When applicable *projected reserve prices* for each *reserve region*; and
- (h) Identification and quantification of:
  - (1) Projected *load shedding* requirement;
  - (2) Projected *violations of system security*;
  - (3) Projected failure to meet *reserve* requirements;
  - (4) *Trading intervals* for which low or inadequate capacity margins are projected to apply; and
  - (5) Projected congestion on *market network lines*; and
  - (6) *Constraint violation coefficients*.

### 3.8 SCHEDULING AND DISPATCH IMPLEMENTATION

#### 3.8.1 Responsibilities of the Market Operator

Prior to commencement of each trading interval, the *Market Operator* shall, in consultation with the *Grid Operator*, and in accordance with the timetable prescribed in the relevant *Market Manuals*:[\(As amended by DOE DC No.2003-11-010 dated 11 November 2005 and further amended by DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

- (a) Determine, or estimate, the status of all generation facility for that *trading interval*;
- (b) Prepare a forecast of the *unrestrained net load* expected at each *market trading node* for the end of that *trading interval*;  
[\(As amended by DOE DC No.2005-11-010 dated 11 November 2005\)](#)
- (c) Adjust that *unrestrained net load forecast* to account for *load shedding*, if required, in accordance with clause 3.9.5;

- (d) Determine the most appropriate network configuration and state to be assumed for the end of that *trading interval*;
- (e) Use the *market dispatch optimization model* to determine the target *loading level* in MW for each *scheduled generating unit*, *must dispatch generating unit*, *priority dispatch generating unit*, *non-scheduled generating unit*, *scheduled load* and *reserve facility* for the end of that *trading interval* using the latest data from the *System Operator* and *Trading Participants*; [\(As amended by DOE DC No. 16-01-0002 dated 12 January 2016\)](#)
- (f) Submit to the *System operator* the *dispatch schedule* containing the target *loading levels* to be achieved at the end of that *trading interval*, determined in accordance with clause 3.8.1 (e);
- (g) Send to all *Trading Participants* a *dispatch schedule* that contains target *loading levels* in respect of their *scheduled generating unit*, *must dispatch generating unit*, *priority dispatch generating unit* and *non-scheduled generating units* calculated under Clause 3.8.1(e) for each *trading interval* prior to the commencement of that *trading interval* in accordance with the relevant *Market Manuals*; and [\(Added per DOE DC No. 16-01-0002 dated 12 January 2016\)](#)
- (h) Ensure that the *dispatch schedule* issued to a *must dispatch generating unit* or *priority dispatch generating unit* includes the information on whether or not the scheduled output of the *generating unit* has been restricted in accordance with Clause 3.6.1.7.” [\(Added per DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

### **3.8.2 Responsibilities of the System operator**

- 3.8.2.1 During each *trading interval*, the *System Operator* shall use its reasonable endeavors to:
  - (a) Implement the *dispatch* targets determined by the *Market Operator*,
  - (b) Maintain *system security* consistent with the requirements of the *Grid Code*;

- (c) Implement *load shedding*, if necessary, as provided by clause 3.9;
- (d) Dispatch *Constrain-on* or *Constrain-off* generators or *Must-Run Units* if all available frequency regulation and contingency reserves are exhausted during a trading interval. The *System Operator* may also dispatch generators as *Must-Run Units* in specific grid areas which have become isolated from the rest of the grid and in which the Market Operator cannot determine the generator schedules;
- (e) In relation to (d) above, the *System Operator* shall incorporate to its Ancillary Service Procurement Plan Must-Run Units as an additional type of Ancillary Service. For this purpose, the criteria and procedures developed under Clause 3.5.13 shall be revised accordingly; and
- (f) Intervene, where necessary, as provided by Clauses 6.3 and 6.5.

[\(As amended by DOE DC No.2014-10-0021 dated 24 October 2014\)](#)

3.8.2.2 After each *trading interval*, in accordance with the *timetable* prescribed in the relevant *Market Manuals*, the *System Operator* shall advise the *Market Operator* of: [\(As amended by DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

- (a) Situations in which it became necessary for dispatch instructions to deviate from the dispatch targets determined by the *Market Operator* during the *trading interval*;
  - (b) *Load Shedding* or other directions issued by the *System operator* during the *Trading Interval*;
- [\(As amended by DOE DC No.2005-11-010 dated 11 November 2005\)](#)

- (c) Significant incidents in which *contingency reserve* was called upon during the *trading interval*;
- (d) *Network constraints* which affected *dispatch* during the *trading interval*;
- (e) Binding security constraints which affected dispatch during the trading interval; and
- (f) Operational irregularities arising during the trading interval including but not limited to any circumstances in which there was prima facie evidence of a failure to follow dispatch instructions.
- (g) The following information in respect of *must dispatch generating units* and *priority dispatch generating units*:
  - (i) any output restrictions imposed by the *System Operator* or *Market Operator* on *must dispatch generating units* and *priority dispatch generating units*;
  - (ii) the compliance of those units with those output restrictions;
  - (iii) the compliance of *must dispatch generating units* and *priority dispatch generating units* with the other operating parameters imposed by the *Grid Code*; and
  - (iv) any other information prescribed in the relevant *Market Manuals*.

[\(Added per DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

The *System Operator* shall likewise provide a dispatch deviation report to the *Market Operator*, in accordance with the *Timetable*, detailing among others the circumstances and dispatch levels of units that were *Constrained-on* or *Constrained-off* or put on must-run during a *Trading Interval*. [\(As amended by DOE DC No.2014-10-0021 dated 24 October 2014\)](#)

- 3.8.2.3 Before each *trading interval*, in accordance with the *timetable* prescribed in the relevant *Market Manuals*, the *System Operator* shall submit to the *Market Operator* the *variable renewable energy aggregated generation forecast* for each interconnected system it operates in accordance with the *Grid Code*.  
[\(Added per DOE DC No. 16-01-0002 dated 12 January 2016\)](#)
- 3.8.3 System Operator Implementation of Real-Time Dispatch  
[\(Added per DOE DC No. 16-01-0002 dated 12 January 2016\)](#)
- 3.8.3.1 The *System Operator* and *Trading Participants* shall communicate with each other with regard to the target *loading levels* for each *trading interval* prior to the commencement of that *trading interval* in accordance with the *timetable* and consistent with the *Grid Code*. [\(Added per DOE DC No. 16-01-0002 dated 12 January 2016\)](#)
- 3.8.3.2 All *scheduled generating units* and *priority dispatch generating units* shall follow all instructions from the *System Operator*, in accordance with the *Grid Code*, the *WESM Rules* and pertinent *Market Manuals*.  
[\(Added per DOE DC No. 16-01-0002 dated 12 January 2016\)](#)
- 3.8.3.3 Subject to Clause 3.8.3.4, if, in real-time, the available *generation* from a *must dispatch generating unit* differs from the available *generation* assumed in the *dispatch schedule* provided to the *System Operator*, the *System Operator* shall allow the *must dispatch generating unit* to generate at its *maximum available output*, and, if all available frequency regulation is exhausted during a *trading interval*, shall adjust the *dispatch* of other *generating units*, to compensate as required in accordance with relevant *Market Manuals*.

(Added per DOE DC No. 16-01-0002 dated 12 January 2016)

3.8.3.4 The *System Operator* shall instruct a *must dispatch generating unit* or a *priority dispatch generating unit* to restrict its output or constrain its *ramp rate* to a level specified by the *System Operator*, but only while the *grid* is not operating in *normal state*, in accordance with the *Grid Code* and the relevant *Market Manuals*.

(Added per DOE DC No. 16-01-0002 dated 12 January 2016)

3.8.3.5 If the *System Operator* has instructed a *must dispatch generating unit* or a *priority dispatch generating unit* to restrict its output, the *System Operator* shall instruct the *generating unit* to remove the restriction as soon as practicable after the actual or potential system security issue has been resolved.

(Added per DOE DC No. 16-01-0002 dated 12 January 2016)

#### **3.8.4 Dispatched Trading Participants**

3.8.4.1 *Scheduled generating units* and *priority dispatch generating units* who are dispatched shall use reasonable endeavors to achieve a linear *ramp rate* over the *trading interval* to reach the target loading level by the end of that *trading interval* and within the *dispatch tolerances* specified in Clause 3.8.7 and those *Trading Participants* should not be required to operate in any different fashion unless required to:

- (a) Respond in accordance with reserve or ancillary service contracts; or
- (b) Respond to a direction in accordance with Clauses 6.3 and 6.5.

(Added per DOE DC No. 16-01-0002 dated 12 January 2016)

3.8.4.2 A *priority dispatch generating unit* shall follow the *dispatch schedule* issued by the *Market Operator*, unless otherwise instructed by the *System Operator* under Clause 3.8.3.

[\(Added per DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

3.8.4.3 If the *projected output* of a *must dispatch generating unit* has been restricted, as communicated in accordance with Clause 3.8.1(h), the *must dispatch generating unit* shall ensure its output does not exceed the value included in the *dispatch schedule*.

[\(Added per DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

3.8.4.4 A *must dispatch generating unit* shall generate at its *maximum available output* at all times, unless the *Market Operator* or *System Operator* has instructed the *generating unit* to restrict output under Clauses 3.8.1(h) or 3.8.3.4.

[\(Added per DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

### **3.8.5 Ramp Rate of Trading Participant**

Where applicable, *Trading Participants* will be assumed to have a *linear ramp rate* over that *trading interval* to reach the target *loading levels* by the end of that *trading interval*.

### **3.8.6 Deviations from the Ramp Rate**

If *Trading Participants* in some part of the *power system* deviate in aggregate from the assumed *Linear Ramp Rate* for any reason or as a result of any cause including the initiation of *Load Shedding* under Clause 3.9.3, these deviations shall be dealt with by the *System Operator*, utilizing the *Reserves*, or other *Ancillary Services* scheduled to deal with such circumstances, in accordance with Clause 3.3.

*Trading Participants* are required to comply with linear ramping in any trading interval; otherwise, the *Market Operator* or the *System Operator* shall report the generator to the *Market Surveillance Committee*.

[\(As amended by DOE DC No.2014-10-0021 dated 24 October 2014\)](#)

### 3.8.7 Dispatch Tolerances

- 3.8.7.1 *Dispatch tolerances* shall be set to allow limits on the extent to which *scheduled generating units, and priority dispatch generating units* may deviate from dispatch targets issued by the *System Operator*.

[\(As amended by DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

- 3.8.7.2 The *Market Operator* shall maintain and publish *dispatch tolerances* standards developed by the *System Operator* for each type of plant, and location, in accordance with Clause 3.8.7, the *Grid Code*, and the *Distribution Code*. [\(As amended by DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

### 3.8.8 Sanctions of Trading Participants

- 3.8.8.1 Any *Trading Participant* who consistently fails to use its reasonable endeavors to act in accordance with *dispatch schedules* issued under Clause 3.8.1(g), *dispatch instructions* issued by the *System Operator*, or who breaches the *dispatch tolerance* standards published under Clause 3.8.7.2, may be liable of a sanction imposed under Clause 7.2.

[\(As amended by DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

- 3.8.8.2 A *Trading Participant* that fails to comply with a directive from the *System Operator* issued under Chapter 6 of these *WESM Rules*, the relevant *Market Manuals*, and the *Philippine Grid Code* in respect to its must *dispatch generating unit* may be liable for sanctions imposed under Clause 7.2.

[\(Added per DOE DC No. 16-01-0002 dated 12 January 2016\)](#)



### 3.9 TREATMENT OF LOAD SHEDDING, EXCESS GENERATION AND RESERVE VIOLATION

(As amended by DOE DC No. 2006-01-0001 dated 10 January 2006)

#### 3.9.1 Direction to Conduct Load Shedding

The *System Operator* may direct a *WESM member* to conduct *load shedding* in response to:

(As amended by DOE DC No. 2014-03-0007 dated 26 March 2014)

- (a) An overall shortage of *energy* at a *node* or in a region specified in the *market network model*; or
- (b) Other *network conditions*, as determined by the *System operators* accordance with the procedures established under the *Grid Code and Distribution Code*.

#### 3.9.2 Market Operator Advice on Load Shedding

In the event that:

- (a) *Day ahead projections* performed under clause 3.7; or
- (b) *Dispatch optimization* performed under clause 3.8, indicate that nodal *energy prices* are expected to be equal to, or exceed, nodal VoLL at any *customer nodes* in the *market network model*, then the *Market Operator* shall immediately inform the *System operator* of the likelihood of initiating *load shedding* at those nodes.

#### 3.9.3 System operator Responsibility to Initiate Load Shedding

The *System Operator*.

- (a) Shall, if advised by the *Market Operator* under clause 3.9.2, consider the need to initiate *load shedding*, at those nodes, or at other nodes, after taking account of the *load shedding* targets from the relevant *dispatch optimization*, and any other considerations which the *System operator* considers relevant under the *Grid Code and Distribution Code* and any other applicable regulatory instrument; and
- (b) May initiate *load shedding* in response to any other circumstances which it reasonably considers necessitates such action under the *Grid Code and Distribution Code* or any other applicable regulatory instrument.

#### **3.9.4 Advising of Load Shedding**

If it is anticipated that *load shedding* will occur in a *trading interval*, the *System operator* shall, as soon as possible, advise its load shedding plans to:

- (a) The *Market Operator*; and
- (b) *WESM members* who are likely to be directly affected by such *load shedding*. [\(As amended by DOE DC No. 2014-03-0007 dated 26 March 2014\)](#)

#### **3.9.5 Revising Forecasts**

If advised by the *System operator* of the likelihood of *load shedding* in any *trading interval* under clause 3.9.4, the *Market Operator* shall, as soon as possible:

- (a) If practical within the time frame remaining before the start of that *trading interval*, revise the *load forecasts* to be used to determine the *dispatch schedule* for that *trading interval* in accordance with clause 3.5.4.4, to account for those *load shedding plans*; and
- (b) Issue additional *day ahead projections*, if required, under clause 3.7.3.7.

#### **3.9.6 Pricing Error Notice**

If, as a result of *load shedding*, no *ex-ante prices* can be determined or communicated within the timeframe specified in the timetable, or the calculated prices are believed to be in error, the *Market Operator* shall, as soon as possible, issue a *pricing error notice* in accordance with clause 3.10.5. [\(As amended by DOE DC No. 2005-11-010 dated 11 November 2005\)](#)

#### **3.9.7 Management of Load Shedding**

The *System operator* and the *Market Operator* shall manage all aspects of *dispatch* and *pricing* during periods when *load shedding* is required in accordance with the detailed procedures to be developed by the *System operator* and the *Market Operator*, in consultation with *WESM Participants*, and subject to approval by the *PEM Board*, consistent with the *Grid Code and Distribution Code*

#### **3.9.8 Management Procedures for Excess Generation**

3.9.8.1 Should either the *Dispatch Optimization*, or any *Market Projection*, indicate *Excess Generation* at any *Node*, the *Market Operator* shall advise the *System Operator* that it may be necessary to require some *Generating Systems* to shut down.

[\(As amended by DOE DC No.2014-10-0021 dated 24 October 2014\)](#)

3.9.8.2 Where necessary to shut down *Generating Systems* under Clause 3.9.8.1, the *System Operator* and the *Market Operator* shall manage all aspects of *Dispatch* and pricing in accordance with the procedures to be developed by the *System Operator* and the *Market Operator*, in consultation with WESM Participants, and subject to approval by the *PEM Board*. The procedures shall also take into account the occurrence of excess generation during a *trading interval* when the *System Operator* has exhausted its *Ancillary Services* to address the excess generation.

[\(As amended by DOE DC No.2014-10-0021 dated 24 October 2014\)](#)

3.9.8.3 During a *Trading Interval*, if *Excess Generation* is imminent or is detected in the *Power System* by the *System Operator* in accordance with the *Grid Code* and it is established that the *Excess Generation* is being caused by a *Generating System* that is not following its dispatch schedule or observing a linear ramp rate, then the *Generation Company* representing the *Generating System* in the market may be liable of a sanction under Clause 7.2. The *Generation Company* representing the *Generating System* that is not following its *Dispatch Schedule* or observing linear ramp rate, however, shall compensate other *Generation System* that has been constrained-off by the *System Operator*. Such conditions shall also be

considered in the procedures to be developed under Clause 3.9.8.2.

(As amended by DOE DC No.2014-10-0021 dated 24 October 2014)

### 3.9.9 Management Procedures for Reserve Violation

(Added as per DOE DC No. 2006-01-0001 dated 10 January 2006)

3.9.9.1 Should either the dispatch optimization or any market projection indicate a violation of a reserve requirement, the *Market Operator* shall: (Added as per DOE DC No. 2006-01-0001 dated 10 January 2006)

- (a) Promptly advise the *System operator* that it may be necessary to reduce the level of the reserve requirement.
- (b) Reduce the *reserve* requirement by the minimum amount to a level that prevents a violation of that requirement.
- (c) Solve the *market dispatch optimization model* with the reduced *reserve* requirement.

3.9.9.2 The prices determined in clauses 3.10.2, 3.10.6 and 3.10.10 will be derived from the solution of the *market dispatch optimization model* provided for in clause 3.9.9.1 (c) (Added as per DOE DC No. 2006-01-0001 dated 10 January 2006)

## 3.10 DETERMINATION OF MARKET PRICES

### 3.10.1 Calculation of Prices

For each *trading interval*, the *Market Operator* shall calculate, and publish in accordance with the *timetable*:

- (a) *Ex-ante nodal energy prices* in accordance with clause 3.10.2;
- (b) *Ex-ante zonal energy prices* in accordance with clause 3.10.3;
- (c) *Ex-post nodal energy prices* in accordance with clause 3.10.6;
- (d) *Ex-post zonal energy prices* in accordance with clause 3.10.8; and

- (e) When applicable, *zonal reserve prices* in accordance with clause 3.10.10.

### **3.10.2 Determination of Ex-Ante Nodal Energy Price**

The *ex-ante nodal energy price* for each *market trading node* in any *trading interval* shall, subject to clause 3.10.5, be determined as the *shadow price* on the *energy balance equation* or equivalent mathematical formulation for that *market trading node* formed in accordance with clause 3.6.1.4 (c), in the *dispatch optimization* performed for that *trading interval* in accordance with clause 3.8.1. [\(As amended by DOE DC No. 2006-01-0001 dated 10 January 2006\)](#)

### **3.10.3 Determination of Ex-Ante Zonal Energy Prices**

*Ex-ante zonal energy prices* shall be determined for each *customer pricing zone*.

### **3.10.4 Publishing Ex-Ante Prices According to Timetable**

The *Market Operator* shall *publish* the *ex-ante nodal energy prices* and the *ex-ante zonal energy prices*, prior to the commencement of the *trading interval* to which they apply in accordance with the *timetable*.

### **3.10.5 Pricing Error Notice**

In the event where no *ex-ante prices* can be determined or communicated within the timeframe specified by the *timetable*, or the calculated prices are believed to be in error, as a result of *load shedding*, occurrence of *constraints violation coefficients*, or for any other reason: [\(As amended by DOE DC 2005-11-010 dated 11 November 2005\)](#)

- (a) The *Market Operator* may, as soon as possible after the end of a *trading interval*, issue a *pricing error notice*, in which case, the *ex-post quantities* and the *ex post prices* determined according to clause 3.10.7 shall also serve as *ex-ante quantities* and *ex-ante prices*. If no *ex-post prices* can be determined or the calculated prices are believed to be in error as a result of the imposition or relaxation of constraints pursuant to clause 3.5.13.1, the *Market Operator* shall re-run the *Market Dispatch Optimization Model*. [\(As amended by DOE DC No. 2005-11-010 dated 11 November 2005 and further amended by DOE DC No. 2006-05-006 dated 5 May 2006\)](#)

The *Market Operator* shall develop and publish the procedures for the determination of the market re-run prices. Such procedures shall provide the criteria and conditions for the market re-run and the timetable for implementation. [\(As amended by DOE DC No.2010-03-0004 dated 21 March 2010\)](#)

- (b) If no *pricing error notice* is issued within the time specified in the foregoing paragraph, the *ex-post prices* and quantities shall serve as ex-ante prices and quantities and shall stand irrespective of the outcome of any subsequent investigations or resolutions of any dispute.

[\(As amended by DOE DC No. 2005-11-010 November 2005\)](#)

- (c) Should the pricing error also include *reserves*, the *reserve* quantity and price determined in the *ex-post* run shall serve as the *reserve* quantity and prices. (Added as per DOE DC No. 2005-11-010 November 2005)

### 3.10.6 Determination of Ex-Post Nodal Energy Price

The *ex-post nodal energy price* for each *market trading node* shall be determined as the *shadow price* on the *energy balance equation* or equivalent mathematical formulation for that *market trading node*, formed in accordance with clause 3.6.1.4 (c), in a *ex-post dispatch optimization* performed, in accordance with the *timetable*, to determine target *dispatch* levels for the end of that *trading interval*, assuming: [\(As amended by DOE DC No. 2005-11-010 dated 11 November 2005 and further amended by DOE DC No. 2006-01-0001 dated 10 January 2006\)](#)

- (a) the *plant* status at the end of that *trading interval* as determined for the ex-post dispatch optimization or, if load shedding occurred in that *trading interval*, the *plant* status which would have pertained at the end of that *trading interval*, as indicated in the targets determined by the ex-post dispatch for that *trading interval*; [\(As amended by DOE DC No. 2005-11-010 November 11, 2005\)](#)
- (b) The *generation offers* which applied at the beginning of that *trading interval*. [\(As amended by DOE DC No. 2005-11-010 November 11, 2005\)](#)

- (c) The *unrestrained load* determined from *metering data*, or estimated, at the end of that trading interval, to apply at each *market network node* for that *trading interval*. [\(As amended by DOE DC No. 2005-11-010 November 11, 2005\)](#)
- (d) The real-time instantaneous injection at the end of that *trading interval* of *non-scheduled generating units* in place of their nomination of *loading levels*; [\(Added per DOE DC No. 16-01-0002 dated 12 January 2016\)](#)
- (e) The real-time instantaneous injection at the end of that *trading interval* of *must dispatch generating units* and *priority dispatch generating units* in place of their *projected outputs*; [\(Added per DOE DC No. 16-01-0002 dated 12 January 2016\)](#)
- (f) A market network configuration and network state which the Market Operator, in consultation with the *System Operator*, in its reasonable opinion determines to best represent network conditions pertaining for the duration of the *trading interval*, as provided for by the procedures developed under Clause 3.10.7; and [\(As amended by DOE DC No. 16-01-0002 dated 12 January 2016\)](#)
- (g) Any relevant constraints recommended by the *System Operator* to represent system security conditions or actual generation performance over the *trading interval*, as provided for by the procedures developed under Clause 3.10.7. [\(As amended by DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

### 3.10.7 Procedures for Ex-Post Nodal Energy Price

The *Market Operator*, in consultation with *WESM Participants*, and subject to approval by the *PEM Board*, shall develop and publish the procedures to be employed in Clauses 3.10.6 (d), (e), (f), and (g) in establishing the real-time instantaneous injection of *non-scheduled generating units*, *must dispatch generating units*, and *priority dispatch generating units*, network configuration and other constraints to be assumed for the determination of *ex-post nodal energy prices* for circumstances in which power system conditions materially change during the *trading interval*, with a view to ensuring that: [\(As amended by DOE](#)

DC No. 2005-11-010 dated 11 November 2005 and further amended by DOE DC No. 16-01-0002 dated 12 January 2016)

- (a) Consistency is maintained between the market network configuration and state determined in accordance with Clause 3.10.6 (f), any constraints determined in accordance with Clause 3.10.6 (g), the unrestrained net loads measured or estimated for each market network node in accordance with Clause 3.10.6 (c), and the real-time instantaneous injection of *non-scheduled generating units, must dispatch generating units, and priority dispatch generating units* in accordance with Clauses 3.10.6 (d) and (e); and (As amended by DOE DC No. 16-01-0002 dated 12 January 2016)
- (b) The ex-post prices produced in accordance with Clause 3.10.6, properly and fairly represent conditions at the end of the trading interval. (As amended by DOE DC No. 16-01-0002 dated 12 January 2016)

**3.10.8 Determination of Ex-Post Zonal Energy Prices**

The *ex-post zonal energy prices* for each *trading interval* shall be load weighted average of the *ex-post nodal energy prices* within a *customer pricing zone*.

**3.10.9 Determination of Ex-Ante And Ex-Post Energy Settlement Prices**

Subject to clause 3.10.5, the *ex-ante energy settlement prices and ex-post energy settlement prices* for each *market trading node* in each *trading interval* shall be:

- (a) The *ex-ante zonal energy price and the ex-post zonal energy price* for that *trading interval* determined for that *customer pricing zone* in accordance with clauses 3.10.3 and 3.10.8, respectively, if that node is deemed to be a *customer node* and to lie in a defined *customer pricing zone*; and
- (b) The *ex-ante nodal energy price and the ex-post nodal energy price* for that *node*, in that *trading interval*, determined in accordance with clauses 3.10.2 and 3.10.6, respectively, for all other nodes.



### 3.10.10 Determination of Zonal Reserve Price

When applicable, the *zonal reserve price* for each *market reserve zone* in each *trading interval* shall be determined as the *shadow price* on the relevant *reserve requirement constraint*, defined in accordance with clause 3.6.1.4 (e), in the *dispatch optimization* for that *trading interval* and *published* by the *Market Operator* before the start of that *trading interval*.

## 3.11 MARKET INFORMATION

### 3.11.1 Market Information

3.11.1.1 The *Market Operator* shall *publish* the following:

- (a) *Nodal energy prices* for each *market trading node*;
- (b) *Zonal energy prices* for each *customer energy pricing zone*;
- (c) When applicable, *reserve prices* for each *reserve region*; and
- (d) *Binding network constraints*, for each *trading interval* in accordance with the *timetable*.

3.11.1.2 As part of the information record under clause 5.2.5, the *Market Operator* shall retain details of:

- (a) Final *dispatch* offers and when applicable, *reserve* offers;

[\(As amended by DOE DC No.2005-11-010 dated 11 November 2005\)](#)

- (b) Final *dispatch* bids; and
- (c) Actual availabilities of generating units and scheduled load,
- (d) Including, for each *trading interval* and *dispatch* offer and *dispatch* bid:
- (e) The identification of the *Trading Participant* submitting the *dispatch* bid or *dispatch* offer

[\(As amended by DOE DC No.2005-11-010 dated 11 November 2005\)](#)

- (f) The *dispatch* bid or *dispatch* offer prices and quantities; and

- (g) The time at which any final dispatch offer or dispatch bid was made.

3.11.1.3 Each *trading day*, in accordance with the timetable, the *Market Operator* shall publish:

- (a) The *dispatch schedule* for each *scheduled generating unit*, *must dispatch generating unit*, *priority dispatch generating unit*, *non-scheduled generating unit* and *scheduled load* in each *trading interval* for the previous *trading day*; and [\(As amended by DOE DC No. 16-01-0002 dated 12 January 2016\)](#)
- (b) A summary of the information provided to it with respect to each *trading interval* by the *System operator* in accordance with clause 3.8.2.2.

### 3.11.2 Access to Information

3.11.2.1 All information relating to the operation of the *spot market* that the *Market Operator* is required to *publish* in accordance with the *WESM Rules* shall be made available by the *Market Operator* via the *electronic communications system*.

3.11.2.2 If the *Market Operator* makes information available under clause 3.11.2.1 by additional means other than the *electronic communications system*, the *Market Operator* may, at its discretion, charge a fee for access to that information provided that such fee reflects the *Market Operator's* costs of providing that information.

## 3.12 FINANCIAL TRANSMISSION RIGHTS

### 3.12.1 Market for Transmission Rights

When necessary or reasonably feasible, the *Market Operator* shall establish a market for *transmission rights* as approved by the *PEM Board*.

### 3.12.2 Publication of Rental Information

The *Market Operator* shall regularly *publish* in summary form the rentals associated with each *market network line* as calculated under clause 3.13.12.

### 3.12.3 Further Transmission Rights

From time to time, and at least annually, the *Market Operator* shall assess the potential for the issuance of further *transmission rights*, of the form provided for in the *settlements* process defined by clause 3.13.

### 3.12.4 Matters to Consider in Assessment

The assessment shall take account of the:

- (a) Demand for *transmission rights* between particular locations, as evidenced by *WESM member* submissions;
- (b) Uncommitted physical capacity between those locations, as indicated by the difference between the physical capacity of the lines involved, and the *transmission rights* already issued; and
- (c) Economic feasibility of supporting further *transmission rights*, as indicated by the difference between the line rental trading amounts calculated for particular lines in accordance with clause 3.13.12, and the cost of supporting *transmission rights* already issued, as evidenced by the *transmission rights* trading amounts calculated in accordance with clause 3.13.13.

### 3.12.5 Issuing Transmission Rights

3.12.5.1 *Transmission rights* may be issued by the *Market Operator*, and may be settled via the *settlements system*, in accordance with clause 3.13.15, provided:

- (a) The issuer of the *transmission right* enters into a commitment to support that *transmission right*, in accordance with clause 3.13.2 (d);
- (b) The issuer of the *transmission right* complies with such *prudential requirements* as may be approved by the *PEM Board* under clause 3.14 taking into account the implied potential exposure of the issuer to *settlement price* differences between the *nodes* involved;
- (c) The *transmission right* is defined between two *markets trading nodes*; and

- (d) The relevant details of the *transmission rights* are notified to the *Market Operator*, in accordance with clause 3.13.2.

3.12.5.2 A *WESM member* may request the *Market Operator* to make available a *transmission right* at an appropriate price.

3.12.5.3 The issuance of a *transmission right* is not to be unreasonably withheld.

#### **3.12.6 Accounting for Net Income**

The net income that will be derived by the *Market Operator* from the transactions required under clause 3.13.16 or from the sale of *transmission rights*, shall be clearly accounted for, and taken into account when setting the allowable charges under any regulatory instruments applicable to the *Market Operator*.

### **3.13 SETTLEMENT QUANTITIES AND AMOUNTS**

#### **3.13.1 Submission of Bilateral Contract Data**

3.13.1.1 *Trading Participants* who sell electricity pursuant to *bilateral contracts* and wish those *bilateral contracts* to be accounted for in settlements shall, after each *trading day*, in accordance with the billing and settlements timetable: [\(As amended by DOE DC No. 2005-11-010 dated 11 November 2005\)](#)

- (a) Submit a schedule to the *Market Operator* specifying the

*MWH bilateral sell quantities* at each *relevant market trading node*, in each *trading interval* of that *trading day*;

- (b) Identify the counterparty to the bilateral contract and the party that will pay the line rental trading amount associated with the bilateral contract quantity submitted; provided, however, that in case only one of the bilateral counter parties is registered as a *Direct WESM Member*, that *WESM Member* shall be the party that will pay the line rental to the *Market Operator*; and [\(As amended by DOE DC No.](#)

2004-07-008 dated 7 July 2004 and further amended by DOE DC No. 2006-11-0013 dated 09 November 2006)

- (c) Provide evidence that the counterparty to the *bilateral contract* agrees with the submission made under this clause 3.13.1.1. Such evidence shall be attached to the submission of schedule in 3.13.1.1(a). (As amended by DOE DC No. 2010-03-0004 dated 21 March 2010)

3.13.1.2 *Bilateral sell quantities* submitted in accordance with clause 3.13.1.1 (a) are to be deemed to be *bilateral buy quantities* for the party identified in clause 3.13.1.1 (b), at the same *market trading node*.

### **3.13.2 Submission of Transmission Right Data**

3.13.2.1 This section shall apply only upon commencement of the *transmission rights* market established under clause 3.12.1.

3.13.2.2 *Trading Participants* who hold *transmission rights* and wish to have those *transmission rights* accounted for in *settlements* shall, after each *trading day*, in accordance with the *timetable*, submit to the *Market Operator* a schedule specifying:

- (a) The *sending node* and *receiving node* between which each *transmission right* applies;
- (b) The MWH quantities of each *transmission right* in each *trading interval* of that *trading day*, as they apply at the *sending node*;
- (c) The agreed loss differential associated with each *transmission right*, if any, as a proportion of the quantity specified in clause 3.13.2 (b); and
- (d) That the *System operator* is in agreement with the submission made under clause 3.13.2 (and providing evidence of that agreement), and will cover any deficit in that *System operator's* settlements position with the *spot market* under

clause 3.13.15.1(b) arising as a result of honoring this *transmission right*.

### **3.13.3 Data for Bilateral Contracts and Transmission Rights**

The *Market Operator* shall:

- (a) Inform the *Trading Participants* which submitted data under clause 3.13, if any of the data provided is invalid or incomplete; and
- (b) If the data provided under clause 3.13 is valid or complete, employ that data for settlements purposes in accordance with clauses 3.13.7 and 3.13.13.

### **3.13.4 Zonal Reserve Settlement Quantity**

The *zonal reserve settlement quantity* for each *Trading Participant* in each *trading interval* shall be calculated as:

- (a) The aggregate, across all of the *Trading Participant's* facilities in the relevant *reserve region*, of the *reserve target* determined by the *dispatch optimization* performed prior to the beginning of that *trading interval*, in accordance with clause 3.8.1; multiplied by
- (b) The *reserve effectiveness factor* for that *reserve facility category* to be determined by the *System operator*.

### **3.13.5 Defining the Gross Ex-Ante Energy Settlement Quantity for Market Trading Nodes**

3.13.5.1 For each *trading interval*, the *gross ex-ante energy settlement quantity* before being adjusted for bilateral contracts for each *market trading node* shall be determined by the *Market Operator* as follows: (As amended by DOE DC No. 2013-03-0005 dated 22 March 2013)

- (a) If the *market trading node* is defined under clause 3.2.2.1 as lying on the boundary of the *power system* operated by the *System operator*, the *gross ex-ante energy settlement quantity* for that *market trading node* is the average of the *net* expected flows into the *power system* operated by the *System operator* through the associated *meter*, as estimated by the initial conditions assumed for the beginning of the *trading interval*, and by the *forecast*, or target,

for the end of that *trading interval* for that *market trading node* assumed in, or estimated by, the *dispatch optimization* performed prior to the beginning of that *trading interval*; (As amended by DOE DC No. 2013-03-0005 dated 22 March 2013)

- (b) If the *market trading node* is defined under clause 3.2.2.2 as a *generator node* lying on the interface between *networks*, apparatus or equipment operated by parties other than the *System operator*, the gross *ex-ante energy settlement quantity* for the *market trading node* is the average of the net expected flows through the associated meter from the *Generating Company* to the *Customer* side of the *meter*, as estimated by the initial conditions assumed for the beginning of that *trading interval*, and by the target generation for the end of that *trading interval* for that *generator node*; (As amended by DOE DC No. 2013-03-0005 dated 22 March 2013) and
- (c) If the *market trading node* is defined under clause 3.2.2.2 as a customer node lying on the interface between *networks*, apparatus or equipment operated by parties other than the *System operator*, the gross *ex-ante energy settlement quantity* for that *market trading node* is the negative of the amount determined for the corresponding generator *node* in clause 3.13.5.1 (b).

### **3.13.6 Defining the Gross Ex-Post Energy Settlement Quantity for Market Trading Nodes**

For each *trading interval*, the gross *ex-post energy settlement quantity* before being adjusted for bilateral contracts for each *market trading node* shall be determined by the *Market Operator* as follows:

- (a) If the *market trading node* is defined under clause 3.2.2.1 as lying on the boundary of the *power system* operated by the *System Operator*, the gross *ex-post energy settlement quantity* for the

*market trading node* is the net metered flow into the *power system* operated by the *System operator* through the associated meter, provided however, that if the *market trading node* is a *customer node*, and there is no ERC-registered embedded generation facility associated with that node, or the source of injection cannot be traced, any injection shall not be accounted for in determining the gross *ex-post energy settlement quantity* for that node; [\(As amended by DOE DC No. 2005-11-010 dated 11 November 2005 and further amended by DOE Circular No. DC 2013-07-0017 dated 26 July 2013\)](#)

- (b) If the *market trading node* is defined under clause 3.2.2.2 as a *generator node* lying on the interface between *networks*, apparatus or equipment operated by parties other than the *System Operator* the gross *ex-post energy settlement quantity* for the *market trading node* is the net metered flows through the associated meter from the *Generation Company* to the *Customer* side of the *meter*; and [\(As amended by DOE DC No. 2005-11-010 dated 11 November 2005\)](#)
- (c) If the *market trading node* is defined under clause 3.2.2.2 as a customer node lying on the interface between networks, apparatus or equipment operated by parties other than the *System operator* the gross *ex-post energy settlement quantity* for the *market trading node* is the negative of the amount determined for the corresponding *generator node* in clause 3.13.6.1(b).
- (d) If the net metered flows registered through a meter is inconsistent with the expected power flows at the *market trading node* to which that meter is associated, the *Metering Services Provider* shall determine and shall notify the *Market Operator* and the relevant *Trading Participant* the appropriate manner of determining the gross *ex-post settlement quantity* for that *market trading node*. [\(Added per DOE Circular No. DC 2013-07-0017 dated 26 July 2013\)](#)



### 3.13.7 Energy Settlement Quantity Adjustments for Bilateral

For settlement purposes, the *ex-ante energy settlement quantity* for any *market trading node* in any *trading interval* shall be determined by the *Market Operator* by adjusting the gross *-ex-ante energy settlement quantity* for that *market trading node* and any *trading interval*, as measured in accordance with clause 3.13.5 for bilateral contract quantities notified to the *Market Operator* under clause 3.13.1.1, or inferred by the *Market Operator* under clause 3.13.1.1 and accepted as valid under clause 3.13.1.2 by: [\(As amended by DOE DC No. 2005-11-010 dated 11 November 2005\)](#) [\(As amended by DOE DC No. 2013-03-0005 dated 22 March 2013\)](#)

- (a) Subtracting all *bilateral sell quantities* notified for that node in that *trading interval* from the measured or estimated gross *energy settlement quantity* for that node in that *trading interval*; and
- (b) Adding all *bilateral buy quantities* inferred for that node in that *trading interval* to the measured or estimated gross *energy settlement quantity* for that node in that *trading interval*.

### 3.13.8 Determining the Ex Ante Energy Trading Amount

For settlement purposes, the *ex-ante energy trading amount* for each *market trading node* and *trading interval* will be determined as the *ex-ante energy settlement price* for that node in that *trading interval* multiplied by the *ex-ante energy settlement quantity* (in MWh) for that node in that *trading interval*.

### 3.13.9 Determining the Ex Post Energy Trading Amount

For settlement purposes, the *ex post energy trading amount* for each *market trading node* and *trading interval* will be determined as:

- (a) The *ex-post energy settlement price* for that node in that *trading interval* multiplied by the gross *ex-post energy settlement quantity* for that node in that *trading interval* (in MWh) as adjusted in accordance with clause 4.5.2.2; [\(As amended by DOE DC No. 2013-03-0005 dated 22 March 2013\)](#) minus
- (b) The *ex-post energy settlement price* for that node in that *trading interval* multiplied by the gross *ex-ante energy settlement*

*quantity for that node in that trading interval (in MWh). (As amended by DOE DC No. 2013-03-0005 dated 22 March 2013)*

### **3.13.10 Determining the Reserve Trading Amount**

- 3.13.10.1 For settlement purposes, the *reserve-trading* amount for each *Trading Participant* who supplies *reserve* to a particular *reserve region* in a *trading interval* will be determined as the *zonal reserve price* for that *reserve region* in that *trading interval* multiplied by the *zonal reserve settlement quantity* for that *Trading Participant* in that *reserve region* for that *trading interval*.
- 3.13.10.2 During the initial operation of the *interim WESM*, the *reserve trading* amount shall be calculated based on the cost of reserves contracted for by the *System operator*.

### **3.13.11 Determining the Reserve Cost Recovery Charge**

The *reserve cost recovery charge* for settlement purposes will be determined for each *Trading Participant* in each *trading interval* in accordance with the procedures developed under clause 3.3.5.

### **3.13.12 Calculation of Line Rental Trading Amounts**

The *Market Operator* shall calculate the line rental trading amounts for each bilateral contract associated with the delivery of the bilateral contract quantities (BCQ) through the *transmission line* in the *market network model* as: (As amended by DOE DC No. 2013-03-0005 dated 22 March 2013)

- (a) The expected flow of energy out of the *receiving node of the market net work line* as determined by the *market dispatch optimization model* multiplied by the *ex-ante nodal energy settlement price* at that node; less [\(As amended by DOE DC No. 2005-11-010 dated 11 November 2005\)](#)
- (b) The expected flow of energy into the sending node multiplied by the *ex-ante nodal energy settlement price* at that node of the *market network line* as determined by the *market dispatch optimization model*.

### **3.13.13 Determining the Transmission Rights Trading Amount**

For *settlement* purposes, the *transmission right trading amount* for each *transmission right* in each *trading interval* is to be determined as:

- (a) The MWh capacity of that *transmission right* in that *trading interval* as notified under clause 3.13.2, multiplied by the *ex ante energy settlement price* for the *receiving node* in that *trading interval*; minus the sum of
- (b) The MWh capacity of that *transmission right*, in that *trading interval*, as notified under clause 3.13.2, multiplied by the *ex ante energy settlement price* at the *sending node* in that *trading interval*; plus
- (c) The MWh capacity of that *transmission right* in that *trading interval*, as notified under clause 3.13.2, multiplied by the agreed loss differential for that *transmission right*, as notified under clause 3.13.2, multiplied by the *ex ante energy settlement price* at the *receiving node* in that *trading interval*.

### **3.13.14 Settlement Amounts for Trading Participants**

3.13.14.1 For each *billing period*, the *Market Operator* shall determine the *settlement amount* for each *Trading Participant* as the sum of the aggregate trading amounts for the *trading intervals* in that *billing period*, determined in accordance with clause 3.13.14.2: plus [\(As amended by DOE DC No. 2005-11-010 dated 11 November 2005\)](#)

- (a) Any amount payable by the *Market Operator* to that *Trading Participant* in respect of that *billing period* and not accounted for in clause 3.13.14.2, including payment for any *ancillary services* purchased on behalf of the *System operator*, less the sum of
- (b) Any *market fees* which that *Trading Participant* is required to pay in respect of that *billing period* as determined in accordance with clause 2.10; plus
- (c) Any other amounts payable by that *Trading Participant* to the *Market Operator* in respect of that *billing period*, including any *ancillary services cost recovery charges*.

- 3.13.14.2 The aggregate trading amount for a *Trading Participant* for a *trading interval* equals the sum of:
- (a) The *ex-ante energy trading* amounts for each *market trading node* for which that *Trading Participant* is responsible calculated in accordance with clause 3.13.8 (which will typically be positive for a *Generation Company* and negative for a *Customer*); plus
  - (b) The *ex-post energy trading* amounts for each *market trading node* for which that *Trading Participant* is responsible calculated in accordance with clause 3.13.9 (which may be positive or negative for any *Trading Participant*); plus
  - (c) The *reserve trading* amounts for each *reserve region* into which that *Trading Participant* contributes *reserve* calculated in accordance with clause 3.13.10 (which will always be positive for both *Generation Companies* and *Customers*); plus
  - (d) The *transmission right trading* amounts for each *transmission right* held by the *WESM Participant* calculated in accordance with clause 3.13.13 (which will typically be positive for any *Trading Participant*); less the sum of
  - (e) The *reserve cost recovery charge* determined for that *Trading Participant* with respect to any *reserve cost recovery zone* within which it has any facility connected calculated in accordance with the procedures developed under clause 3.3.5 (which will be positive for any *Trading Participant*); and
  - (f) Any other *ancillary service cost recovery charges* determined for that *Trading Participant* in accordance with the procedures developed under clause 3.3.5 (which will be positive for any *Trading Participant*).

3.13.14.3 The *Market Operator* shall develop and implement, subject to approval by the ERC, the appropriate pricing and settlement methodology for compensation of trading participants whose generating units are designated as *Must-Run Units* or identified as Displaced Generators, and the corresponding recovery mechanism for the same.  
[\(As amended by DOE DC No.2014-10-0021 dated 24 October 2014\)](#)

3.13.15 Deleted [\(As per DOE DC No. 2004-07-008 dated 7 July 2004\)](#)

**3.13.16 Treatment of Remaining Settlement Surplus**

3.13.16.1 If the transactions required by clauses 3.13.14.2 (a), (b) and (d), in aggregate, result in a surplus or deficit remaining, this will be known as the *net settlement surplus*. [\(As amended by DOE DC No. 2005-11-010 dated 11 November 2005\)](#)

3.13.16.2 The net settlement surplus:

- (a) May be retained by the Market Operator, to fund deficit as a result of transactions required in clauses 3.13.14, or may be flowed back to the Market Participants in accordance with the procedures to be developed under 3.13.16.3, or may be used by the Market Operator to establish and support the market for Financial Transmission Rights subject to the approval of the PEM Board; and,  
[\(As amended by DOE DC No. 2004-07-008 dated 7 July 2004\)](#)
- (b) Shall be clearly accounted for and taken into account when setting the allowable charges under any regulatory instruments applying to the *Market Operator* and the *System operator*.

3.13.16.3 The Market Operator shall: [\(Amended by DOE DC No. 2004-07-008 dated 7 July 2004\)](#)

- (a) Publish regular summary reports on the amount of any net settlement surplus being generated;
- (b) within one year from spot market commencement date, and every year thereafter, publish a review of the underlying factors giving rise to any net settlement surplus, and attempt to identify any binding constraints which may have caused or contributed to such net settlement surplus;
- (c) Determine, in consultation with Trading Participants and Network Service Providers, and subject to approval by the PEM Board, whether the net settlement surplus generated by any particular set of constraints is of such magnitude as to justify development of a regime similar to that implemented in the WESM Rules with respect to transmission line rentals and transmission rights.
- (d) Develop procedures on the possible uses of net settlement surplus subject to approval by the PEM Board; and,
- (e) Continuously review the procedures on possible uses of net settlement surplus to the extent the Market Operator considers it to be reasonably necessary to promote WESM objectives. Any changes made on the procedures shall have approval from the PEM Board.

### **3.13.17 Settlement Amounts for Trading Participants with Bilateral Contracts**

**(Added as per DOE DC No. 2004-07-008 dated 7 July 2004)**

- 3.13.17.1** For each billing period, the Market Operator shall determine the settlement amount for each trading participant with bilateral contract as the sum of the aggregate trading amounts for the trading intervals in that billing period, determined in accordance with clause 3.13.17.2 plus: **(As amended by DOE DC No. 2013-03-0005 dated 22 March 2013)**

- (a) Any amount payable by the Market Operator to that Trading Participant in respect of that billing period and not accounted for in clause 3.13.17.2, including payment for any ancillary services purchased on behalf of the System operator, less the sum of
- (b) Any market fees which that Trading Participant is required to pay in respect of that billing period as determined in accordance with clause 2.10; plus
- (c) Any other amounts payable by that Trading Participant to the Market Operator in respect of that billing period, including any ancillary services recovery charges.

3.13.17.2 The aggregate trading amount for a Trading Participant for a trading interval equals the sum of:

- (a) The ex-ante energy trading amounts for each market trading node for which the Trading Participants is responsible calculated in accordance with clauses 3.13.7 and 3.13.8 (which will typically be positive for a Generation Company and negative for a Customer); plus
- (b) The ex-post energy trading amounts for each market trading node for which the Trading Participant is responsible calculated in accordance with clauses 3.13.7 and 3.13.9 (which will typically be positive or negative for any Trading Participant); plus
- (c) The line rental trading amount corresponding to the quantity of bilateral contract of that Trading Participant calculated in accordance with clause 3.13.12; plus
- (d) The reserve trading amounts for each reserve region into which that Trading Participant contributes reserve calculated in accordance with clause 3.13.10 (which will always be positive for both Generation Companies and Customers); plus

- (e) The transmission right trading amounts for each transmission right held by the WESM Participant calculated in accordance with clause 3.13.13 (which will always be positive for both Generation Companies and Customers) plus
- (f) The reserve cost recovery charge determined for that Trading Participant with respect to any reserve cost recovery zone within which it has any facility connected calculated in accordance with the procedures developed under clause 3.3.4 (which will be positive for any Trading Participant); and
- (g) Any other ancillary service cost recovery charges determined for that Trading Participant in accordance with the procedures developed under clause 3.3.4.

### **3.14 SETTLEMENT PROCESS**

#### **3.14.1 Settlements Management by Market Operator**

The *Market Operator* shall determine the *settlement* amount payable by *WESM members* and facilitate the billing and *settlement* of transactions between itself and the *WESM members* under the *WESM Rules* in accordance with this clause 3.14.

#### **3.14.2 Electronic Funds Transfer**

3.14.2.1 The *Market Operator* shall ensure that an EFT facility is provided and made available for all *WESM members* for the purposes of facilitating *settlements* and the collection and payment of all *market fees*.

3.14.2.2 Unless otherwise authorized by the *Market Operator*, all *WESM Members* shall use the EFT facility provided by the *Market Operator* under clause 3.14.2.1 for the *settlement* of transactions and the payment of *market fees*.

#### **3.14.3 Payment of Settlement Amount**



- 3.14.3.1 Where the *settlement* amount for a *WESM member* is a negative amount, the *WESM member* shall pay that amount to *Market Operators* accordance with clause 3.14.6.3.14.3.2 Where the *settlement* amount for a *WESM member* is a positive amount, *Market Operator* shall pay that amount to *the WESM Member* in accordance with clause 3.14.7.

#### **3.14.4 Preliminary Statements**

- 3.14.4.1 Within 7 *days* after the end of each billing period, the *Market Operator* shall give each *WESM member* who has engaged in *market transactions* in that billing period a preliminary statement which sets out the *market transactions* of that *WESM member* in that billing period and the settlement amount payable by or to that *WESM member*. (As amended by DOE DC No. 2013-03-0005 dated 22 March 2013)

If the seventh day falls on a *Non-Working Day*, the issuance of the preliminary statements shall be made during the next immediate *Working Day*. (Added per DOE DC No. 2013-03-0005 dated 22 March 2013)

- 3.14.4.2 The statements issued under this clause 3.14.4 shall include supporting data for all amounts payable sufficient to enable each *WESM member* to audit the calculation of the amount payable by or to that *WESM member*.

- 3.14.4.3 If the *WESM member* reasonably believes there was an error or discrepancy in the preliminary statement given to the *WESM Member* by the *Market Operator* under this clause 3.14.4, the *WESM member* shall notify the *Market Operator* as soon as practicable of that error or discrepancy and the *Market Operators* shall review the preliminary statement.

- 3.14.4.4 If the *Market Operator* considers that a preliminary statement contains an error or discrepancy after reviewing the preliminary statement as notified by a *WESM member* pursuant to clause 3.14.4.3 or as independently identified by the *Market Operator*, the *Market Operator* shall ensure

that correction of any error or discrepancy is reflected in the relevant final statements, provided that corrections requiring the input of an external party are received by the *Market Operator* at least two *Working Days* before the deadline of the issuance of the final statements. If the *Market Operator* receives notice of an error, discrepancy or correction of an earlier identified error after their relevant deadlines, clause 3.14.9.2 shall apply. (As amended by DOE DC No. 2013-03-0005 dated 22 March 2013)

### 3.14.5 Final Statements

- 3.14.5.1 No later than eighteen *days* after the end of each billing period, the *Market Operator* shall give to each *WESM member* who has engaged in *market transactions* in that billing period a final statement stating the amounts payable by the *WESM member* to the *Market Operator* or payable by the *Market Operator* to the *WESM member* in respect of the relevant billing period. (As amended by DOE DC No. 2013-03-0005 dated 22 March 2013)

If the eighteenth day falls on a *Non-Working Day*, the issuance of the final statements shall be made during the next immediate *Working Day*. (Added per DOE DC No. 2013-03-0005 dated 22 March 2013)

- 3.14.5.2 The statements issued under this clause 3.14.5 shall include supporting data for all amounts payable which shall be sufficient to enable each *WESM member* to audit the calculation of the amount payable by or to that *WESM member*.

### 3.14.6 Payment by Trading Participants

No later than 3.00 pm on the twenty-fifth day of the calendar month following the billing period, each *WESM member* shall pay to the *Market Operator* in cleared funds the *settlement amount* (if any) stated to be

payable to the *Market Operator* by that *WESM member* in that *WESM member's* final statement, whether or not the *WESM member* disputes, or continues to dispute, the amount payable. (As amended by DOE DC No. 2013-03-0005 dated 22 March 2013)

If the twenty-fifth day of the calendar month following the billing period falls on a *Non-Working Day*, the payment due date shall be moved to the next immediate *Working Day*. (Added per DOE DC No. 2013-03-0005 dated 22 March 2013)

#### **3.14.7 Payment to Trading Participants**

On the following *Working Day* after the *Market Operator* is to be paid under clause 3.14.6, and in accordance with the schedule set in the billing and settlements timetable, the *Market Operator* shall pay to each *WESM member* in cleared funds the settlement amount (if any) stated to be payable in that *WESM member's* final statement. (As amended by DOE DC No. 2005-11-010 dated 21 November 2013 and further amended by DOE DC No. 2013-03-0005 dated 22 March 2013)

The maximum total payment which the *Market Operator* is required to pay in respect of any billing period is equal to the aggregate of-

- a) the total payments actually received from *WESM Members* in accordance with clause 3.14.6; *plus*
- b) the total amount that the *Market Operator* is able to actually draw from the prudential security of the defaulting *WESM Members* in accordance with clause 3.15, if one or more *WESM Member* is in default; *plus*
- c) other sources of funds which the PEM Board may approve to be the paid to the *WESM Members* if the total amount drawn from the prudential security deposit of the defaulting *WESM Members* is insufficient to cover the defaulted amounts.

If it becomes necessary for the *Market Operator* to draw upon the prudential security of a defaulting *WESM Member* in accordance with

clause 3.15, the corresponding payments to the *WESM Members* entitled to be paid shall be made only after the *Market Operator* is actually able to draw on the prudential security but not later than the date specified in the billing and settlement time table.

If the total payments actually received or drawn from the prudential security by the *Market Operator* for a particular billing period is insufficient to pay for the total amounts payable to the *WESM Members*, the total payments received and drawn shall be distributed and paid to the relevant *WESM Members* in proportion to the amount payable to them for that billing period.

The shortfall shall be paid upon collection from the defaulting *WESM Member* but not later than the date specified in the billing and settlement time table.

[\(As amended by DOE DC No. 2005-11-010 dated 11 November 2005 and further amended by DOE DC No. 2006-11-0013 dated 09 November 2006\)](#)

#### **3.14.8 Disputes**

3.14.8.1 If a dispute arises between a *WESM member* and the *Market Operator* concerning either:

- (a) The *settlement* amount stated in any preliminary statement provided under clause 3.14.4 to be payable by or to it; or
- (b) The supporting data, they shall each use reasonable endeavors to resolve the dispute within fifteen *business days* after the end of the relevant billing period.

3.14.8.2 Disputes in respect of *final statements* or the supporting data provided with them in accordance with *WESM Rules* Clause 3.14.5 shall be raised within twelve (12) months of the relevant billing period, provided, however, that the data contained in reports submitted by the System Operator pursuant to *WESM Rules* Clause 3.5.13.1 that have already become final shall not be subject of dispute.

- 3.14.8.3 Disputes raised under this clause 3.14.8 shall be resolved by agreement or pursuant to the dispute resolution procedures set out in clause 7.3.

### 3.14.9 Settlement Revisions

- 3.14.9.1 If an amount in a *final statement* issued under clause 3.14.5:

- (a) Has been the subject of a dispute and the dispute has been resolved; or
- (b) Was subject of a pending case before a Court of competent jurisdiction and that said Court has already rendered a final and executory Decision;

If any of the abovementioned cases has caused a different amount payable as set out in the *final statement*, the *Market Operator* shall issue to each *WESM Member* affected, an adjustment to the *final statement* for the relevant billing period setting out:

- (a) The amount payable by the *WESM Member* to the *Market Operator* or the amount payable by the *Market Operator* to the *WESM Member*, and
- (b) Interest calculated on a daily basis at the interest rate for the *final statement* to which the adjustment relates to the payment date applicable to the revised statement issued under this clause 3.14.9.1.

The *Market Operator* shall issue the adjustment to the *final statement* not later than twelve (12) calendar months after the resolution of the dispute or receipt of the relevant final and executory Order unless parties to be billed agrees that the issuance of the particular WESM bill adjustment shall be at a later time.

[\(As amended by DOE DC No. 2011-12-0011 dated December 2011\)](#)

- 3.14.9.2 If the *Market Operator* becomes aware of an error in an amount stated in a *final statement* issued under clause 3.14.5 and, in the *Market Operator's* reasonable opinion, a *WESM Member* would be materially affected if a revision to

the *final statement* was not made to correct the error, then the *Market Operator* shall issue the Revised Statement not later than six (6) calendar months from receipt of the *Market Operator* of written notice of error from the participant, or from the *Market Operator's* discovery of the same.

(As amended by DOE DC No. 2011-12-0011 dated December 2011)

### **3.14.10 Payment of Adjustments**

3.14.10.1 The *Market Operator* shall specify the time and date on which a payment of an adjustment under a revised statement issued under clause 3.14.9 is due, which date shall be not less than ten *business days* and not more than fifteen *business days* after the issue of that revised statement.

3.14.10.2 By no later than the time and date specified by the *Market Operator* pursuant to clause 3.14.10.1, each *WESM member* shall pay to the *Market Operator* in cleared funds the net amount (if any) stated to be payable by that *WESM member* in the revised statement issued to it under clause 3.14.9.

3.14.10.3 On the following *Working Day* on which the *Market Operator* is to be paid under clause 3.14.10.2, the *Market Operator* shall pay to each *WESM Member* in cleared funds the net amount (if any) stated to be payable to that *WESM member* in the revised statement issued to it under clause 3.14.9.

(As amended by DOE DC No. 2013-03-0005 dated 22 March 2013)

### **3.14.11 Payment Default Procedure**

3.14.11.1 Each of the following events is a default event in relation to a *WESM member*.

(a) The *WESM member* does not pay any money due for payment by it under the *WESM Rules* by the appointed time on the due date;

(b) The *Market Operator* does not receive payment in full of any amount claimed by the *Market Operator*

- under any credit support in respect of a *WESM member*, within ninety minutes after the due time for payment of that claim;
- (c) The *WESM member* fails to provide credit support required to be supplied under the *WESM Rules* by the appointed time on the due date;
  - (d) It is or becomes unlawful for the *WESM member* to comply with any of its obligations under the *WESM Rules* or any other obligation owed to the *Market Operator* or it is claimed to be so by the *WESM member*,
  - (e) It is or becomes unlawful for any *Credit Support Provider* in relation to the *WESM member* to comply with any of its obligations under the *WESM Rules* or any other obligation owed to the *Market Operator* or it is claimed to be so by that *Credit Support Provider*,
  - (f) An authorization from a government authority necessary to enable the *WESM member* or a *Credit Support Provider* which has provided credit support for that *WESM member* to carry on their respective principal businesses or activities ceases to have full force and effect;
  - (g) The *WESM member* or a *Credit Support Provider* which has provided credit support for that *WESM member* ceases or is likely to cease to carry on its business or a substantial part of its business;
  - (h) The *WESM member* or a *Credit Support Provider* which has provided arrangement (including a scheme of arrangement), composition or compromise with, or assignment for the benefit of, all or any class of their respective creditors or members, or a moratorium involving any of them;
  - (i) The *WESM member* or a *Credit Support Provider* which has provided credit support for that *WESM member* states that it is unable to pay from its own

money its debts as and when they fall due for payment;

- (j) A receiver or receiver and manager is appointed in respect of any property of the *WESM member* or a *Credit Support Provider* which has provided credit support for that *WESM member*,
- (k) An administrator, provisional liquidator, liquidator, trustee in bankruptcy or person having a similar or analogous function is appointed in respect of the *WESM member* or a *Credit Support Provider* which has provided credit support for that *WESM member*, or any action is taken to appoint any such person;
- (l) An application or order is made for the winding up or dissolution or a resolution is passed or any steps are taken to pass a resolution for the winding up or dissolution of the *WESM member* or a *Credit Support Provider* which has provided credit support for that *WESM member*,
- (m) The *WESM member* or a *Credit Support Provider* which has provided credit support for that *WESM member* dies or is dissolved unless such notice of dissolution is discharged; and
- (n) The *WESM member* or a *Credit Support Provider* which has provided credit support for that *WESM member* is taken to be insolvent or unable to pay its debts under any applicable legislation.

3.14.11.2 Where a default event has occurred in relation to a *WESM member*, the *Market Operator* may:

- (a) Issue a default notice which specifies:
  - (1) The nature of the alleged default; and
  - (2) If the *Market Operator* considers that the default is capable of remedy, that the *WESM member* shall remedy the default within 24 hours of the issue of the default notice; and/or



- (b) Immediately issue a suspension notice in accordance with clause 3.15.8 if the *Market Operator* considers that the default is not capable of remedy and that failure to issue a suspension notice would be likely to expose other *WESM members* to greater risk, and to notify in writing the appropriate regulatory and administrative bodies concerned of such suspension; and/or [\(As amended by DOE DC No. 2014-03-0008 dated 26 March 2014\)](#)
- (c) If it has not already done so, make a claim upon any credit support held in respect of the *WESM member* for such amount as the *Market Operator* determines represents the amount of any money actually or contingently owing by the *WESM member* to the *Market Operator* pursuant to the *WESM Rules*.

3.14.11.3If:

- (a) The *Market Operator* considers that a default event is not capable of remedy; or
- (b) A default event is not remedied within 24 hours of the issue of the default notice or any later deadline agreed to in writing by the *Market Operator*, or
- (c) The *Market Operator* receives notice from the defaulting *WESM member* that it is not likely to remedy the default specified in the default notice, then the *Market Operator* may issue a suspension notice in accordance with clause 3.15.7 under which the *Market Operator* notifies the defaulting *WESM member* that it is prohibited from participating in the *spot market*.

**3.14.12 Interest on Overdue Amounts**

If a *Trading Participant* fails to pay any amount due and payable by it under the *WESM Rules*, such overdue amount shall bear the default interest rate reckoned from the first day such amount is due and payable, up to and including the date on which payment is made, with interest computed based on a 360-day year.

### 3.15 PRUDENTIAL REQUIREMENTS

#### 3.15.1 Purpose

The purpose of the *prudential requirements* is to ensure the effective operation of the *spot market* by providing a level of comfort that *WESM members* will meet their obligations to make payments as required under the *WESM Rules*.

#### 3.15.2 Provision of Security

3.15.2.1 Subject to clause 3.15.2.2, a *WESM member* wishing to participate in *Market Transactions* shall provide and maintain a security complying with the requirements of Clause 3.15.2. [\(As amended by DOE DC No. 2014-03-0008 dated 26 March 2014\)](#)

3.15.2.2 The *Market Operator* may exempt *WESM members* from the requirement to provide a security under clause 3.15.2.1, if:

- (a) the *Market Operator* believes it is likely that the amount payable by the *Market Operator* to that *WESM Member* under the *WESM Rules* will consistently exceed the amount payable to the *Market Operator* by that *WESM member* under the *WESM Rules* in respect of that period; or
- (b) the *Market Operator* believes it is unlikely that the *WESM member* will be required to pay any amounts to the *Market Operator*; or
- (c) Deleted [\(As per DOE DC No. 2004-07-008 dated 7 July 2004\)](#)

3.15.2.3 The *Market Operator* may vary or cancel the exemption given pursuant to clause 3.15.2.2 above in reference to Clause 3.15.2.1, at any time, by giving written notice of the variation or cancellation of the exemption to the *WESM member*. [\(As amended by DOE DC No. 2014-03-0008 dated 26 March 2014\)](#)

3.15.2.4 A *WESM member* who is exempt from providing a security deposit under Clause 3.15.2.2 shall be required to pay the

total negative settlement amount due, if any, within three (3) *working days* before the due date as provided under Clause 3.14.6. [\(Added per DOE DC No. 2014-03-0008 dated 26 March 2014\)](#)

3.15.2.5 Failure to comply with Clause 3.15.2.4 shall be a ground for the cancellation of exemption and said failure shall cause the *WESM member* to be assessed and be required to put up *Prudential Requirements*. Upon written request of the *WESM member*, the *Market Operator* may lift the cancellation of exemption from *Prudential Requirements*, provided that the *WESM member*:

- a) has settled all its outstanding obligations including interest, if any; and
- b) has no record of default in payment or non-compliance with the *Prudential Requirements* for the immediately preceding six (6) billing periods from the cancellation of exemption. [\(Added per DOE DC No. 2014-03-0008 dated 26 March 2014\)](#)

### 3.15.3 Form of Security

[\(As amended by DOE DC No. 2014-03-0008 dated 26 March 2014\)](#)

The security provided by the *WESM Member* under this clause 3.15 shall be in accordance with the following hierarchy of preferred forms of security :

- a) Cash; or
- b) Another immediate, irrevocable and unconditional commitment in a form and from a bank or other institution acceptable to the *Market Operator*; or
- c) Surety bond issued by a surety or insurance company duly accredited by the Office of the Insurance Commissioner of the Philippines; or

- d) Such other forms of security or guarantee as may be acceptable and allowed by the *Market Operator*. (Added as per DOE DC No.2006-07-0010 dated 20 July 2006)

Provided, however, that in all cases where the security deposit provided is other than in the form of Cash, the following conditions shall apply in determining whether or not the *Market Operator* will allow such alternative form of security:

- a) Only in the event that the *Market Operator* determined that the amount of default can be immediately drawn on due date from such form of security; and,
- b) Said *WESM member* proposing to post a security deposit in a form other than Cash has no record of default in payment or non-compliance with the Prudential Requirements for the immediately preceding six (6) billing periods.

#### **3.15.4 Amount of Security**

Using available historical data, the *Market Operator* shall determine the initial *Prudential Requirements* of a new *WESM member* corresponding to the portion of its demand that is not covered by bilateral contracts, or ten percent (10%) of its total demand if fully covered by bilateral contracts, multiplied by the average actual market price of the previous twelve (12) billing periods. (Added per DOE DC No. 2014-03-0008 dated 26 March 2014)

- 3.15.4.1 Subject to clause 3.15.2.2, prior to the end of each *Financial Year*, the *Market Operator* shall determine and provide written confirmation to each *WESM member* of its *Maximum Exposure* to the *Market Operator* in respect of a billing period in the following *Financial Year*. The amount of security to be provided by each *WESM member* pursuant to Clause 3.15.2.1 and 3.15.2.2 shall be equivalent to the *Maximum Exposure*.

Upon the request of a *WESM member*, the *Market Operator* may consider a replacement month in the computation of *Maximum Exposure* within the 26th March to 25th September billing periods, having the same number of calendar days if:

- a) There is a disagreement between the *Market Operator* and the *WESM Participant* on the *Final Statement* during the months covered in the computation of the *Maximum Exposure*; or
- b) There is a positive settlement amount in any billing period in the computation of the *Maximum Exposure*.

If there is a change in the *bilateral contract* of a *WESM member*, the *maximum exposure* shall be computed based on the *settlement amounts* estimated by the *Market Operator* using the average actual *market price* based on the *billing period* of 26th March to 25th September. In no case shall the *Maximum Exposure* be less than ten percent (10%) of the total demand. Average actual market price shall refer to the ratio of the total *spot market* payment of a *WESM member*, which may include *Spot Market* energy and reserve transactions and *Line Rental* amount for contracted quantities, to the total metered quantities net of *bilateral contract* quantities for each billing month.

If a *WESM member* that is exempt from the *Prudential Requirements* under Clause 3.15.2.2 becomes a net buyer and fails to pay its obligations, the prudential security that shall be imposed pursuant to Clause 3.15.2.5 shall be computed based on:

- a) the average of the previous six (6) negative settlement amounts for the past twelve (12) consecutive billing periods; or,

b) in the absence of the previous six (6) negative settlement amounts, the average of the available negative settlement amounts for the past twelve (12) consecutive billing periods.

If the *Market Operator* determines that the security provided by a *WESM member* is below the assessed *Maximum Exposure*, the *Market Operator* shall require such *WESM member* to increase its security deposit up to the level of its *Maximum Exposure* within three (3) *working days* after the receipt of the written notification of the annual assessment. If the *WESM member* fails to comply within the prescribed date or any later date agreed to in writing with the *Market Operator*, then the *Market Operator* shall issue a default notice under Clause 3.14.11.1.c.

[\(As amended by DOE DC No. 2014-03-0008 dated 26 March 2014\)](#)

- 3.15.4.2 The *Market Operator* may review its method of determination of a *WESM member's Maximum Exposure* at any time, provided that any change to a *WESM member's Maximum Exposure* will apply no earlier than thirty (30) days following receipt of written notification from the *Market Operator* by a *WESM member* of that change, or such earlier period agreed to in writing by the *PEM Board*. [\(As amended by DOE DC No. 2014-03-0008 dated 26 March 2014\)](#)
- 3.15.4.3 Each *WESM member* shall ensure that at all times the aggregate undrawn and unclaimed amounts of current and valid security held by the *Market Operator* in respect of that *WESM member* is not less than that *WESM member's Maximum Exposure*.
- 3.15.4.4 To diminish the possibility of incurring a *Margin Call* under Clause 3.15.10, a *WESM member* may provide a security or

securities in accordance with clause 3.15.3 for an aggregate amount that exceeds its *Maximum Exposure*.

If said additional security or securities is not in the form of Cash, the *WESM member* shall secure the prior written determination and approval of the *Market Operator*.

### 3.15.5 Replacement Security

#### 3.15.5.1

If:

- (a) An existing security provided by a *WESM member* under this clause 3.15 is due to expire or terminate; and
- (b) After that security expires or terminates, the maximum amount which the *Market Operator* will be entitled to be paid in aggregate under any remaining security or securities provided by the *WESM member* under this clause 3.15 will be less than *WESM member's Maximum Exposure*,

then the *WESM member* shall deliver to the *Market Operator*, at least ten (10) *working days* prior to the time at which that existing security is due to expire or terminate, a replacement security which:

- (1) Is of sufficient value to enable the *WESM member* to comply with clause 3.15.4.3;
- (2) Complies with the requirements of this clause 3.15; and,
- (3) Shall take effect no later than the date on which the existing security is due to expire or terminate.

[\(As amended by DOE DC No. 2014-03-0008 dated 26 March 2014\)](#)

#### 3.15.5.2

If:

- (a) A *WESM member* fails to comply with clause 3.15.5.1; and,
- (b) That *WESM member* does not remedy that failure within three (3) *working days* after being notified by the *Market Operator* of the failure,

then the *WESM member* is deemed to be in default and the *Market Operator* shall give the *WESM member* a *Suspension Notice* in accordance with clause 3.15.7.

[\(As amended by DOE DC No. 2014-03-0008 dated 26 March 2014\)](#)

### **3.15.6 Drawdown of Security**

- 3.15.6.1 The *Market Operator* shall notify a *WESM member*, in writing, once the *Market Operator* exercises its rights in accordance with Clause 3.15 under a security provided by said *WESM member*. [\(As amended by DOE DC No. 2014-03-0008 dated 26 March 2014\)](#)
- 3.15.6.2 If, as a result of the *Market Operator* exercising its rights under a security provided by a *WESM member* under this Clause 3.15, the maximum amount which the *Market Operator* is entitled to be paid under the security or securities provided by the *WESM member* under this Clause 3.15 is less than the *WESM member's Maximum Exposure*, then, within three (3) *working days* from receipt of the written notice under Clause 3.15.6.1, the *WESM member* shall provide an additional security to ensure that, at all times, it complies with the requirements of this Clause 3.15. [\(As amended by DOE DC No. 2014-03-0008 dated 26 March 2014\)](#)
- 3.15.6.3 If a *WESM member* fails to comply with clause 3.15.6.2 within the time period referred to in that clause, then the *Market Operator* shall give the *WESM member* a suspension notice in accordance with clause 3.15.7.



### 3.15.7 Refund of Security

Upon written request from the WESM member, the Market Operator shall refund the prudential security under the following conditions:

- a) if the Market Operator has lifted the cancellation of exemption after the WESM member complied with its obligations under Clause 3.15.2.5; or
- b) if the security deposit of a WESM member consistently exceeds the Maximum Exposure in previous six (6) consecutive billing period.

The refund of security deposit shall be allowed by the Market Operator after the assessment of the amount of refund, provided that the WESM member has no record of default and non-compliance with the Prudential Requirements in previous six (6) consecutive billing periods.

[\(As per DOE DC No. 2014-03-0008 dated 26 March 2014\)](#)

### 3.15.8 Suspension of a WESM member

3.15.8.1 As soon as practicable after a *Suspension Notice* is issued by the *Market Operator* under the *WESM Rules*, the *Market Operator* shall:

- (a) *Publish the suspension notice*; and  
[\(As amended by DOE DC No.2005-11-010 dated 11 November 2005\)](#)
- (b) Place a notice in a newspaper of general circulation that the *WESM member* has been suspended.
- (c) Notify in writing the *ERC*, the *DOE* and *National Electrification Administration* of such suspension.  
[\(As per DOE DC No. 2014-03-0008 dated 26 March 2014\)](#)

3.15.8.2 The *Market Operator* shall revoke a *Suspension Notice* if:

- (a) In the case of a default event, the default event is remedied; or

- (b) In the case of a failure to maintain compliance with prudential requirements under this clause 3.15, that failure has been remedied; and
- (c) There are no other circumstances in existence, which would entitle the *Market Operator* to issue a *Suspension Notice*.

The *Market Operator* shall not revoke a *Suspension Notice* more than one month after it was issued. [\(As amended by DOE DC No. 2014-03-0008 dated 26 March 2014\)](#)

- 3.15.8.3 If a suspension notice is revoked, the Market Operator shall publicize that fact in the same manner in which the suspension notice was publicized in accordance with clause 3.15.7.1.
- 3.15.8.4 From the time that the *Market Operator* issues a written *Suspension Notice* to a *WESM member* under the *WESM Rules*, the *WESM member* is ineligible to participate in the *spot market*, until such time as the *Market Operator* notifies the *WESM member* and all other relevant *WESM members*, in writing, that the *Suspension Notice* has been revoked. [\(As amended by DOE DC No. 2014-03-0008 dated 26 March 2014\)](#)
- 3.15.8.5 A *WESM member* shall comply with a suspension notice issued to it under the *WESM Rules*.
- 3.15.8.6 If:
  - (a) The *Market Operator* has issued a *Suspension Notice* to a *WESM member* due to a default event and in the Market Operator's reasonable determination, the *WESM member* is incapable of rectifying the default event for any reason; or,
  - (b) The *Market Operator* has issued a suspension notice to a *WESM member* due to a failure by the *WESM member* to continue to satisfy the *Prudential Requirements* and in the *Market Operator's*

reasonable determination, the *WESM member* is incapable of rectifying that failure for any reason,

The *Market Operator*, in either case, shall deregister that *WESM member* as soon as practicable and promptly *publish* a notice of that fact.

[\(As amended by DOE DC No.2005-11-010 dated 11 November 2005 and further amended by DOE DC No. 2014-03-0008 dated 26 March 2014\)](#)

### **3.15.9 Trading Limits**

3.15.9.1 Subject to clause 3.15.8.2, the Market Operator shall set a trading limit for each WESM member who participates in market transactions.

3.15.9.2 If, under clause 3.15.2.2, the Market Operator has exempted a Trading Participant from the requirement to provide a security under clause 3.15.2.1 for a period, then the Market Operator shall not set a trading limit for that WESM Member for the period during which that exemption applies.

3.15.9.3 The trading limit for a *WESM member*, at any time, shall be equal to the total value of the security, including *Interest Rate*, if any, provided by the *WESM member* to the *Market Operator* under Clauses 3.15.3 (a) to (c).

[\(As amended by DOE DC No.2006-07-0010 dated 20 July 2006 and further amended by DOE DC No. 2014-03-0008 dated 26 March 2014\)](#)

### **3.15.10 Monitoring**

3.15.10.1 The Market Operator shall review, on a monthly basis, its actual exposure to each *WESM member* in respect of previous billing periods in accordance with the *WESM Rules*.

[\(As amended by DOE DC No. 2014-03-0008 dated 26 March 2014\)](#)

3.15.10.2 In calculating the *Market Operator's* actual exposure to a *WESM member* under Clause 3.15.9.1, the *Market Operator* shall take into account:

a) Outstanding settlement amounts for the *WESM member* in respect of previous billing periods; and

b) Settlement amounts for the *WESM member* for the billing period that will be due on the period in which the review occurs based on the available settlement statement.

[\(As amended by DOE DC No. 2014-03-0008 dated 26 March 2014\)](#)

3.15.10.3 If the *Market Operator* calculates that its actual exposure exceeds the *WESM member's* trading limit, then the *Market Operator* shall notify the *WESM member* in writing. [\(As amended by DOE DC No. 2014-03-0008 dated 26 March 2014\)](#)

3.15.10.4 If the *Market Operator* calculates that its actual exposure to a *WESM Member* exceeds the *WESM Member's* trading limit, then the *Market Operator* shall notify the *WESM Member* accordingly.

### **3.15.11 Margin Calls**

3.15.11.1 If the *Market Operator* calculates that its exposure to a *WESM member* exceeds the *WESM member's trading limit*, then the *Market Operator* shall make a Margin Call on that *WESM member* by notice to the *WESM member* in writing (Margin Call Notice). [\(As amended by DOE DC No. 2014-03-0008 dated 26 March 2014\)](#)

3.15.11.2 If the *Market Operator* makes a *Margin Call* on a *WESM member* under clause 3.15.11.1, then the *WESM member* must satisfy the *Margin Call* by providing the amount of shortfall within three (3) *working days* from receipt of the Margin Call Notice by either:

- (a) Providing to the *Market Operator* an additional security or securities complying with the requirements of this Clause 3.15, or
- (b) Prepaying the amount payable or which will become payable.

(As amended by DOE DC No. 2014-03-0008 dated 26 March 2014)

- 3.15.11.3 If a *WESM member* fails to satisfy a margin call by providing additional security or making a prepayment under clause 3.15.11.2, then the *Market Operator* shall issue the *WESM member* a *Suspension Notice* in writing.

(As amended by DOE DC No. 2014-03-0008 dated 26 March 2014)

In the event of suspension, all the settlement statements issued to such *WESM member*, including an estimate of the accrued trading amounts, shall become immediately due and demandable.

(As amended by DOE DC No. 2014-03-0008 dated 26 March 2014 and further amended by DOE DC No. 2014-03-0008 dated 26 March 2014)

### **3.15.12 Confidentiality**

All information provided by a *WESM member* in relation to its financial circumstances shall be treated by the *Market Operator* as confidential information in accordance with clause 5.2.

## CHAPTER 4

### METERING

#### 4.1 SCOPE OF CHAPTER 4

This chapter 4 sets out the:

- (a) Obligations of *Trading Participants*;
- (b) Requirements in relation to the installation, use and security of *meters*;
- (c) Manner in which *metering data* is to be used and managed;
- (d) Method of deregistration of *Metering Services Providers*;
- (e) Manner in which *metering databases* are to be managed; and
- (f) Manner in which new technologies are to be adopted.

#### 4.2 APPLICATION OF CHAPTER

This chapter 4 applies to:

- (a) A *Customer* in respect of any *market trading node* that is assigned to it through which it purchases electricity from the *spot market*; [\(As amended by DOE DC No. 2006-01-0001 dated 10 January 2006\)](#)
- (b) A *Generation Company* in respect of a *market trading node* that is assigned to it through which it sells electricity to the spot market, and [\(As amended by DOE DC No. 2006-01-0001 dated 10 January 2006\)](#)
- (c) Metering Services Providers in respect of metering installations for which they are responsible; and
- (d) All *WESM members* as far as applicable.

#### 4.3 OBLIGATIONS OF TRADING PARTICIPANTS

##### 4.3.1 Obligations

- 4.3.1.1 Before a *Trading Participant* who is a *Direct WESM Member* will be permitted by the *Market Operator* to participate in the *spot market* in respect of a *market trading node*, the *Trading Participant* shall ensure that: [\(As amended by DOE DC No. 2006-01-0001 dated 10 January 2006\)](#)

- (a) Each of its assigned *market trading node* has a metering installation; [\(As amended by DOE DC No. 2006-01-0001 dated 10 January 2006\)](#)
- (b) Each *metering installation* has been installed in accordance with this chapter4 and in accordance with the *Grid Code and Distribution Code*; and
- (c) Each *metering installation* is registered with the *Market Operator*.

4.3.1.2 The *Market Operator* may refuse to permit a *Trading Participant* who is a *Direct WESM member* to participate in the *spot market* in respect of any assigned *market trading node* if the *metering installation* associated with that *market trading node* does not comply with the provisions of this chapter 4, the *Grid Code and Distribution Code*.[\(As amended by DOE DC No. 2006-01-0001 dated 10 January 2006\)](#)

4.3.1.3 The *Market Operator* shall promptly advise the *ERC* of any refusal made under clause 4.3.1.2.

#### **4.3.2 Election of a Metering Services Provider by a Trading Participant**

4.3.2.1 A *Trading Participant* who is a *Direct WESM member* shall:

- (a) Elect a *Metering Services Provider* who will have responsibility for arranging for the provision, installation, testing, calibration and maintenance of each metering installation for which that *Trading Participant* is financially responsible;
- (b) Enter into an agreement with the *Metering Services Provider(s)* which includes the terms and conditions for the provision, installation and maintenance of the relevant *metering installation* by the *Metering Services Provider*, and
- (c) Provide the *Market Operator* with the relevant details of the *metering installation* in accordance with Appendix B2 within 10 *business days* of entering into an agreement with the *Metering Services Provider(s)* under clause 4.3.4(b).

#### 4.3.3 Metering Services Provider Obligations

The *Metering Services* Provider shall:

- (a) Ensure that its *metering installations* are provided, installed, tested, calibrated and maintained in accordance with this chapter 4, the *Grid Code and Distribution Code* and all applicable laws, rules and regulations;
- (b) Ensure that the accuracy of each of its *metering installations* complies with the requirements of chapter 4 and the *Grid Code and Distribution Code*; and
- (c) If the *Market Operator* requires, arrange for the provision of remote monitoring facilities to alert the *Market Operator* of any failure of any components of the *metering installation*, which might affect the accuracy of the *metering data* derived from that *metering installation*.

#### 4.4 REGISTRATION OF METERING SERVICES PROVIDERS

4.4.1 Other than the *TRANSCO*, a *Metering Services Provider* is a person or an entity who:

- (a) Is authorized by the *ERC* to provide *metering services*;
- (b) Is registered with the *Market Operator* as a *Metering Services Provider*, and
- (c) Is required to have the qualifications and adhere to any performance standards specified by the *Market Operator* in relation to *Metering Services Providers*.

4.4.2 A *Generation Company* or *Customer* which is involved in the trading of energy shall not be registered as a *Metering Services Provider* for any market trading node assigned to it. [\(As amended by DOE DC No. 2005-11-010 dated 11 November 2005 and further amended by DOE DC No. 2006-01-0001 dated 10 January 2006\)](#)

4.4.3 If a *Trading Participant* is a *Customer* and also a *Network Service Provided*, the *Trading Participant* may register as a *Metering Services Provider* only for connection points that it does not own.

Provided, however, that if such *Trading Participant* is also a *Metering Services Provider* and there is only one *Metering Services Provider*



registered with the *Market Operator* (in the Transmission Level), then it shall be allowed to provide *metering services* on an interim basis for a *market trading node* assigned to it or a connection point that it owns until another *Metering Services Provider* becomes authorized by the *ERC* and is registered with the *Market Operator* upon which the *metering services* shall be transferred to another *Metering Services Provider* following the applicable procedures. [\(As amended under DOE Circular No. DC 2013-07-0016 dated 26 July 2013\)](#)

## 4.5 METERING INSTALLATION

### 4.5.1 Metering Installation Components

A *metering installation* shall:

- (a) Be accurate in accordance with this chapter 4 and the *Grid Code and Distribution Code*;
- (b) Have facilities to enable *metering data* to be transmitted from the *metering installation* to the *metering database*, and be capable of communication with the *metering database*; This requirement may be relaxed during the operation of the *interim WESM*.
- (c) Contain a device which has a visible or an equivalently accessible display of *metering data* or which allows the *metering data* to be accessed and read at the same time by portable computer or other equipment of a type or specification reasonably acceptable to all entities who are entitled to have access to that *metering data*;
- (d) Be secure;
- (e) Have electronic data recording facilities such that all metering data can be measured and recorded in *trading intervals*;
- (f) Be capable of separately registering and recording flows in each direction where bi-directional *active energy* flows occur;
- (g) Have a *meter* having an internal or external *data logger* capable of storing the *metering data* for at least 60 days and have a back up storage facility enabling *metering data* to be stored for 48 hours in the event of external power failure; and
- (h) Have an active *energy meter*, and if required in accordance with the *Grid Code and Distribution Code*, a reactive *energy meter*, having both an internal or external *data logger*.

#### 4.5.2 Location of Metering Point

- 4.5.2.1 The *Metering Services Provider* shall ensure that the *metering point* is located as close as practicable to the *market trading node*. [\(As amended by DOE DC No. 2006-01-0001 dated 10 January 2006\)](#)
- 4.5.2.2 The *Trading Participant*, the *Network Service Provider* and the *Market Operator* shall use their best endeavors to agree to adjust the *metering data* to allow for physical losses between the actual *metering point* and the relevant *market trading node*. [\(As amended by DOE DC No. 2006-01-0001 dated 10 January 2006\)](#).
- 4.5.2.3 The *metering installation* shall be accessible to the *Metering Service Provider* at all times.

#### 4.5.3 Meter Accuracy

The class of *metering installation* and the accuracy requirements for a *metering point* are to be determined by the *PEM Board* in accordance with the *Grid Code and Distribution Code* and according to the annual amount of *active energy* that passes through the *metering point* of that *Trading Participant*.

#### 4.5.4 Use of Meters

- 4.5.4.1 The registered metering installation shall be used by the *Market Operator* as the primary source of metering data for billing purposes.
- 4.5.4.2 Notwithstanding any other provision of this clause 4.4, the *Market Operator* will not be liable to any person or entity in respect of any inaccuracies, discrepancies or other defects in *metering data*, including *metering data* which is stored in the *metering database* provided that these do not arise from the gross negligence or willful misconduct of the *Market Operator*.
- 4.5.4.3 Where a *metering installation* is used for purposes in addition to the provision of *metering data* to the *Market Operator* then:
- (a) That use shall not be inconsistent with, or cause any *WESM member* to breach, any requirements of the

*WESM Rules*, the *Grid Code* and *Distribution Code* or any applicable laws; and

- (b) The *Metering Services Provider* shall coordinate with the entities that use the *metering installation* for such other purposes to ensure that clause 4.4.4.3 (a) is complied with.

#### **4.5.5 Security of Metering Equipment**

- 4.5.5.1 The *Metering Services Provider* shall use reasonable endeavors to protect the *metering installation* from unauthorized interference both intentional and inadvertent by providing secure housing for metering equipment or otherwise ensuring that security at the metering point is adequate to protect against such interference.
- 4.5.5.2 If a *WESM member* has reason to believe that the *metering installation* has been interfered with or the accuracy thereof might have been affected by any tampering, he shall inform the *Metering Services Provider* who shall test the *metering installation* to ensure that the *metering equipment* operates within the applicable accuracy parameters described in the *Grid Code* and *Distribution Code*.
- 4.5.5.3 If evidence of tampering with a *metering installation* is found or discovered by a *WESM member*, all affected Participants shall be notified of that fact by that *WESM member* and the *PEM Board* as soon as reasonably possible.
- 4.5.5.4 The *PEM Auditor*, in consultation with the *Market Operator* and *Metering Services Providers*, shall review the security arrangements and requirement of *metering installations* annually.

#### **4.5.6 Security of Metering Data Held in a Metering Installation**

The *Metering Services Provider* shall ensure that *metering data* held in a *metering installation* is protected from local or remote electronic access or manipulation of data by the installation of suitable security electronic access controls (including, if required by the *Market Operator*, passwords).

#### **4.5.7 Performance of Metering Installations**

4.5.7.1 The *Metering Services Provider* shall use all reasonable endeavors to ensure that *metering data* is capable of being transmitted to the *metering database* from its *metering installations*:

- (a) Within the applicable accuracy parameters described in the *Grid Code and Distribution Code*; and
- (b) Within the time required for *settlement*, at a level of availability of at least 99% per annum, or as otherwise agreed between the *Market Operator* and the *Metering Services Provider*.

4.5.7.2 If a metering installation malfunction or defect occurs, the Metering Services Provider shall ensure that repairs shall be made as soon as practicable and in any event within two business days, unless extended by the Market Operator.

4.5.7.3 A WESM *Participant* who becomes aware of a *metering installation* malfunction or other defect shall advise the *Market Operator* within 3 hours from the time it was detected.

#### **4.5.8 Meter Time**

4.5.8.1 The *Metering Services Provider* shall ensure that all *metering installation* and *data logger* clocks are referenced to Philippines Standard Time.

4.5.8.2 The *metering database* time shall be set within an accuracy of plus or minus five (5) seconds of Philippines Standard Time.

### **4.6 METERING DATA**

#### **4.6.1 Changes to Metering Data**

The *Metering Services Provider* shall not make, cause or allow any alteration to the original stored data in a *metering installation*. It shall also use reasonable endeavors to ensure that no other person or entity does the same.

#### 4.6.2 Data Transfer and Collection

4.6.2.1 The MSP that is contracted by the MTP for a particular metering point shall retrieve the metering data from the meter and transmit the data to the Market Operator for billing and settlement.

However, the MSP shall not make, cause or allow any alteration to the original stored meter data as retrieved in the metering installation.

At its option, the Market Operator may also directly retrieve the meter data.

The MSP with a Certificate of Authority from ERC and registered with MO must be capable of sending meter data in the required format of MO. An MSP must have its own Meter Data Retrieval System and compatible with the MO Meter Data Collection System.

[\(As amended by DOE DC No.2006-07-0010 dated 20 July 2006\)](#)

4.6.2.2 Each *WESM member* shall use its reasonable endeavors to ensure that the *Market Operator* is given access to, or is provided with, the *metering data*.

4.6.2.3 The *Metering Services Provider* shall, at its own cost, ensure that *metering data* derived from a *metering installation* for which it is responsible shows the time and date at which it is recorded and is capable of being transmitted from the *metering installation* to the *metering database* in accordance with the *Market Operator's* reasonable requirements.

4.6.2.4 The *Market Operator* may use data collection systems to transfer *metering data* to the *metering databases*.

4.6.2.5 Without prejudice to the generality of this clause 4.5, the *Metering Services Provider* shall ensure that each of its *metering installations* have adequate communication facility that will enable the *Market Operator* to obtain remote access to the *metering data* from the *metering*

*database*. This requirement, however, may be relaxed during the initial operation of the WESM.

- 4.6.2.6 In cases where the *metering installation* has no capability to transmit the *metering data* electronically to the *metering database*, the *WESM Participant* must use its reasonable endeavors to ensure that the *Market Operator* is given alternative access to, or is provided with, the *metering data* in accordance with the procedures established under the *Grid Code and Distribution Code*.

## **4.7 DEREGISTRATION OF METERING SERVICES PROVIDERS**

### **4.7.1 Settlement with inaccurate metering information**

The *Market Operator* shall develop a detailed process for settling accounts retroactively to correct incorrect metering information and *market settlements* that results from meter tampering, meter bypass, meter failure, data loss, unethical conduct, excessive inaccuracy or other causes.

### **4.7.2 Sanctions for inaccurate metering information**

The *Market Operator* shall develop a process of penalties and sanctions for *Meter Services Providers* and *WESM Participants* whose meter data is incorrect beyond reasonable limits for whatever reason.

### **4.7.3 Notice following material breach of WESM Rules**

If a *Metering Services Provider* materially breaches the *WESM Rules*, the *Market Operator* shall send to that *Metering Services Provider* notice in writing setting out the nature of the breach and if the *Metering Services Provider* remains in breach for a period of more than 7 *business days* after notice from the *Market Operator*, the *Market Operator* may deregister the *Metering Services Provider*.

### **4.7.4 Deregistration following unethical act**

The *Market Operator* may deregister a *Metering Services Provider* for unethical act or behavior.

### **4.7.5 Effect of deregistration for unethical act**

If the *Market Operator* deregisters a *Metering Services Provider* in accordance with clause 2.6.2 and subject to clause 2.7, the *Market Operator* shall:

- (a) Notify the *ERC* and the *WESM Participants* of this action and basis for decision; and
- (b) *Publish* details of the deregistration.

## **4.8 DATABASES**

### **4.8.1 Installation Databases**

- 4.8.1.1 The *Metering Services Provider* shall create, maintain and administer an *installation database* in relation to all its *metering installations*.
- 4.8.1.2 The *Metering Services Provider* shall ensure that each affected Participant and the *Market Operator* is given access to the information in its *installation database* at all reasonable times and:
  - (a) In the case of data sixteen months old or less, within seven *business days* of receiving written notice from the person or entity seeking access; and
  - (b) In the case of data more than sixteen months old, within thirty days of receiving written notice from the person or entity seeking access.
- 4.8.1.3 The *Metering Services Provider* shall ensure that its *installation database* contains the information specified in Appendix B2.

### **4.8.2 Metering Database**

- 4.8.2.1 The Market Operator shall create, maintain and administer a metering database, which shall include a metering register containing information for each metering installation registered with the Market Operator.
- 4.8.2.2 The metering database shall include metering data, energy data, data substituted in accordance with this clause 4.7 and all calculations made for settlement purposes.
- 4.8.2.3 Data shall be stored in the *metering database*:
  - (a) For 16 months in accessible format; and
  - (b) For 10 years in archive.

#### 4.8.3 Rights of Access to Metering Data

The only entities entitled to have either direct or remote access to *metering data* on a read only basis from the *metering database* or the *metering register* in relation to a *metering point* are:

- (a) Each *Trading Participant* whose *settlement* amounts are determined by reference to quantities of *energy* flowing through that *metering point*,
- (b) The *Metering Services Provider* who is responsible for the *metering installation* at that *metering point*,
- (c) A *Network Service Provider* associated with the *metering point*,
- (d) The *Market Operator* and its authorized agents; and
- (e) Any Customer with respect to the *metering data* in relation to the *metering point* registered to it; [\(As amended by DOE DC No. 2006-01-0001 dated 10 January 2006\)](#)
- (f) The *Market Surveillance Committee*; and
- (g) The *ERC*.

#### 4.8.4 Confidentiality

Subject to clause 4.7.3, *metering data* is confidential and each *WESM member* and *Metering Services Provider* shall ensure that such data is treated as confidential information in accordance with the *WESM Rules*.

#### 4.8.5 Payment for Access to Metering Data

All reasonable costs (including, without limitation, telecommunications charges) incurred by the *Metering Services Provider* in providing access to *metering data* at a *metering installation* or by the *Market Operator* in providing access to information in the *metering database* shall be paid by the *WESM member* whom the *metering data* or information was provided.

### 4.9 DATA VALIDATION AND SUBSTITUTION

The *Market Operator* is responsible for the validation and substitution of *metering data* after being furnished settlement-ready *metering data* by the *Metering Services Provider* and shall develop data validation procedures in consultation with *WESM Participants* and in accordance with Appendix C1.2 (d).



#### **4.10 PROCESSES AND REVIEW**

The *Market Operator* shall undertake a periodic review of the provisions of this chapter 4 in accordance with the public consultation procedures, including but not limited to:

- (a) New technologies and the impact of new technologies on and in relation to technical standards for metering in the *WESM Rules*, the *Grid Code and Distribution Code*;
- (b) Contestability in the provision and types of meters used; and
- (c) Whether the provisions of this chapter 4 have the effect of eliminating the use of alternative types of meters.

#### **4.11 TRANSITORY PROVISION**

During the initial operation of the WESM, the TRANSCO shall provide the services required of the Metering Services Provider, but this shall not exclude other entities from doing the same, provided they meet the requirements provided herein.

## CHAPTER 5

### MARKET INFORMATION AND CONFIDENTIALITY

#### 5.1 SCOPE OF CHAPTER 5

This chapter 5 sets out:

- (a) Procedures for dealing with *spot market* information, including:
  - (1) Systems and procedures for the provision and storage of *spot market* information; and
  - (2) A requirement to audit *spot market* information; and
- (b) Procedures for dealing with confidential information, including
  - (1) Exceptions to the general rule that confidential information shall not be disclosed; and
  - (2) Conditions of disclosure of confidential information.

#### 5.2 MARKET INFORMATION AND CONFIDENTIALITY

##### 5.2.1 Provision of Information

- 5.2.1.1 The provisions of this chapter are always subject to the rights and obligations of the *Market Operator* and *WESM members* in relation to confidential information as set out in clause 5.3.
- 5.2.1.2 In addition to any specific obligation of the *Market Operator* under the *WESM Rules* to provide information, the *Market Operator*.
  - (a) Shall, upon written request, make available to *Trading Participants* any information concerning the operation of the *spot market* provided that said information is not confidential or commercially-sensitive; and
  - (b) May charge a fee reflecting the cost of providing such information.
- 5.2.1.3 The *Market Operator* shall make public and electronically post information on the *market price* as well as reasons for any significant movement thereon and provide hard copies

of such informational materials upon request and reimbursement of cost to produce the same.

5.2.1.4 The *Market Operator* shall make available to the *ERC* all pertinent information which would help the latter effectively perform its regulatory and oversight functions.

5.2.1.5 The *Market Operator* shall make available to the *DOE* all pertinent information which would help the latter effectively perform its energy policy-making function.

## 5.2.2 Systems and Procedures

5.2.2.1 Information required, covered or otherwise contemplated by the WESM Rules such as those provided by WESM members to the Market Operator or those provided by the Market Operator to WESM members shall be provided by means of an electronic communication system unless the WESM Rules specify otherwise or changed or modified by the Market Operator.

5.2.2.2 Information provided by means of an electronic communication system shall be in accordance with the templates included in the said *electronic communication system* unless otherwise changed or modified by the *Market Operator* as approved by the *PEM Board*.

5.2.2.3 As far as practicable, the Market Operator shall incorporate a binding acknowledgement receipt in its electronic communication system which would establish the time the pertinent information is actually received.

5.2.2.4 Information is deemed to be published by the Market Operator when the information is posted on the market information website.

5.2.2.5 The Market Operator shall maintain and publish electronic communication procedures under which:

- (a) Information shall be provided by *WESM members* to the *Market Operator*,
- (b) Information shall be provided by the *Market Operator* to *WESM members*; and

- (c) Information *published* on the market *information website* may be accessed by *Trading Participants*.

5.2.2.6 From time to time, the *Market Operator*, in consultation with *WESM Members*, may review and alter:

- (a) The requirements for electronic communication systems; and
- (b) Electronic *communication procedures*.

5.2.2.7 The *Market Operator* shall provide the *ERC* and *DOE* all necessary facilities to effectively monitor the operation of the *WESM*, on real-time and for review purposes.

### 5.2.3 Participant Data

The *Market Operator* shall maintain, periodically update as it considers reasonably necessary from time to time and publish:

- (a) A list of all *WESM members* identifying those of them that are *trading Participants*;
- (b) A list of all membership applicants to the *WESM* and identifying those applying to become a *Trading Participant*,
- (c) A list of all former *WESM members* and the time that each ceased to be *WESM members*; and
- (d) A list of all suspended *Trading Participants* and the time at which each was suspended.

### 5.2.4 Planning and Design Data

5.2.4.1 Consistent with the *Grid Code*, the *System operator* is to maintain a register of data provided by *Trading Participants* and *Network Service Providers* for planning and design purposes.

5.2.4.2 The *System operator* shall provide on a regular basis a copy of the register of data prepared under clause 5.2.4.1 to the *Market Operator* in a form specified by the *Market Operator*.

### 5.2.5 Information Records

The *Market Operator* shall retain all information provided to it under the *WESM Rules* for at least ten years in a form it deems appropriate for reasonable access as may be required by the *ERC* or the *DOE*.

### 5.2.6 Market Audit

5.2.6.1 The PEM Auditor shall arrange for a spot market audit to be performed once each quarter, or such other period as determined by the PEM Auditor. [\(As amended by DOE DC No. 2010-03-0004 dated 21 March 2010\)](#)

5.2.6.2 The *spot market* audit shall cover and review compliance by the *Market Operator* with its procedures and the effectiveness and appropriateness of systems utilized in the operation of the *spot market*, including but not limited to:

- (a) Valid audit certificates for the current revisions of all numeric software;
- (b) The calculations and allocations performed by the *metering* and *settlements* systems;
- (c) Billing and information systems;
- (d) The scheduling and *dispatch* processes;
- (e) The processes for software management including the Information and Communications Technology Change Management Process or “ICMP” instituted by the *Market Operator* subject to the conduct of regular audits as may be determined under the *WESM Rules*;
- (f) The *Market Operator's* compliance with the *WESM Rules*.

The said market audit shall also cover all new software and modifications to the existing software implemented through the ICMP.

[\(As amended by DOE DC No. 2011-12-0012 dated December 2011\)](#)

5.2.6.3 The PEM Auditor may engage, subject to the *PEM Board* approval, the services of a qualified third party Auditor as outlined in clause 1.5.2 and clause 5.2.6.2. The selection of third party Auditors shall be approved by the *PEM Board*. [\(Added as per DOE DC. No. 2010-03-0004 dated 21 March 2010\)](#)

5.2.6.4 The PEM Auditor shall prepare a report on the results of the *spot market* audit. The said report shall be made available

to the *DOE*, the *ERC*, the *PEM Board* and *WESM members*. ([As amended by DOE DC No. 2010-03-0004 dated 21 March 2010](#))

## 5.3 CONFIDENTIALITY

### 5.3.1 Confidentiality

5.3.1.1 Each *WESM member* and the *Market Operator* shall keep confidential any confidential information, which comes into their control, possession, or otherwise be aware of.

5.3.1.2 A *WESM member* and the *Market Operator*:

- (a) Shall not disclose confidential information to any person or entity except as permitted by the *WESM Rules*;
- (b) Shall only use or reproduce confidential information for the purpose for which it was disclosed or for a purpose contemplated by the *WESM Rules*; and
- (c) Shall not permit unauthorized persons to have access to confidential information.

5.3.1.3 Each *WESM member* and the *Market Operator* shall use all reasonable endeavors to:

- (a) Prevent unauthorized access to confidential information which is in its possession or control; and
- (b) Ensure that any person to whom it discloses confidential information observes the provisions of this clause 5.3 in relation to that information.

### 5.3.2 Exceptions

Subject to clause 5.3.3.1, this clause 5.3 does not prevent:

- (a) The disclosure of information (confidential or otherwise) between anyone or more of the following:
  - (1) The *ERC* and the *DOE*;
  - (2) The *System operator*,
  - (3) The *Market Surveillance Committee*; and
  - (4) Any other person or entity, including but not limited to a committee appointed by the *PEM Board* in accordance with the *WESM Rules*, for the purposes of:

- (5) The operation, security and planning of the power system in accordance with the Grid Code;
  - (6) Complying with any other instrument (including any contractual instrument or understanding governing the relationship between the parties detailed in clauses 5.3.2 (a) (1) to (a) (5)); and
  - (7) Any other circumstance which, in the reasonable opinion of the Market Operator, is necessary to assist the Market Operator in establishing and operating the WESM in accordance with the WESM objectives;
- (b) The disclosure, use or reproduction of information if the relevant information is at that time generally and publicly available other than as a result of a breach of this clause 5.3;
  - (c) The disclosure of information by a *WESM member* or the *Market Operator*, or by persons to whom the *WESM member* or the Market Operator (as the case may be) has disclosed that information to such as:
    - (1) An employee or officer of the WESM member, or
    - (2) A legal or other professional adviser, auditor or other consultant of the WESM member or the Market Operator (as the case may be); or
    - (3) Similar persons or entities,
 for purposes of complying with the *WESM Rules*, or advising the *WESM member* or the *Market Operator* in relation to the *WESM Rules* proved that the person receiving the information undertakes in writing not to further disclose that information to any other person;
  - (d) The disclosure, use or reproduction of information with the written consent of the person or persons who provided the relevant information under the *WESM Rules*;
  - (e) The disclosure, use or reproduction of information to the extent required by law or by a lawful requirement of:
    - (1) The *ERC* and the *DOE*; or
    - (2) Any government authority having jurisdiction over a *WESM member* or the *Market Operator*,

- (f) The disclosure, use or reproduction of information if necessary in accordance with the lawful requirements of or in connection with legal proceedings, arbitration, expert determination or other dispute resolution mechanisms relating to the *WESM Rules*, or for the purpose of advising a person in relation thereto provided that those to whom the information is disclosed undertakes in writing not to further disclose that information to any other person;
- (g) The disclosure of information to the extent required to protect the safety of personnel or equipment;
- (h) The disclosure, use or reproduction of information by or on behalf of a *WESM member* or the *Market Operator* to the extent reasonably required in connection with the *WESM member's* or the *Market Operator's* financing arrangements (as the case may be), investment in a *WESM member* or a disposal of a *WESM member's* assets provided that those to whom the information is disclosed signs a written undertaking not to further disclose that information to any other person;
- (i) The disclosure of information to the *ERC* and *DOE* and any other government authority having jurisdiction over a *WESM member*, pursuant to the *WESM Rules* or otherwise.
- (j) The disclosure of (i) settlement amounts unpaid by the end of the month, and (ii) the specific *WESM Member* that failed to pay the settlement amounts; and [\(As amended by DOE Circular No. DC 2013-07-0018 dated 26 July 2013 and further amended by DOE DC No. 16-01-0002 dated 12 January 2016\)](#)
- (k) The disclosure of settlement information of Feed-In Tariff-Eligible *generating units* to *TRANSCO* pursuant to the FIT-All Guidelines. [\(Added per DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

### 5.3.3 Conditions

- 5.3.3.1 Any entity who receives information disclosed in accordance with clause 5.3.2 (a):
  - (a) Shall not disclose the information to any person, except as provided by the *WESM Rules*; and



- (b) Shall only use the information for the purposes for which it was disclosed under clause 5.3.2(a).

5.3.3.2 In the case of a disclosure under clause 5.3.2(c), 5.3.2(f) or 5.3.2(i), the *WESM member* or the *Market Operator* (as the case may be) who wishes to make the disclosure, shall prior to making the disclosure, inform the proposed recipient of the information that it is confidential information and shall take appropriate precautions, including at the very least securing a written undertaking from the recipient that such recipient will keep the information confidential to ensure that the recipient keeps the information confidential in accordance with the provisions of this clause 5.3 and does not use the information for any purpose other than that permitted under clause 5.3.2.

#### **5.3.4 Indemnity to the Market Operator**

Each *WESM member* indemnifies the *Market Operator* against any claim, action, damage, loss, liability, expense or outgoing which the *Market Operator* pays, suffers, incurs or is liable for in respect of any breach of this clause 5.3 by that *WESM member* or any officer, agent or employee of that *WESM member*. Provided that no *WESM Participant* shall be liable for any of the foregoing to the extent they arise from the gross negligence or willful misconduct of the *Market Operator*.

#### **5.3.5 Survival**

Notwithstanding any other provision of the *WESM Rules*, a person shall continue to comply with this clause 5.3 after that person has ceased to be a *WESM member*.

#### **5.3.6 The Market Operator Information**

The *Market Operator* shall develop and, to the extent practicable, implement a procedure approved by the *PEM Board* to:

- (a) Protect information which it acquires pursuant to the *Market Operator* functions from use or access, which is contrary to the provisions of the *WESM Rules*;
- (b) Protect information which is commercially sensitive from use or access by members of the *PEM Board* who are officers, directors or employees of a *WESM member*; and

- (c) Disseminate such information in accordance with its rights, powers and obligations in a manner, which promotes ease of entry into and the orderly operation of the *spot market*.

#### **5.3.7 Timetable**

The Market Operator shall develop the timetable for the publication of market information in accordance with Chapter 5 of the WESM Rules.

**(Added as per DOE DC. No. 2010-03-0004 dated 21 March 2010)**

## CHAPTER 6

### MARKET INTERVENTION AND MARKET SUSPENSION

(As amended by DOE DC No. 2016-06-0008 dated 17 June 2016)

#### 6.1 SCOPE OF CHAPTER 6

This chapter 6 sets out:

- (a) The procedures which shall be established by the *Market Operator*, *System operator* and *WESM Participants* to ensure that they are able to take all necessary actions in an *emergency*;
- (b) The procedures to be followed by the *Market Operator*, *System operator* and *WESM Participants* in an *emergency*;
- (c) The procedures which are to take effect in the event of a threat to *system security*; (As amended by DOE DC No. 2013-12-0028 dated 16 December 2013)
- (d) The circumstances and manner in which the *ERC* through the *Market Operator* may *intervene* or suspend the *spot market*; and (As amended by DOE DC No. 2013-12-0028 dated 16 December 2013)
- (e) The responsibilities of the *Market Operator* to develop, simulate and implement *business continuity* plan and *disaster recovery* procedures. (Added per DOE DC No. 2013-12-0028 dated 16 December 2013)

#### 6.2 OVERVIEW

##### 6.2.1 Preparation and Responses

- 6.2.1.1 The *System Operator* is responsible for giving directions and coordinating the actions, which are to be taken by *WESM Participants* and *Market Operator* when there is *market suspension* or *market intervention*. (As amended by DOE DC No. 2016-06-0008 dated 17 June 2016)
- 6.2.1.2 *Intervention* is warranted when the *grid* or a portion of the *grid* is in the alert or *emergency state* condition as established in the *Grid Code* arising from:
  - (a) an *emergency* condition;
  - (b) a threat to *system security*; or

(c) an event of *force majeure*.

(As amended by DOE DC No.2014-10-0021 dated 24 October 2014 and further amended by DOE DC No. 2016-06-0008 dated 17 June 2016)

6.2.1.3 *Market intervention* may also be warranted if there are interruptions in the operations of market software used by the *Market Operator* to support various processes in the WESM during the simulation of the *business continuity* plan and *disaster recovery* procedures of the *Market Operator* developed under Clause 6.8.1.1. (Added per DOE DC No. 2013-12-0028 dated 16 December 2013 and further amended by DOE DC No. 2016-06-0008 dated 17 June 2016)

6.2.1.4 During *market intervention* or *market suspension*, the *System Operator* and *Market Operator* shall coordinate their actions to restore normal operation of the *power system* and the market.(Renumbered per DOE DC No. 2013-12-0028 dated 16 December 2013 and amended by DOE DC No. 2016-06-0008 dated 17 June 2016 )

6.2.1.5 *WESM Participants* acknowledge that:

(a) The operation of the *power system* involves risks to public safety and property and therefore accepts that the provisions of this chapter 6 are appropriate and reasonable;

(b) Their business interests will be subordinate to the need for the *Market Operator* and the *System Operator* to implement *emergency* procedures in accordance with the *Grid Code* and Clause 6.3.2 and to issue declarations and *emergency directions* under Clause 6.5 in an *emergency*; (As amended by DOE DC No. 2016-06-0008 dated 17 June 2016)

(c) Subject to Clause 6.2.1.1, the *System Operator* shall issue *emergency instructions* to all *WESM members*

in accordance with the *WESM Rules* and the *Grid Code*, and shall prepare and submit a significant incident report, as soon as practicable, to the *ERC*, *PEM Board*, *DOE*, Grid Management Committee and the *Market Operator*.

[\(Renumbered per DOE DC No. 2013-12-0028 dated 16 December 2013 and amended by DOE DC No. 2016-06-0008 dated 17 June 2016 \)](#)

#### **6.2.2 Exemption from Liability due to Market Suspension and Market Intervention**

[\(As amended by DOE DC No. 2016-06-0008 dated 17 June 2016\)](#)

6.2.2.1 In the event of a *market suspension* or *market intervention*, any action of the *ERC*, *Market Operator*, *System Operator* or a *WESM Participant* in compliance with the *emergency* procedures provided in this Chapter shall not constitute a breach of the *WESM Rules*, except in the case of an act committed in bad faith or gross negligence, and said parties shall not be liable for any loss incurred by a *WESM Participant* as a result of any action taken by the *System Operator*, the *Market Operator* or the *ERC* under this Chapter 6. [\(As amended by DOE DC No. 2016-06-0008 dated 17 June 2016\)](#)

6.2.2.2 Nothing in this chapter 6 is to be taken to limit the ability of the *System operator* or *Market Operator* to take any action or procedure under this chapter 6 which either the *System operator* or *Market Operator* considers in their absolute discretion to be necessary to protect the public or property.

### 6.2.3 Administered Price

During *market suspension* and *market intervention*, the *Market Operator* shall impose an *administered price* to be used as basis for settlements.

The *Market Operator* shall formulate, and update as necessary, the methodology for determining the *administered price* to be used during *market suspension* or *market intervention*. Said *administered price* and any change thereto is to be endorsed by the *PEM Board* for *ERC approval*.  
[\(As amended by DOE DC No. 2005-11-010 dated 11 November 2005 and further amended by DOE DC No. 2016-06-0008 dated 17 June 2016\)](#)

## 6.3 EMERGENCIES

### 6.3.1 Emergency

6.3.1.1 The *System Operator* shall give an *emergency instructions* when it determines the existence of a situation which has an adverse material effect on electricity supply or which poses as a significant threat to *system security*. [\(As amended by DOE DC No. 2016-06-0008 dated 17 June 2016\)](#)

6.3.1.2 An *emergency* may include:

- (a) A significant electricity *supply* capacity shortfall, being a condition where there is insufficient *generation or supply* options available to securely *supply* in one or more regions of the *power system* likely to be affected by the event;
- (b) A *power system* disturbance due to an outage in the *transmission network* or *generating system*, which poses a significant threat to *system security*, for which market processes are inadequate for recovery;  
[\(As amended by DOE DC No. 2016-06-0008 dated 17 June 2016\)](#)
- (c) A significant environmental phenomenon, including weather, earthquake, floods, volcanic eruptions, tsunamis, storms or fires which are likely to or are significantly affecting the *power system* for which *market* processes are inadequate for recovery;

(As amended by DOE DC No. 2016-06-0008 dated 17 June 2016)

- (d) A system blackout or significant *power system* under voltage condition;
- (e) Material damage to a *distribution system* which has or is likely to adversely affect the operation of the *transmission system* or to render the *spot market* ineffective; and
- (f) A situation, which the Government proclaims or declares an emergency.

6.3.1.3 A *WESM Participant* shall notify the *System operator* as soon as practicable of:

- (a) Any event or situation of which the *WESM Participant* becomes aware where, in the reasonable opinion of the *WESM Participant*, that event or situation is of a kind described in clause 6.3.1.2; and
- (b) Any action taken by the *WESM Participant* under its safety procedures or otherwise in response to that event or situation, in accordance with the *Grid Code and Distribution Code*.

6.3.1.4 The *System operator* may, from time to time, specify procedures for communicating the existence of an emergency and all relevant information relating to the emergency to the *WESM Participants*.

6.3.1.5 Notwithstanding any other provision contained in these Rules, the ERC, DOE or the PEM Board may investigate or require explanations regarding an emergency direction given by the *System operator*.

6.3.1.6 Each *WESM Participant* shall use its best endeavors to ensure that its safety plan permits it to comply with emergency directions.

6.3.1.7 When the *System Operator* has determined that an emergency or the effect thereof has ended, the *System Operator* shall notify the *Market Operator* who in turn shall notify all *WESM Participants*, the *DOE* and the *ERC* that the

*emergency* or the effect of such *emergency* has ended. [\(As amended by DOE DC No. 2016-06-0008 dated 17 June 2016\)](#)

### 6.3.2 Emergency Procedures

6.3.2.1 During the period when the *power system* may be or is affected by an *emergency* condition the *System Operator* shall carry out actions, in accordance with the *Market Manual on system security and reliability*, the *Grid Code* and *Distribution Code* to: [\(As amended by DOE DC No. 2016-06-0008 dated 17 June 2016\)](#)

- (a) Identify the impact of the *emergency* on *system security* in terms of the capability of *generating units, transmission systems or distribution systems*; and
- (b) Identify and implement the actions required to restore the *power system* to its satisfactory operating state.

6.3.2.2 *Emergency procedures* are the processes or steps to be taken by or at the direction of the *System Operator* to: [\(As amended by DOE DC No. 2016-06-0008 dated 17 June 2016\)](#)

- (a) Maintain *system security*;
- (b) Avert or reduce the effect of an *emergency*;
- (c) Issue notifications and warnings to the *Market Operator*, the *PEM Board*, the *DOE* and the *ERC* where appropriate; [\(As amended by DOE DC No. 2016-06-0008 dated 17 June 2016\)](#)
- (d) Restore the *power system* to a satisfactory operating state immediately after an *emergency*.

6.3.2.3 *Emergency procedures* may require a WESM Participant to take action, or not to take action, in accordance with emergency directions given by the *System operator*.

6.3.2.4 The *System Operator* in consultation with the *Market Operator* shall:

- (a) Develop and maintain appropriate *emergency procedures* in accordance with the *Grid Code* and *Distribution Code* which shall be subject to approval



of the PEM Board; and [\(As amended by DOE DC No. 2016-06-0008 dated 17 June 2016\)](#)

- (b) Publish details of the approved emergency procedures.

6.3.2.5 The System operator shall, in consultation with the Market Operator, review the emergency procedures from time to time.

6.3.2.6 Each *WESM member* shall promptly:

- (a) Comply with any emergency direction given by the System operator, including emergency directions requiring the disconnection of equipment from a transmission system or distribution system for reliability purposes, unless the *WESM Participant* reasonably believes that an emergency direction given by the System operator poses a real and substantial risk of damage to its equipment, to the safety of its employees or the public, or of undue injury to the environment;
- (b) Notify the System operator if it intends not to follow the emergency direction for any of the reasons described in clause 6.3.2.6 (a); and
- (c) Comply with the System operator's direction to the fullest extent possible without causing the harms described in clause 6.3.2.6 (a).

## **6.4 EMERGENCY PLANNING BY WESM PARTICIPANTS**

### **6.4.1 WESM Participant Emergency Contacts**

6.4.1.1 Each *WESM Participant* shall provide the *Market Operator* and *System operator* with:

- (a) An effective means of communication by which a representative of the *WESM Participant* may be contacted by the *Market Operator* 24 hours a day; and

- (b) The name and title of the *WESM Participant* representative who can be contacted by using that means of communication.

6.4.1.2 The representative of each *WESM Participant* nominated under clause 6.4.1.1 shall be a person having appropriate authority and responsibility within the *WESM Participant's* organization to *act* as the primary contact for the *System operator* in the event of an *emergency*.

6.4.1.3 Each *WESM Participant* shall immediately notify the *Market Operator* and *System operator* of a change to the details provided under clause 6.4.1.1.

#### **6.4.2 WESM Participant Procedures**

6.4.2.1 Each *Trading Participant* and *Network Service Provider* shall establish and maintain its own internal safety procedures necessary to enable it and, its *Customers*, to comply with *emergency directions* under this chapter.

6.4.2.2 Each *Trading Participant* and *Network Service Provider* shall ensure that the safety procedures it establishes under clause 6.4.2.1 are consistent with the emergency procedures established under clause 6.3.2.4 and the *Grid Code*.

#### **6.4.3 Emergency Procedures Awareness**

6.4.3.1 Each *Trading Participant* shall at all times ensure that all of its responsible officers and staff and their *Customers*, are familiar with both the safety and the emergency procedures.

6.4.3.2 For the purposes of clauses 6.4.3.1 and 6.5.1, responsible officers and staff are those whose functions or areas of responsibility are such that they are likely to be required to make decisions or take action in an *emergency*.

### **6.5 RESPONSE TO AN EMERGENCY**

#### **6.5.1 Instructions during Emergency Condition**

[\(As amended by DOE DC No. 2016-06-0008 dated 17 June 2016\)](#)

6.5.1.1 During an *emergency* condition: [\(As amended by DOE DC No. 2016-06-0008 dated 17 June 2016\)](#)

- (a) The *System Operator* shall, in coordination with the *Market Operator*, issue *emergency instructions* as it reasonably considers necessary, which may include, but need not be limited to, directions to: [\(As amended by DOE DC No. 2016-06-0008 dated 17 June 2016\)](#)
  - (1) Switch off, or re-route, energy delivery from a *Generation Company*;
  - (2) Call equipment into service;
  - (3) Take transmission line or equipment out of service; [\(As amended by DOE DC No. 2016-06-0008 dated 17 June 2016\)](#)
  - (4) Commence operation or maintain, increase or reduce active or reactive power output;
  - (5) Curtail, shut down or otherwise vary operation or output of the generating plants; [\(As amended by DOE DC No. 2016-06-0008 dated 17 June 2016\)](#)
  - (6) Shed or restore load; and
  - (7) Subject to clause 6.8, do any other act or thing necessary to be done for reasons of public safety or the security of the power system or of undue injury to the environment.
- (b) The *System operator* shall also: [\(As amended by DOE DC No. 2005-11-010 dated 11 November 2005\)](#)
  - (1) Implement any *load shedding* in a manner consistent with the *system security* and *reliability guidelines*; and
  - (2) To the extent possible, determine a rotating *outage* plan, and rotate any *load shedding* requirements.

- 6.5.1.2 When an emergency condition arises, the *System Operator* shall immediately notify the *ERC*, the *DOE*, *Market Operator* and Grid Management Committee as soon as reasonably practicable, of the commencement and nature of the emergency. The *Market Operator*, on the other hand, shall notify *WESM Participants*, as soon as reasonably practicable, of the commencement and nature of the *emergency*. [\(As amended by DOE DC No. 2016-06-0008 dated 17 June 2016\)](#)
- 6.5.1.3 Upon being notified of an emergency, each *WESM Participant* shall advise all responsible officers and staff (as defined in clause 6.4.3.2) and their *Customers*, of the existence and nature of the *emergency*.
- 6.5.1.4 Each *WESM Participant* shall, subject to clause 6.5.1.5:
- (a) Comply with safety procedures, the emergency procedures applicable to the *WESM Participant* in the circumstances, this chapter, and all emergency directions given by the *System Operator*, and
  - (b) Cooperate with the *Market Operator* and the *System Operator* to enable the *System Operator* to implement the emergency procedures.
- 6.5.1.5 Where there is conflict between these Rules and:
- (a) The requirements of a *WESM Participant's* safety procedures;
  - (b) The emergency procedures applicable to the *WESM Participant* in the relevant circumstances;
  - (c) This chapter;
  - (d) Any procedures developed by the *System operator*, or
  - (e) An emergency direction given by the *System operator*, the *System operator* shall decide which of those requirements or part of those requirements is to prevail and advise the relevant *WESM Participants* accordingly.

**6.5.2 Market Intervention Due to Emergency Condition or Threat in System Security** [\(As amended by DOE DC No. 2016-06-0008 dated 17 June 2016\)](#)

6.5.2.1 If the *System Operator* determines that, insufficient time exists for the *spot market* to address an *emergency* condition or eliminate threat in *system security*, the *System Operator* shall take any or all measures it considers to be reasonable and necessary to overcome the *emergency*, including but not limited to the following: [\(As amended by DOE DC No. 2016-06-0008 dated 17 June 2016\)](#)

- (a) Increase or decrease the *generation* or *supply* capability such as issuance of *emergency instructions* to all available but not committed *generating units* to start-up, shutdown, cancel *generating units* on testing or recall *transmission* equipment outages; [\(As amended by DOE DC No. 2016-06-0008 dated 17 June 2016\)](#)
- (b) Disconnect one or more connection points as considered by the System operator to be necessary;
- (c) Direct, in accordance with clause 6.5.1, a Customer<sup>^</sup> take such steps as are reasonable to immediately reduce its load;
- (d) Constrain-on or constrain-off a Generation Company; and
- (e) Require WESM Participants to do any reasonable act or thing which, the *System Operator* believes necessary in the circumstances.

Thereafter, the *System Operator* shall report in detail to the *Market Surveillance Committee*, the *DOE*, and *ERC* regarding the actions and circumstances under which the intervention was made. The *Market Operator* shall likewise submit a report to the *PEM Board*, *DOE* and *ERC* for such incidents. [\(As amended by DOE DC No. 2016-06-0008 dated 17 June 2016\)](#)

## 6.6 SYSTEM SECURITY

### 6.6.1 System Security and Reliability Guidelines

- 6.6.1.1 In consultation with *WESM Participants* and the *Market Operator*, the *System Operator* shall develop and periodically update the *system security and reliability guidelines*, subject to approval of the *PEM Board*. [\(As amended by DOE DC No. 2016-06-0008 dated 17 June 2016\)](#)
- 6.6.1.2 The *system security and reliability guidelines* developed under clause 6.6.1.1 shall be provided to:
- (a) The *ERC* and the *DOE* on completion and after any update thereon;
  - (b) *WESM Participants*; and
  - (c) Interested persons upon request.
- 6.6.1.3 If the *System operator* proposes a change to the *system security and reliability guidelines* which, in the *System operator's* reasonable opinion, is a material change then, prior to its implementation, that proposed change shall be reviewed in accordance with the *Grid Code and Distribution Code*.

### 6.6.2 Notice of Declaration of Market Intervention

[\(As amended by DOE DC No. 2016-06-0008 dated 17 June 2016\)](#)

- 6.6.2.1 Upon determination of the existence of an alert or *emergency state*, the *System Operator*, in coordination with the *Market Operator*, may declare *market intervention*.

The *Market Operator* shall inform the *WESM Participants* of alert warning notice from the *System Operator* and/or declaration of *market intervention*. [\(As amended by DOE DC No. 2016-06-0008 dated 17 June 2016\)](#)

- 6.6.2.2 The *System Operator* (for *grid-related* events) and *Market Operator* (for *market-related* events) shall submit a *market intervention* report, as soon as practicable, to the *Market*

*Surveillance Committee, Market Operator, DOE and ERC*, after the resumption of the *spot market*. Said report shall include the details relative to the *market intervention*, as follows:

- (a) the reason for the declaration of *market intervention*;
- (b) the number of trading intervals affected by the *intervention*;
- (c) the actions done to address the threat in system security; and
- (d) the actual dispatch of all *generating units* per interval affected.

(As amended by DOE DC No. 2016-06-0008 dated 17 June 2016)

6.6.2.3 Despite Clause 5.3, a *WESM Participant* shall not withhold information required by the *System Operator*. The *System Operator* may require each *WESM Participant* to provide the following:

- (a) the *Scheduled Generation Company's* plant availability to either increase or decrease generation; and
- (b) the *Customer's* ability to either increase or decrease load.

The *WESM Participant* shall comply with the instructions and provide the information required as soon as practicable.”

(As amended by DOE DC No. 2016-06-0008 dated 17 June 2016)

6.6.2.4 The *System Operator* shall treat all information provided to it by a *WESM Participant* under Clause 6.6.2.3 as *confidential information* and may only use that information for the following purposes: (As amended by DOE DC No. 2016-06-0008 dated 17 June 2016)

- (a) Maintaining or re-establishing system security by issuing emergency directions under clauses 6.6.4 and 6.6.5;

- (b) Making a decision under clause 6.6.3; and
- (c) Regulatory reporting.

6.6.2.5 The *System Operator*, in coordination with the *Market Operator*, shall recommend for market resumption if the *emergency* condition or threat in *system security* has ended. The *Market Operator* shall inform the *WESM Participants* of the market resumption. [\(As amended by DOE DC No. 2016-06-0008 dated 17 June 2016\)](#)

### 6.6.3 Response to System Security Threat

6.6.3.1 If the *System Operator* has identified a threat to *system security* and reasonably considers that sufficient time exists for the threat to subside without *market intervention*, the *System Operator* shall, in accordance with the procedures set out in Clause 6.6.4, facilitate a *spot market* response to overcome the threat to *system security*. [\(As amended by DOE DC No. 2016-06-0008 dated 17 June 2016\)](#)

6.6.3.2 If the *System Operator* has identified a threat to *system security* and it does not believe that sufficient time exists for the threat to subside without *market intervention* then the *System Operator* shall: [\(As amended by DOE DC No. 2016-06-0008 dated 17 June 2016\)](#)

- (a) Take any measures it believes to be reasonable and necessary to maintain or restore system security including those set out in clause 6.6.5; and
- (b) Act at all times in accordance with the *system security* and *reliability guidelines*.

### 6.6.4 Market Response to Threat to System Security

6.6.4.1 If the *System Operator* believes that sufficient time exists for a threat to *system security* to subside without *market intervention*, the *System Operator* shall advise the *Market Operator* and those *WESM Participants* who the *System Operator* considers would be required to take action or cease taking action. [\(As amended by DOE DC No. 2016-06-0008 dated 17 June 2016\)](#)



- 6.6.4.2 The action or cessation of action required under Clause 6.6.4.1 may include, but is not limited to, changes by the *Market Operator* to the pre-dispatch *schedule* affecting *scheduled generating units*, *schedule network services* and/or *scheduled load*. ([As amended by DOE DC No. 2016-06-0008 dated 17 June 2016](#))
- 6.6.4.3 The Market Operator may:
- (a) Invite *Trading Participants* to revise or re-bid their physical capabilities submitted by such *Trading Participants* in accordance with clause 3.4 in respect of the relevant *trading interval*; and
  - (b) Notify all *Trading Participants* of significant changes to the information provided under this clause 6.6.4.
- 6.6.4.4 *WESM Participants* shall comply with all requests and directions issued by the *Market Operator* under this clause 6.6.4.

#### **6.6.5 Market Intervention Due to System Security Threat**

- 6.6.5.1 If the *System Operator*, determines that insufficient time exists for the *spot market* to address a threat to *system security*, the *System Operator* shall take any and all measures it considers to be reasonable and necessary to overcome the threat to *system security*, including but not limited to the following:
- (a) Increase or decrease the *generation or supply* capability such as giving instructions to all available but not committed *generating units* to start-up, or to shut down, or recall *transmission* equipment *outages*; ([As amended by DOE DC No. 2016-06-0008 dated 17 June 2016](#))
  - (b) Disconnect one or more connection points as considered by the *System operator* to be necessary;
  - (c) Direct, in accordance with clause 6.5.1, a *Customer* to take such steps as is reasonable to immediately reduce its load;

- (d) Constrain-on or constrain-off a *Generation Company*; and
- (e) Require *WESM Participants* to do any reasonable act or thing, which the *System Operator* believes necessary in the circumstances.

6.6.5.2 Thereafter, as specified in Clause 6.6.2, the *System Operator* shall prepare a *market intervention* report to be submitted to the *Market Surveillance Committee*, *Market Operator*, *DOE* and *ERC* regarding the actions and circumstances under which the *market intervention* was made. [\(As amended by DOE DC No. 2016-06-0008 dated 17 June 2016\)](#)

## 6.7 FORCE MAJEURE

### 6.7.1 Force Majeure Event

A *force majeure* is the occurrence in a *trading interval* of an event or events in the *grid* where a *trading interval* is not within the reasonable control, directly or indirectly, of the *System Operator*, *Market Operator* and *WESM Member*, to the extent that such event, despite the exercise of the reasonable diligence, cannot be or be caused to be prevented, or removed and has resulted in a reduction in the normal capacity of part or all of the power *transmission system* during that *trading interval* and such reduction is likely to materially affect the operation of the *spot market* or materially threaten *system security*. [\(As amended by DOE DC No. 2016-06-0008 dated 17 June 2016\)](#)

### 6.7.2 Force Majeure Event

Events of *force majeure* shall include:

- (1) Major system disturbance that caused partial or system-wide blackout;
- (2) Market system hardware or software failure including that of the *System Operator* that makes it impossible to receive real-time status input data or process *market offer/bid* information to produce market schedules for real-time *dispatch* in accordance with the *WESM Rules*; and
- (3) Any other event, circumstance or occurrence in the nature of, or similar in effect to any of the foregoing.

(As amended by DOE DC No.2014-10-0021 dated 24 October 2014 and further amended by DOE DC No. 2016-06-0008 dated 17 June 2016)

### 6.7.3 Notification

6.7.3.1 The WESM Participant shall notify the Market Operator as soon as reasonably possible of the occurrence of any force majeure event.

6.7.3.2 The *Market Operator* shall notify all *Trading Participants* as soon as reasonably possible of the nature of the *force majeure* and the extent to which the *force majeure* affects the operation of the *spot market*.

### 6.7.4 Obligations of WESM Participants

*WESM Participants* shall use all reasonable endeavors to:

- (a) Ensure that they do not cause or exacerbate a *force majeure* event; and
- (b) Mitigate the occurrence and effects of a *force majeure* event.

## 6.8 BUSINESS CONTINUITY PLAN AND DISASTER RECOVERY PROCEDURES OF THE MARKET OPERATOR

(Added per DOE DC No. 2013-12-0028 dated 16 December 2013)

### 6.8.1 Development, Updating and Implementation of the Business Continuity and Disaster Recovery Procedures (As amended by DOE DC No. 2016-06-0008 dated 17 June 2016)

6.8.1.1 The *Market Operator*, in coordination with the *System Operator*, shall develop, update and implement the *business continuity* plan and *disaster recovery* procedures to ensure operational continuity of the WESM in cases of *emergencies* and *force majeure* events.

Any changes to the *business continuity* plan and *disaster recovery* procedures as may be necessary shall be approved by the *PEM Board*. (As amended by DOE DC No. 2016-06-0008 dated 17 June 2016)

## 6.8.2 Simulations

6.8.2.1 The *Market Operator* shall regularly conduct an emergency drill to simulate the procedures set forth in the *business continuity* plan as well as the *disaster recovery* procedures to ensure the preparedness of the *Market Operator*, *System Operator* and *Trading Participants* in the event of *emergencies* affecting market operations. The *Market Operator*, in coordination with the *System Operator*, shall evaluate the results of the simulation exercise and shall identify deficiencies in the procedures, if any. In cases of deficiencies in the procedures, the *Market Operator* shall recommend corrective measures for approval of the *PEM Board*. [\(As amended by DOE DC No. 2016-06-0008 dated 17 June 2016\)](#)

Thereafter, the *Market Operator* shall provide a report to the *PEM Board*, *DOE*, and *ERC* on the result of the simulation and the implementation of the Business Continuity Plan and Disaster Recovery Procedures.

6.8.2.2 The *Market Operator* shall coordinate with the *System Operator* and inform the *Trading Participants* of the simulations at least thirty (30) days prior to the conduct of the same. [\(As amended by DOE DC No. 2016-06-0008 dated 17 June 2016\)](#)

6.8.2.3 The *Market Operator* shall also notify all *Trading Participants* and the *System Operator* as soon as reasonably possible if the simulation or implementation of its Business Continuity Plan and Disaster Recovery Procedures may interrupt the operations of market software used by the *Market Operator* to support various processes in the WESM. The *Market Operator* shall use all efforts to minimize any possible market interruption in the conduct of the simulation or

implementation of the Business Continuity Plan and Disaster Recovery Procedures.

## 6.9 MARKET SUSPENSION

[\(Renumbered per DOE DC No. 2013-12-0028 dated 16 December 2013\)](#)

### 6.9.1 Conditions for Suspension of the Market

6.9.1.1 Pursuant to Section 30 of the *Act*, the *ERC* shall suspend the operation of the *spot market* or declare a temporary wholesale electricity *spot market* failure in cases of:

- (a) Natural calamities; or
- (b) Following official declaration of a national and international security emergency by the President of the Republic.

### 6.9.2 Declaration of Market Suspension

6.9.2.1 The *spot market* can only be suspended by a declaration by the *ERC* under Clause 6.9.1.1 and if the *spot market* is suspended:

- (a) The *ERC* shall notify the *Market Operator* and the *System Operator*, and
- (b) The *Market Operator* shall notify all *WESM Participants* and the *DOE*, as soon as possible.

[\(As amended by DOE DC No. 2016-06-0008 dated 17 June 2016\)](#)

6.9.2.2 The *spot market* is deemed suspended at the start of the *trading interval* in which the *ERC* advises the *Market Operator* that the *spot market* is suspended.

6.9.2.3 Following a declaration by the *ERC* under Clause 6.9.1.1, the *spot market* is to remain suspended until the *ERC* notifies the *Market Operator* that *spot market* operation is to resume.

The *Market Operator* shall then coordinate with the *System Operator* in resuming *spot market* operation.

[\(As amended by DOE DC No. 2016-06-0008 dated 17 June 2016\)](#)

6.9.2.4 The *Market Operator* shall promptly notify all *WESM Participants* that *spot market* operation is to resume and the time at which *spot market* operation is to resume.

6.9.2.5 Notwithstanding a suspension of the *spot market*, the *System Operator*, in coordination with the *Market Operator*, may issue *emergency instructions* to *WESM Participants* in accordance with Clause 6.5.1.

[\(As amended by DOE DC No. 2016-06-0008 dated 17 June 2016\)](#)

### **6.9.3 Effect of Market Suspension**

6.9.3.1 The *market price* during a *trading interval* in which the *ERC* has declared the *spot market* to be suspended and up to the time that the market resumes in accordance with 6.8.2.4 is to be determined by the *Market Operator* in accordance with clause 6.2.3.

6.9.3.2 During a *trading interval* in which the *spot market* is suspended, the *WESM Rules* will continue to apply with such modifications as the *Market Operator* reasonably determines to be necessary, taking into consideration the circumstances and conditions giving rise to the decision by the *ERC* to suspend the *spot market*.

### **6.9.4 Market Intervention Report**

[\(As amended by DOE DC No. 2016-06-0008 dated 17 June 2016\)](#)

6.9.4.1 Upon the concurrence of one or more of the following events:

- (a) a *market intervention*; [\(As amended by DOE DC No. 2016-06-0008 dated 17 June 2016\)](#)
- (b) An event which, in the *System operator's* reasonable opinion, is or may be a threat to *system security*;
- (c) A force majeure event; or
- (d) An emergency,

the PEM Board shall, within ten days thereof, direct the Market Surveillance Committee to investigate the circumstances of that event and prepare a report to assess:

- (a) The adequacy of the relevant provisions of the WESM Rules in relation to the event or events which occurred;
- (b) The appropriateness of actions taken by the System operator and the Market Operator in relation to the event or events which occurred;
- (c) The costs incurred by WESM members as a consequence of responding to the event or events; and
- (d) Any finding of potential, fault of any WESM Participant including a preliminary recommendation for further evaluation by the PEM Auditor.

6.9.4.2 A copy of the report prepared under Clause 6.9.4.1 shall be provided to:

- (a) the *PEM Board*;
- (b) the *Market Operator*;
- (c) the *ERC* and the *DOE*; and
- (c) *WESM Participants* and interested persons on request.

[\(As amended by DOE DC No. 2016-06-0008 dated 17 June 2016\)](#)

## **6.9.5 Market Suspension Report**

6.9.5.1 Within ten (10) *business days* following a declaration by the *ERC* under Clause 6.9.1.1, the *Market Surveillance Committee*, upon directive from the *PEM Board*, shall investigate the circumstances of that event and prepare a report to assess:

- (a) The adequacy of the provisions of the WESM Rules relevant to the event or events which occurred;
- (b) appropriateness of actions taken by the Market Operator or the *System Operator* in relation to the

event or events which occurred; and [\(As amended by DOE DC No. 2016-06-0008 dated 17 June 2016\)](#)

- (c) The costs incurred by the WESM members as a consequence of responding to the event or events.

6.9.5.2 A copy of the report prepared under clause 6.9.5.1 shall be provided to:

- (a) The PEM Board;
- (b) The ERC and the DOE on completion of the report; and
- (c) WESM Participants and interested persons on request.



## CHAPTER 7

### ENFORCEMENT AND DISPUTES

#### 7.1 SCOPE OF CHAPTER 7

In line with the principles of self-governance, expeditious, just and least expensive disposition of disputes and considering the continuous nature of the transactions and operations of the *WESM*, this chapter sets out:

- (a) The responsibilities for ensuring that all *WESM members* comply with the *WESM Rules*;
- (b) The procedures on how the alleged breaches will be dealt with including:
  - (1) The correct party to whom notice of an alleged breach of the *WESM Rules* by a *WESM member* shall be given;
  - (2) The manner in which an alleged breach is to be investigated;
  - (3) The manner in which a breach is to be sanctioned;
- (c) Other provisions on how disputes are to be resolved; and
- (d) The appointment of an *Enforcement and Compliance Officer*, a *Dispute Resolution Administrator* and selection of mediators and arbitrators that shall form part of the arbitration panel. (As amended by DOE DC No. 2006-01-0001 dated 10 January 2006 and further amended by DOE DC No. 2012-02-0001 dated 15 February 2012)

#### 7.2 ENFORCEMENT

##### 7.2.1 Compliance

The *PEM Board*, in consultation with the *Market Operator* and the *System operator*, shall do all things reasonably necessary to ensure that all *WESM members* comply with the *WESM Rules*.

##### 7.2.2 Breaches of the *WESM Rules* by *WESM members*.

(As amended by DOE DC No. 2006-01-0001 dated 10 January 2006)

- 7.2.2.1 If a *WESM member* or the *Market Operator* has reasonable grounds to believe that another *WESM member* may have committed or may be committing a breach of the *WESM Rules*, the *WESM member* or the *Market Operator* shall

notify the *PEM Board* of the alleged breach in writing as soon as possible.

7.2.2.2 The *PEM Board* shall direct the *Enforcement and Compliance Officer* to investigate the alleged breach as soon as possible, when: [\(As amended by DOE DC No. 2006-01-0001 dated 10 January 2006\)](#)

- (a) A *WESM member* or the Market Operator notifies the *PEM Board* of an alleged breach of the *WESM Rules* in accordance with clause 7.2.2.1; or
- (b) The *PEM Board* has a reasonable ground to believe that the *WESM member* has committed or is committing an act probably in violation of the *WESM Rules*; or
- (c) The Market Surveillance Committee submits a report showing suspected breaches of the *WESM Rules* by *WESM members*. (Added as per DOE DC No. 2006-01-0001 dated 10 January 2006)

7.2.2.3 The *Enforcement and Compliance Officer* shall issue a written notice to the *WESM member* who is alleged to be in breach of the *WESM Rules* within five calendar days upon receipt of notice from the *PEM Board*. [\(As amended by DOE DC No. 2006-01-0001 dated 10 January 2006\)](#)

7.2.2.4 The said notice issued by the *Enforcement and Compliance Officer* shall: [\(As amended by DOE DC No. 2006-01-0001 dated 10 January 2006\)](#)

- (a) Specify the nature of the breach and the sanctions that may be imposed if the breach is not remedied;
- (b) Require the *WESM member* to explain in writing the alleged breach within ten (10) calendar days from receipt thereof; and
- (c) Order the *WESM Member* who is in alleged breach to immediately remedy the act or omission comprising the alleged breach or some other remedial measure, if in the opinion of the *Enforcement and Compliance Officer*, exercising due

and necessary diligence, believes that some remedial or preventive measure should be taken to abate the effects of the act or omission complained of; Provided that (i) complying with the order shall not be deemed as an admission of guilt of the act or omission complained of, and (ii) shall be recognized as a mitigating factor if the complying party is later determined to be in breach. [\(As amended by DOE DC No. 2006-01-0001 dated 10 January 2006\)](#)

- 7.2.2.5 The notice shall be copy furnished to:
- (a) The *PEM Board*; [and]
  - (b) The *ERC*,
  - (b) the market operator [\(Added as per DOE DC No. 2006-01-0001 dated 10 January 2006\)](#)
- within five *business days* from issuance of notice.
- 7.2.2.6 The *Enforcement and Compliance Officer* after according the parties due process shall determine whether the *WESM member* in question is in breach of the *WESM Rules*. [\(As amended by DOE DC No. 2006-01-0001 dated 10 January 2006\)](#)
- 7.2.2.7 If the *Enforcement and Compliance Officer* determines that a *WESM member* has indeed breached a *WESM Rule*, the *Enforcement and Compliance Officers* shall require in writing the *WESM member* to remedy the breach within a reasonable period of time; *Provided that*, the period to remedy, as determined by the *Enforcement and Compliance Officer*, shall take in consideration all the attendant circumstances surrounding the breach including the nature and extent of damages or injuries caused as well as the quickest possible time required to correct the breach. [\(As amended by DOE DC No. 2006-01-0001 dated 10 January 2006\)](#)
- 7.2.2.8 The *Enforcement and Compliance Officer* may further recommend to the *PEM Board* that the *WESM member* determined to be in breach be suspended in accordance

with clause 3.15.7 if the said Member has: [\(As amended by DOE DC No. 2006-01-0001 dated 10 January 2006\)](#)

- (a) Committed such a breach of the *WESM Rules* and that the breach cannot be rectified;
- (b) Continued to breach the *WESM Rules* over a period of time; or
- (c) Failed to remedy a breach after it has been required to do so.

The *Enforcement and Compliance Officer* may recommend to the PEM Board for approval the suspension of the party in breach in accordance with clause 3.15.7.

- 7.2.2.9 If the breach is of such a nature that payment of compensation to affected parties is required, the *Market Operator* on behalf of the affected party may make a demand for payment under the *WESM Rules* without prejudice to the fines and penalties that the *ERC* may impose.

### **7.2.3 Alleged Breaches of the WESM Rules by the Market Operator or System Operator**

- 7.2.3.1 If a *WESM member* has reasonable grounds to believe that the *Market Operator* or *System operator* is in breach of the *WESM Rules*, the *WESM member* shall notify in writing the *PEM Board* of the breach.

- 7.2.3.2 If the *PEM Board* considers that the *Market Operator* or *System Operator* has committed a breach of the *WESM Rules*, the *PEM Board* shall direct the *Enforcement and Compliance Officer* to investigate the alleged breach as soon as possible. [\(As amended by DOE DC No. 2006-01-0001 dated 10 January 2006\)](#)

- 7.2.3.3 The *Enforcement and Compliance Officer* shall issue a written notice to the *Market Operator* or the *System operator* within five business days upon receipt of notice from the *PEM Board*. [\(As amended by DOE DC No. 2006-01-0001 dated 10 January 2006\)](#)

- 7.2.3.4 The notice which the Enforcement and Compliance Officer is required to issue under clause 7.2.3.3 shall: [\(As amended by DOE DC No. 2006-01-0001 dated 10 January 2006\)](#)
- (a) Specify the nature of the breach and the sanctions which may be imposed if the breach is not remedied; and
  - (b) Require the *Market Operator* or the *System operator* to explain in writing the alleged breach within a reasonable period of time.
- 7.2.3.5 The notice issued under clause 7.2.3.3 shall be copy furnished to:
- (a) The PEM Board; and
  - (b) The ERC.
- 7.2.3.6 If the breach is of such a nature that payment of compensation to affected parties is required, the PEM Board on behalf of the affected party may make a demand for payment from the Market Operator or the System operator under the WESM Rules without prejudice to the fines and penalties that the ERC may impose.
- 7.2.3.7 If a breach by the *Market Operator* is not rectified within a reasonable time from the notice issued under clause 7.2.3.3 or is incapable of rectification, the *PEM Board* may file a formal complaint to the *ERC*.

#### **7.2.4 Investigations**

- 7.2.4.1 The *Enforcement and Compliance Officer* may request from the *WESM member* who is alleged to be in breach of the *WESM Rules* all information relating to the breach. [\(As amended by DOE DC No. 2006-01-0001 dated 10 January 2006\)](#)
- 7.2.4.2 If the *Enforcement and Compliance Officer* makes a request for information under clause 7.2.4.1, it shall provide to the *WESM member* to whom the request is made the reasons for the request. [\(As amended by DOE DC No. 2006-01-0001 dated 10 January 2006\)](#)

- 7.2.4.3 If a *WESM member* fails to comply with a directive or request by the Enforcement and Compliance Officer for information under clause 7.2.4.1, the Enforcement and Compliance Officer may request the Market Surveillance Committee to investigate the matter and to prepare a report or such other documentation as the Enforcement and Compliance Officer may determine. [\(As amended by DOE DC No. 2006-01-0001 dated 10 January 2006\)](#)
- 7.2.4.4 A *WESM Member* shall cooperate with the Market Surveillance Committee to undertake the investigation and to prepare the report or other documentation under clause 7.2.4.3 and shall, at the request of the Market Surveillance Committee, use its best endeavors to ensure that third parties make available such information as the person may reasonably be required for the purpose of the investigation.
- 7.2.4.5 In the event that an alleged breach exists, the participant in breach shall bear the cost of the investigation and preparation of the report or other documentation under clause 7.2.4.3.
- 7.2.4.6 Any report or other documentation referred to in this clause 7.2.4 maybe used in any proceeding under or in relation to the *WESM Rules* or for the purpose of commencing any such proceeding.
- 7.2.4.7 All information provided under this clause 7.2.4 shall be treated in accordance with clause 5.3.

## **7.2.5 Sanctions**

- 7.2.5.1 The *ERC* shall have the original and exclusive jurisdiction over all cases contesting rates, fees, fines and penalties imposed by the *ERC* in the exercise of its powers, functions and responsibilities, and over all cases involving disputes between and among participants or players in the *energy sector*.
- 7.2.5.2 In line with the principles stated in clause 7.1, the *PEM Board* may impose sanctions on any participant of the *WESM*

for breach of any provision of the *WESM Rules*; Provided that this is without prejudice to the authority of *ERC* to impose fines and penalties pursuant to Section 46 of the Act.

#### **7.2.6 Actions by Agents, Employees or Officers of Participants**

The act of omission of any partner, agent, officer, employee or any person acting for or in behalf of a *WESM member* or the *Market Operator*, constituting a breach of the *WESM Rules*, shall be considered the act or omission of the *WESM member*.

#### **7.2.7 Publication**

Subject to clause 5.3, the *Enforcement and Compliance Officer* shall *publish* a monthly report setting out a summary for the period covered by the report of all actions and rulings made during that period in relation to the enforcement of the *WESM Rules*. [\(As amended by DOE DC No. 2006-01-0001 dated 10 January 2006\)](#)

#### **7.2.8 Appointment of an Enforcement and Compliance Officer**

**(Added as per DOE DC No. 2006-01-0001 dated 10 January 2006)**

7.2.8.1 The President of PEMC shall appoint a person to act as Enforcement and Compliance Officer with the concurrence of the *PEM Board*. **(Added as per DOE DC No. 2006-01-0001 dated 10 January 2006)**

#### **7.2.9 Designation of a Compliance Officer for WESM Member, Market Operator and System Operator**

**(Added as per DOE DC No. 2010-07-0008 dated 30 June 2010)**

7.2.9.1 Each *WESM Member*, the *Market Operator*, the *System Operator*, Metering Service Provider and any other *WESM Service Providers* shall designate a Compliance Officer in their respective organizations. **(Added as per DOE DC No. 2010-07-0008 dated 30 June 2010)**

7.2.9.2 The Compliance Officer shall: **(Added as per DOE DC No. 2010-07-0008 dated 30 June 2010)**

- (a) Monitor and undertake necessary activities to ensure the full compliance of their respective organization to the EPIRA, the EPIRA Implementing Rules and Regulations, *WESM Rules*, and the *WESM Market Manuals*; and develop necessary procedures and

guidelines for this purpose. (Added as per DOE DC No. 2010-07-0008 dated 30 June 2010)

- (b) From time to time, if the Compliance Officer deems it necessary or appropriate, propose policies or amendments to the *WESM Rules* and/or *WESM Market Manuals* to enhance or develop the *WESM* enforcement and compliance, with the objective of promoting good commercial and technical practices. (Added as per DOE DC No. 2010-07-0008 dated 30 June 2010)
- (c) Be responsible in facilitating and coordinating with the *WESM Enforcement Compliance Office (ECO)*, all matters relating to the enforcement and compliance of their respective organization, including the provision of the necessary information and data, as may be required by any of the *WESM Governance Committees* and by the *ECO*. (Added as per DOE DC No. 2010-07-0008 dated 30 June 2010)
- (d) Submit a report to the *ECO* concerning their respective organization's compliance with *WESM Rules* and *WESM Market Manuals* on an annual basis or as may be determined by the *ECO* or any of the *WESM Governance Committees*. (Added as per DOE DC No. 2010-07-0008 dated 30 June 2010)

## 7.3 DISPUTE RESOLUTION

### 7.3.1 Application and Guiding Principles

7.3.1.1 The dispute resolution procedures set out in this clause 7.3 apply to all disputes relating to or in connection with transactions in the *WESM* which may arise between or among any of the following:

- (a) The *Market Operator*;
- (b) The *System Operator*;
- (c) The *PEM Board* and its Working Groups except the *Dispute Resolution Administrator*;



- (d) *WESM members*;
- (e) *Intending WESM members*;
- (f) Persons who have been notified by the *Market Operator* under clause 2.5.6.1 on the following grounds:
  - (1) an application for registration as a *WESM member* has been unsuccessful;
  - (2) the application or interpretation of the *WESM Rules*;
  - (3) the application under or in relation to a contract between two or more persons or entities referred to in clauses 7.3.1.1 (a) to (f) where that contract provides that the dispute resolution procedures under the *WESM Rules* are to apply to any dispute under or in relation to the contract with respect to the application of the *WESM Rules*;
  - (4) a dispute under or in relation to the rules and regulations issued by the *ERC* and the *DOE* under the *Act*, where such rules and regulations provide that the dispute resolution procedures under the *WESM Rules* are to apply to any dispute under or in relation to that industry code or rules and regulations; [\(As amended by DOE No. 2005-11-010 dated 11 November 2005\)](#)
  - (5) the failure of an entity or entities referred to in clauses 7.3.1.1 (a) to (e) to act or behave in a manner consistent with the *WESM Rules*;
  - (6) an obligation to settle payment under the *WESM Rules*;

The aforementioned parties shall bind themselves with the effect of submitting any dispute, controversy or claim arising out of or relating to, a *WESM* transaction to which they are or will be a party for settlement by arbitration in

accordance with the dispute resolution provisions provided herein.

**(As amended by DOE DC No. 2012-02-0001 dated 15 February 2012)**

7.3.1.2 For the avoidance of doubt, the dispute resolution procedures set out in this clause 7.3 apply to disputes between two or more entities from and within each of the categories set out in clauses 7.3.1.1 (a) to (e) and (f) as appropriate.

7.3.1.3 Where a dispute of a kind set out in clause 7.3.1.1 arises, the parties concerned shall comply with the dispute management protocol set out in this Chapter. **(As amended by DOE DC No. 2012-02-0001 dated 15 February 2012)**

7.3.1.4 WESM Members shall comply with the dispute resolution process of the WESM Rules before filing a formal complaint to the ERC.

7.3.1.5 It is intended that the dispute resolution regime set out in, or implemented in compliance with, the *WESM Rules* and described in detail in clause 7.3 should to the extent possible:

- (a) Be guided by the objectives set out in clause 1.2.2;
- (b) Be simple, quick and inexpensive;
- (c) Preserve or enhance the relationship between the parties to the dispute;
- (d) Take account of the skills and knowledge that are required for the relevant dispute or issue;
- (e) Observe the rules of law;
- (f) Place emphasis on conflict avoidance; and
- (g) Encourage resolution of disputes without formal legal representation or reliance on legal procedures.

### **7.3.2 Appointment of Dispute Resolution Administrator (DRA)**

**(As amended by DOE DC No. 2012-02-0001 dated 15 February 2012)**

7.3.2.1 The *PEM Board* shall appoint a person to act as the *Dispute Resolution Administrator*, who shall have the following responsibilities:

- (a) Administer and ensure the effective implementation and operation of the *WESM* dispute resolution process;
- (b) Determine preliminary if the dispute falls under the *WESM* dispute resolution process;
- (c) Draft and issue standard forms and documents to help expedite the resolution of disputes;
- (d) Facilitate the accreditation process of mediators and arbitrators;
- (e) Update the list of accredited mediators and arbitrators published in the website;
- (f) Refer the case to the mediator selected by the parties in dispute from the accredited pool of mediators; and
- (g) Refer the case to the arbitration panel composed of arbitrators selected by the parties in dispute from the accredited list of arbitrators.

**(As amended by DOE DC No. 2006-01-0001 dated 10 January 2006 and further amended by DOE DC No. 2012-02-0001 dated 15 February 2012)**

7.3.2.2 The *Dispute Resolution Administrator* shall have the following qualifications:

- (a) At least five years' experience in alternative dispute resolution practice and procedures which do not involve litigation;
- (b) At least five years' experience in the electricity power industry; and
- (c) Not been employed by any electric power industry participant, or a company or body related to or associated with a *WESM Participant* at least one year before appointment.

The *DRA* agrees not to be employed by and does not accept employment with any electric power industry participant, or company, or a body related to or associated with a *WESM*

*member* within one year after the person ceases to be a *Dispute Resolution Administrator*.

(As amended by DOE DC No. 2006-01-0001 dated 10 January 2006 and further amended by DOE DC No. 2012-02-0001 dated 15 February 2012)

- 7.3.2.3 If the *Dispute Resolution Administrator* does not, in the reasonable opinion of the *PEM Board*, continue to meet the requirements of clause 7.3.2.2, the *PEM Board* may terminate the appointment of the *Dispute Resolution Administrator* and select a replacement *Dispute Resolution Administrator* who meets the requirements set out in clause 7.3.2.2.

### 7.3.3 Dispute Management Protocol

(As amended by DOE DC No. 2012-02-0001 dated 15 February 2012)

- 7.3.3.1 Prior to the referral of a dispute to the *DRA*, a dispute management protocol (DMP) shall first be implemented by all parties covered by the *WESM* dispute resolution process. The DMP is a system to be followed by the disputing parties and shall form part of the negotiation stage of the *WESM* dispute resolution framework. The goal of the DMP is to allow the parties to negotiate through designated DMP contact persons within a period of forty five (45) days from the time a formal notice is received by the *Market Operator* or a *WESM Member*.

For this purpose, the DMP of the *Market Operator* and each *WESM Member* shall provide:

- (a) the DMP contact person who will be the first point of contact for the notification of disputes;
- (b) the mode of service and receipt of notice of dispute and other related notices; and
- (c) the mode of responding to requests for information from other *WESM Member/s* in relation to a dispute. (As amended by DOE DC No. 2012-02-0001 dated 15 February 2012)

- 7.3.3.2 The *Market Operator* and all *WESM Members* shall submit a copy of its dispute management protocol to the *DRA* which shall be posted by the *DRA* in the market website. (As amended by DOE DC No. 2012-02-0001 dated 15 February 2012)

#### 7.3.4 Accreditation and Selection of Mediators and Arbitrators

(Added as per DOE DC No. 2012-02-0001 dated 15 February 2012)

- 7.3.4.1 The *Dispute Resolution Administrator* shall recommend to the *PEM Board* the procedure for the accreditation of the mediators and arbitrators from certified alternative dispute resolution (ADR) providers.

The *PEM Board* shall approve the process of accreditation and shall thereafter accredit the *DRA*-recommended mediators and arbitrators based on the said accreditation process.

The *DRA* shall ensure that an updated list of accredited mediators and arbitrators shall be published in the *WESM* website. (Added as per DOE DC No. 2012-02-0001 dated 15 February 2012)

- 7.3.4.2 In case of failure of the negotiation process and upon a preliminary determination by the *Dispute Resolution Administrator* that the dispute falls under the *WESM* dispute resolution process, the *DRA* shall provide the parties with a list of accredited mediators together with their respective expertise. (Added as per DOE DC No. 2012-02-0001 dated 15 February 2012)

- 7.3.4.3 In the event of failure of the mediation process, the *DRA* shall provide the parties with a list of accredited arbitrators together with their respective expertise. (Added as per DOE DC No. 2012-02-0001 dated 15 February 2012)

### 7.3.5 Dispute Resolution Process

- 7.3.5.1 If a dispute arises to which the dispute resolution procedures under this clause 7.3 apply, the parties to the dispute shall act in good faith and use all reasonable endeavors to resolve the dispute through the procedures and alternative dispute mechanisms which are available to the parties through their *dispute management system*.
- 7.3.5.2 If the parties to the dispute are unable to resolve the dispute in accordance with clause 7.3.4.1, any party who is involved in the dispute can refer the dispute to the Dispute Resolution Administrator in accordance with clause 7.3.4.3.
- 7.3.5.3 If a party wishes to refer a dispute to the Dispute Resolution Administrator under clause 7.3.4.2, that party shall notify in writing the Dispute Resolution Administrator and all of the other parties to the dispute of which the party is aware:
- (a) Of the existence of a dispute; and
  - (b) Setting out a brief history of the dispute including:
    - (1) The names of the parties to the dispute;
    - (2) The grounds of the dispute; and
    - (3) The results of any previous dispute resolution processes undertaken pursuant to the *WESM Rules* in respect of the dispute; and
    - (4) The listing of all unresolved issues and detail description thereof.
- 7.3.5.4 If the *Dispute Resolution Administrator* receives a notice of a dispute under clause 7.3.4.3, the *Dispute Resolution Administrator* shall notify all other relevant parties of the dispute and shall request from those other parties their own short written history of the dispute or any relevant associated written comments and if the *Dispute Resolution Administrator* requests such information from a party to the dispute, that information shall be provided by that party within ten business days.

- 7.3.5.5 If a matter has been referred to the Dispute Resolution Administrator under clause 7.3.4.2, then before taking any action to resolve the dispute, the *Dispute Resolution Administrator* shall determine whether it is reasonable that the dispute is one to which this clause 7.3 applies and shall advise the parties in writing of its decision.
- 7.3.5.6 If the *Dispute Resolution Administrator* is not reasonably satisfied that the dispute is one to which clause 7.3.1.1 applies, the *Dispute Resolution Administrator* shall issue a written order stating that the claim is not a dispute covered under clause 7.3.1.1. (As amended by DOE DC No. 2012-02-0001 dated 15 February 2012)
- 7.3.5.7 If the Dispute Resolution Administrator is reasonably satisfied that the dispute is one to which clause 7.3.1.1 applies, the Dispute Resolution Administrator shall issue a written direction stating preliminarily that the claim falls under the WESM dispute resolution process. (As amended by DOE DC No. 2012-02-0001 dated 15 February 2012)

### **7.3.6 Disputes About Payment**

If a dispute arises between a *WESM member* and the *Market Operator* in respect of final statements or the supporting data provided with them in accordance with clause 3.14.5, then

- (a) The dispute shall be referred to the *Dispute Resolution Administrator* in accordance with clause 7.3.4.3 within twelve months of the dispute arising;
- (b) The *Dispute Resolution Administrator* shall notify all *WESM members* who may be affected by the resolution of the dispute, including but not limited to *WESM members* whose final statement may be amended as a consequence of the resolution of the dispute; and

- (c) Those payments shall be settled without prejudice on the date specified for payment in the relevant final statement, notwithstanding a dispute regarding the amount.

#### **7.3.7 Disputes Affecting Final Statements**

Where an amount stated to be payable in a final statement is the subject of a dispute and the resolution of the dispute affects the amount payable, then:

- (a) When the dispute is resolved in accordance with this clause 7.3, the Market Operator shall issue a revised final statement to replace each final statement affected by the resolution of the dispute, in accordance with clause 3.14.5; and
- (b) The amount specified as payable by a *WESM member* in a revised *final statement* (if any) shall be paid by the relevant *WESM member*, whether or not that *WESM member* is a party to the dispute, on the date specified in the revised *final statement*.

#### **7.3.8 Interim and Emergency Relief**

A party in need of urgent interim or conservatory relief prior to the constitution of the tribunal may apply for such relief pursuant to the procedures set forth in the Dispute Resolution Market Manual. [\(As amended by DOE DC No. DC2018-05-0016 dated 18 May 2018\)](#)

#### **7.3.9 Legal Representation**

Reliance on legal representation in dispute resolution proceedings may be permitted whenever the mediator and/or arbitrator panel considers it appropriate and desirable. [\(As amended by DOE DC No. 2012-02-0001 dated 15 February 2012\)](#)



### 7.3.10 Cost of Dispute Resolution

Unless otherwise agreed upon by the parties, the reasonable costs of the proceedings may be allocated by the mediator or arbitrators for payment by one or more parties as part of the agreement or award, as may be applicable. The following are considered costs of the proceedings:

- (a) Professional fees of the mediator and arbitrators;
- (b) Legal expenses; and
- (c) Administrative costs. (As amended by DOE DC No. 2012-02-0001 dated 15 February 2012)

### 7.3.11 Effect of Resolution

7.3.11.1 A resolution of the *dispute resolution panel* is binding on the parties to the dispute, including, without limitation, any provision of the resolution relating to the *settlement* of payment by any of the parties and any provision as to the performance of actions by any of the parties.

7.3.11.2 A requirement that a party to the dispute settle payment under:

- (a) An agreement reached between the parties to a dispute under clause 7.3.4.1; or
- (b) A resolution of the dispute resolution panel, is an obligation under the *WESM Rules* to settle payments.

7.3.11.3 All persons referred to in clauses 7.3.1.1 (a) to (e) affected by an agreement reached during the mediation stage or an award of the arbitration panel shall comply with the agreement or award to the extent such agreement or award applies to them, notwithstanding that they were not parties to the dispute.

The *DRA* shall, prior to the mediation or arbitration process, notify in writing and through posting in the market website, all persons who may be affected as a consequence of the

resolution of the dispute. (As amended by DOE DC No. 2012-02-0001 dated 15 February 2012)

- 7.3.11.4 If a party to a dispute is not satisfied with the resolution of the *dispute resolution panel*, the party may file a formal complaint to the *ERC*.

### **7.3.12 Recording and Publication**

- 7.3.12.1 Whenever a dispute is resolved, the mediator or the arbitration tribunal, as may be applicable, shall send written details of the resolution of the dispute to the *Dispute Resolution Administrator*, the *PEM Board*, the *DOE*, the *ERC* and the *Market Operator* as soon as practicable. (As amended by DOE DC No. 2012-02-0001 dated 15 February 2012)
- 7.3.12.2 Subject to clause 5.3, the details and results of each dispute which the mediator and/or arbitration panel resolves, as the case may be, except confidential information, shall be *published* and made available to *WESM Members* as soon as practicable. (As amended by DOE DC No. 2012-02-0001 dated 15 February 2012)
- 7.3.12.3 Claims for confidentiality of information disclosed in the dispute resolution process shall be dealt with in accordance with the provisions relating to use of information in clause 5.3.

### **7.3.13 Limitation of Liability**

The *Dispute Resolution Administrator* is not liable for any loss or damage suffered or incurred by a *Participant* or any other person as a consequence of any act or omission of those persons unless the *Dispute Resolution Administrator* acted with malice, manifest impartiality, bad faith, gross incompetence or gross negligence. (As amended by DOE DC No. 2012-02-0001 dated 15 February 2012)

## CHAPTER 8

### RULE CHANGE

#### 8.1 SCOPE OF CHAPTER 8

Proposals for changes, amendments, and modifications of the *WESM Rules* and *Market Manuals*, as well as the adoption of new *Market Manuals* shall be undertaken in accordance with the provisions of this chapter.

This chapter 8 sets out:

- (a) The composition and manner of appointment of the *Rules Change Committee*;
- (b) The procedure for effecting a change to the *WESM Rules* and *Market Manuals*; and
- (c) The procedure for approval of a change to the *WESM Rules* and *Market Manuals*, including proposals that will result in an amendment to the *WESM Price Determination Methodology*; and adoption of new *Market Manuals*.

(As amended by DOE DC No. DC2015-07-0013 dated 29 June 2015)

#### 8.2 RULES CHANGE COMMITTEE

##### 8.2.1 Establishment of a Rules Change Committee

The *PEM Board* shall establish a *Rules Change Committee* in consultation with industry participants.

(As amended by DOE DC No. DC2015-07-0013 dated 29 June 2015)

##### 8.2.2 Composition of Rules Change Committee

8.2.2.1 The *Rules Change Committee* shall be comprised in a manner that is consistent with the composition of the *PEM Board*, provided that the persons representing each of the sectors and other members of the *Rules Change Committee* shall not be the same persons as those who are *Directors* on the *PEM Board*.

(As amended by DOE DC No. DC2015-07-0013 dated 29 June 2015)

8.2.2.2 The principles applicable to the composition and operation of the *PEM Board* as set out in *WESM Rules* Clause 1.4.2 apply also to the composition of the *Rules Change Committee*.

(As amended by DOE DC No. 2005-11-010 dated 11 November 2005 and further amended by DOE DC No. DC2015-07-0013 dated 29 June 2015)

### 8.2.3 Membership requirements - Rules Change Committee

Each member of the *Rules Change Committee* shall:

- (a) be appointed by the *PEM Board* in consultation with industry participants; and
- (b) not be a member of the *PEM Board*.

(As amended by DOE DC No. 2006-11-0013 dated 09 November 2006 and further amended by DOE DC No. DC2015-07-0013 dated 29 June 2015)

### 8.2.4 Termination

The *PEM Board* may terminate the appointment of any member of the *Rules Change Committee* at any time if:

- (a) The person becomes insolvent or under administration;
- (b) The person becomes of unsound mind or a person whose person or estate is liable to be dealt with in any way under a law relating to mental health;
- (c) The person ceases to represent the sectoral group or other groups, or the company to which he has been appointed; or  
[\(As amended by DOE DC No. 2006-11-0013 dated 09 November 2006\)](#)
- (d) The person fails to discharge the obligations of their office.

[\(As amended by DOE DC No. 2006-11-0013 dated 09 November 2006 and further amended by DOE DC No. DC2015-07-0013 dated 29 June 2015\)](#)

#### **8.2.5 Appointment for Vacated Positions**

If the *PEM Board* decides to terminate the appointment of any member of the *Rules Change Committee* in accordance with *WESM Rules* Clause 8.2.4, the *PEM Board* shall appoint another representative from the same membership category to fill the vacancy in the *Rules Change Committee* as soon as practicable.

[\(As amended by DOE DC No. DC2015-07-0013 dated 29 June 2015\)](#)

#### **8.2.6 Resignation**

A member of the *Rules Change Committee* may resign by giving a written notice to the *PEM Board* thirty (30) *working days* before the effectivity of resignation.

[\(As amended by DOE DC No. DC2015-07-0013 dated 29 June 2015\)](#)

#### **8.2.7 Conduct of meetings**

The *Rules Change Committee* shall meet and regulate its meetings and conduct its business in a manner that is consistent with the provisions of the *WESM Rules*.

(As amended by DOE DC No. DC2015-07-0013 dated 29 June 2015)

#### 8.2.8 Advice and assistance

The *Rules Change Committee* may obtain such advice or any other assistance as it deems appropriate, including, without limitation, advice or assistance from persons with experience relevant to any proposal to change the *WESM Rules* or *Market Manuals*, or to adopt a new *Market Manual*, which the *Rules Change Committee* is considering; and from *WESM members* who are likely to be affected by any proposal.

(As amended by DOE DC No. DC2015-07-0013 dated 29 June 2015)

#### 8.2.9 Rules Change Classification and Procedures

(Added as per DOE DC No. 2005-11-010 dated 11 November 2005)

- a) Subject to clause 8.6.4.2, the *Rule Change Committee* will recommend for approval of the *PEM Board* a system of classification of changes to the *WESM Rules*.
- b) Subject to approval by the *PEM Board*, the *Rule Change Committee* will develop and *publish* detailed guidelines and procedures to be employed in the consideration, approval, publication and effectivity of any proposed change to the *WESM Rules*. These guidelines and procedures will, as far as practicable, be consistent with the provisions of this chapter 8, provided, however, that the Committee may establish procedures, time periods and manner of publication and effectivity other than as stated in this chapter 8 depending on the classification of the proposed change.

### 8.3 REFERRAL OF MATTERS TO THE RULES CHANGE COMMITTEE

### **8.3.1 Proposals for Changes to the *WESM Rules* or *Market Manuals*, or Adoption of New *Market Manuals***

The *Market Operator*, the Government, any *WESM member* or other interested parties may submit proposals for changes to the *WESM Rules* or *Market Manuals*, or for the adoption of new *Market Manuals* to the *Rules Change Committee*.

(As amended by DOE DC No. DC2015-07-0013 dated 29 June 2015)

### **8.3.2 Form of submission**

Proposals for a change or changes to the *WESM Rules* or *Market Manuals*, or the adoption of new *Market Manuals* shall:

- (a) be in writing and addressed to the *Rules Change Committee*;
- (b) include the name and address of the applicant;
- (c) demonstrate that the change to the *WESM Rules* or *Market Manual*, or the proposed new *Market Manual* is:
  - (1) consistent with the *WESM* objectives;
  - (2) feasible;
  - (3) not unreasonably costly to implement; and
  - (4) aimed at providing a more appropriate or better means of achieving the criteria set out in *WESM Rules* Clauses 8.3.2 (c) (1) to (c) (3), by replacing an existing provision of the *WESM Rules* or a *Market Manual*, or adopt a new *Market Manual*;
- (d) provide the reasons why a change to the *WESM Rules* or *Market Manuals*, or the adoption of a proposed new *Market Manual* is necessary or desirable; and
- (e) contain sufficient information to permit a proper consideration by the *Rules Change Committee* of those reasons, including the public benefit (if any) of making the change to the *WESM Rules* or *Market Manual*, or adopting a new *Market Manual*.

(As amended by DOE DC No. DC2015-07-0013 dated 29 June 2015)

### 8.3.3 Rules Change Committee obligations

The *Rules Change Committee* shall:

- (a) keep a register of all proposals for a change in the *WESM Rules* or *Market Manuals* as well as proposals for new *Market Manuals* submitted to it; and
- (b) give due course to the proposal in the *Rules Change Committee* meeting immediately following the *Rules Change Committee* Secretariat's receipt of a proposal or as soon as practicable.

(As amended by DOE DC No. DC2015-07-0013 dated 29 June 2015)

## 8.4 CONSIDERATION OF PROPOSALS TO CHANGE THE WESM RULES OR MARKET MANUALS OR TO ADOPT NEW MARKET MANUALS BY THE RULES CHANGE COMMITTEE

(As amended by DOE DC No. DC2015-07-0013 dated 29 June 2015)

### 8.4.1 Rules Change Classification Procedures

(As amended by DOE DC No. DC2015-07-0013 dated 29 June 2015)

8.4.1.1 The Rules change proposals shall be classified as follows:

- (a) Urgent Proposals refer to proposals for amendments to the *WESM Rules* and *Market Manuals* or the adoption of new *Market Manuals*, which require immediate action to:
  - i. Avoid, reduce the risk of or mitigate the adverse effects of certain conditions on the ability of the power system to function normally;



- ii. Avoid, reduce the risk of or mitigate the effects of the abuse of market power or anti-competitive behavior;
- iii. Avoid, reduce the risk of or mitigate the unintended adverse effect of a *WESM Rule* (or any of its amendments) or a provision in a *Market Manual*;
- iv. Facilitate the implementation of any regulation, circular, order or issuance of the *DOE* or *ERC* pursuant to the *EPIRA*. (As amended by DOE DC No. DC2018-07-0018 dated 02 July 2018)

Provided further that the urgent amendments shall be implementable on the affected WESM/Retail operations and/or transactions within the period of six (6) months subject to the confirmation of the Market Operator. (As amended by DOE DC No. DC2018-07-0018 dated 02 July 2018)

(b) Minor Proposals are proposals for amendments to the *WESM Rules* or *Market Manuals*, which are corrections as to form such as typographical or grammatical changes, or those which are of a non-material procedural or a non-substantive nature. A proposal will not qualify as a Minor Proposal if it entails any of the following-

- i. A *WESM member* or the *Market Operator* would incur material additional costs in order to effect the change or to be compliant with the change brought about by the amendment;
- ii. The determination of timetable (including bid and offer submission schedules, auction schedules, etc.) or prices in any of the physical or financial markets would be changed;
- iii. The means of procurement of, and prices paid for, an ancillary service would be changed; The level or timing of information released to the *WESM* would be changed;
- iv. The proposal would result in a change to the conditions for participation such that any currently authorized *WESM member* would no longer be authorized;
- v. The proposal would make it unreasonably difficult for a *WESM member* to comply with the law, or would render an otherwise

- compliant *WESM member* non-compliant with law, or would deprive a *WESM member* of any right under existing law; and
- vi. The change would introduce additional risks to the *Market Operator* of not being able to direct the operation of the *spot market* or to the *System Operator* of not being able to maintain system reliability in accordance with the applicable standards.

(As amended by DOE DC No. DC2015-07-0013 dated 29 June 2015)

- (c) General Proposals refer to proposed amendments to the *WESM Rules* or *Market Manuals*, or new *Market Manuals*, which do not otherwise qualify as either Minor Proposals or Urgent Proposals.

(As amended by DOE DC No. DC2015-07-0013 dated 29 June 2015)

8.4.1.2 The proposed amendments to the *WESM Rules*, *Market Manuals*, and any amendment and/or adoption of a new *Market Manuals* shall take effect upon approval and promulgation by the *DOE*.

In cases of changes to the *WESM Rules*, *Market Manuals* or the adoption of new *Market Manuals*, implemented pursuant to *WESM Rules* Clause 8.4.1.1 (a) prior to *DOE's* approval, shall be processed and submitted to the *DOE* for final approval; otherwise, the effectivity of such *WESM Rules* changes shall be no more than six (6) months from the *PEM Board* approval.

(As amended by DOE DC No. DC2015-07-0013 dated 29 June 2015)

8.4.1.3 Subject to approval by the *PEM Board*, the *Rules Change Committee* shall develop and *publish* detailed guidelines and procedures to be employed in the consideration, approval, publication and effectivity of any proposed change to the *WESM Rules* and *Market Manuals*, as well as for the adoption of new *Market Manuals*. These guidelines and procedures will, as far as practicable, be consistent with the provisions of this Chapter 8, provided, however, that the Committee may establish

procedures, time periods and manner of publication and effectivity other than as stated in this Chapter 8 depending on the classification of the proposed change.

(As amended by DOE DC No. DC2015-07-0013 dated 29 June 2015)

#### 8.4.2 Assessment of proposals

Pursuant to *WESM Rules* Clause 8.3.3 (b), the *Rules Change Committee* shall assess whether the proposed change to the *WESM Rules* or *Market Manual*, or the proposal for a new *Market Manual* is:

- (a) consistent with the *WESM* objectives;
- (b) feasible;
- (c) not unreasonably costly to implement; and
- (d) aimed at providing a more appropriate or better means of achieving the criteria set out in Clauses 8.4.1 (a) to (c).

(As amended by DOE DC No. DC2015-07-0013 dated 29 June 2015)

#### 8.4.3 Discretions when assessing a proposal

In considering whether a proposal for a change in the *WESM Rules* or a *Market Manual*, or for the adoption of a new *Market Manual* satisfies the criteria as set out in *WESM Rules* Clause 8.4.1, the *Rules Change Committee* may:

- (a) Take into account any information and documents that the *Rules Change Committee* reasonably considers to be relevant to its consideration of the proposed change to the *WESM Rules* or *Market Manual* or the proposed new *Market Manual*;
- (b) Consult with such persons whom the *Rules Change Committee* reasonably considers will likely be affected by the proposal;
- (c) Seek such information and views from any person as may be practicable under the circumstances; and

- (d) Refer and delegate the proposal to any working group, comprised of persons having such expertise as the *Committee*, in the *Rules Change Committee's* absolute discretion, whenever it considers reasonable or necessary or as it may consider practicable in the circumstances delegating to that working group any obligation or task of the *Rules Change Committee* as set out in *WESM Rules* Clauses 8.4.3 , and 8.4.5 other than this *WESM Rules* Clause 8.4.3 (d).

(As amended by DOE DC No. DC2015-07-0013 dated 29 June 2015)

#### 8.4.4 Notification following failure to satisfy criteria

If the *Rules Change Committee* concludes that a proposal does not satisfy the criteria set out in *WESM Rules* Clause 8.4.2, it shall notify the proponent and the *PEM Board* within 10 *working days* after its decision on the non-adoption of the proposal, including the reason for its decision.

(As amended by DOE DC No. DC2015-07-0013 dated 29 June 2015)

#### 8.4.5 Notification following satisfying criteria

If the *Rules Change Committee* concludes that a proposal satisfies the criteria as set out in *WESM Rules* Clause 8.4.2, the *Rules Change Committee* shall:

- (a) Notify the *PEM Board*, all *WESM members* and all other interested parties of the proposal; and
- (b) Invite such parties to make written submissions regarding the proposal within the next 30 *working days* after publication of the proposed change to the *WESM Rules* or *Market Manual*, or new *Market Manual* in the market information website.

(As amended by DOE DC No. DC2015-07-0013 dated 29 June 2015)

#### **8.4.6 Submissions regarding proposed Rules change**

To be validly considered, a written submission made in response to a proposed change to the *WESM Rules*, *Market Manual*, or proposal for the adoption of a new *Market Manual*, as provided under clause 8.4.5 (b), must be received by the *Rules Change Committee* no later than 30 *working days* after the notice and invitation referred to in *WESM Rules* Clauses 8.4.5 (a) and (b) are issued.

(As amended by DOE DC No. DC2015-07-0013 dated 29 June 2015)

#### **8.4.7 Approval of proposals**

If the *Rules Change Committee*, upon deliberation of the proposal and having considered all valid submissions, concludes that it is necessary or desirable to give effect to the proposed change to the *WESM Rules* or the *Market Manual*, or adoption of new *Market Manual*, then it shall submit said proposal to the *PEM Board* for approval.

(As amended by DOE DC No. DC2015-07-0013 dated 29 June 2015)

### **8.5 CONSIDERATION OF PROPOSALS TO CHANGE THE WESM RULES OR MARKET MANUALS OR ADOPT NEW MARKET MANUALS BY THE PEM BOARD**

(As amended by DOE DC No. DC2015-07-0013 dated 29 June 2015)

#### **8.5.1 PEM Board assessment of proposals**

If the *Rules Change Committee* submits a proposal to the *PEM Board* for the *PEM Board's* approval of any change to the *WESM Rules* or *Market Manual*, or adoption of a new *Market Manual*, in accordance with *WESM Rules* Clause 8.4.7, the *PEM Board* shall deliberate on the same in the next

*PEM Board* meeting immediately following its receipt thereof to assess whether:

- (a) The proposal satisfies the criteria as set out in *WESM Rules* Clause 8.4.2; and
- (b) The processes and procedures set out in *WESM Rules* Clause 8.4 have been duly followed.

(As amended by DOE DC No. DC2015-07-0013 dated 29 June 2015)

#### **8.5.2 *PEM Board* discretions when assessing a proposal for a change in the *WESM Rules* or *Market Manuals*, or for the adoption of new *Market Manuals***

In considering whether a proposal for a change in the *WESM Rules* or *Market Manuals*, or adoption of new *Market Manuals* satisfies the criteria which are set out in *WESM Rules* Clause 8.4.2, the *PEM Board* may:

- (a) Take into account any information and documents, which the *PEM Board* reasonably considers to be relevant to its consideration of the proposal;
- (b) Consult with such persons as the *PEM Board* reasonably considers will likely be affected by the proposal; and
- (c) Seek such information and views from any person whom the *PEM Board* considers relevant or as may be practicable in the circumstances.

(As amended by DOE DC No. DC2015-07-0013 dated 29 June 2015)

#### **8.5.3 Notification following unsuccessful proposal**

- 8.5.3.1 If the *PEM Board* concludes that a proposed change to the *WESM Rules* or a *Market Manual*, or proposal for a new *Market Manual* does not satisfy the criteria set out in Clause 8.4.2, the *PEM Board* shall notify:

- (a) The *Rules Change Committee*;
- (b) Proponent(s); (As amended by DOE DC No. DC2018-07-0018 dated 02 July 2018)
- (c) Any party who made written submissions to the *Rules Change Committee* under *WESM Rules* Clause 8.4.5; and
- (d) The *DOE* and the *ERC*,

within 10 *working days* after reaching that conclusion, and shall provide reasons for its decision.

(As amended by DOE DC No. DC2015-07-0013 dated 29 June 2015)

8.5.3.2 If the *PEM Board* determines that the processes and procedures set out in *WESM Rules* Clause 8.4 have not been duly followed, the *PEM Board* shall:

- (a) Refer the proposal back to the *Rules Change Committee* so that the procedural error can be rectified within the earliest possible time in accordance with *WESM Rules* Clause 8.4; and
- (b) Take such steps as it considers reasonably necessary and appropriate in all the circumstances to ensure that the *Rules Change Committee* adheres to the processes and procedures set out in *WESM Rules* Clause 8.4 in the future.

(As amended by DOE DC No. DC2015-07-0013 dated 29 June 2015)

#### 8.5.4 Approving and submitting a proposal for approval

(As amended by DOE DC No. 2005-11-010 dated 11 November 2005 and further amended by DOE DC No. DC2015-07-0013 dated 29 June 2015)

If the *PEM Board* concludes that the proposal satisfies the criteria which are set out in *WESM Rules* Clause 8.4.2 and that the processes and procedures set out in *WESM Rules* Clause 8.4 have been duly followed, the *PEM Board*:

- a) shall immediately submit the proposal to the *DOE* for final approval, except in the case of Urgent Proposal; and
- b) shall cause publication of the approved proposal under *WESM Rules* Clause 8.4.1.1 (a), which will become effective fifteen (15) *working days* after its publication or on such date and for such period as the *PEM Board* determines; or upon such time that the amendment may be implemented taking into consideration the technical changes that need to be introduced to the *Market Management System* (MMS) or to such other systems.

(As amended by DOE DC No. DC2015-07-0013 dated 29 June 2015)

## **8.6 APPROVAL OF PROPOSAL FOR CHANGES TO THE WESM RULES OR MARKET MANUALS OR ADOPT NEW MARKET MANUALS**

(As amended by DOE DC No. 2005-11-010 dated 11 November 2005 and further amended by DOE DC No. DC2015-07-0013 dated 29 June 2015)

### **8.6.1 DOE assessment of proposal**

If the *PEM Board* submits a proposal to the *DOE* for *DOE's* final approval of any changes to the *WESM Rules* or *Market Manuals*, or adoption of a new *Market Manual*, in accordance with the *WESM Rules* Clause 8.5.4, the *DOE* shall assess whether the proposed change to the *WESM Rules* satisfies the criteria which are set out in clause 8.4.2.

(As amended by DOE DC No. DC2015-07-0013 dated 29 June 2015)



#### **8.6.2 DOE discretions when assessing proposal for a change in the WESM Rules or Market Manuals, or for the Adoption of New Market Manuals**

In considering whether a proposal for a change in the *WESM Rules* or *Market Manuals*, or adoption of new *Market Manuals* satisfies, the criteria, which are set out in *WESM Rules* Clause 8.4.2, the *DOE*, may:

- (a) Take into account any information and documents which the *DOE* reasonably considers to be relevant to its consideration of the proposal;
- (b) Consult with such persons as the *DOE*, reasonably considers will likely be affected by the proposal; and
- (c) Seek such information and views from any person in relation to the proposal as may be practicable in the circumstances.

(As amended by DOE DC No. DC2015-07-0013 dated 29 June 2015)

#### **8.6.3 Notification following failure to satisfy criteria**

If the *DOE* concludes that a proposal does not satisfy the criteria, which are set out in *WESM Rules* Clause 8.4.2, the *DOE*, shall notify:

- (a) The *PEM Board*;
- (b) The *Rules Change Committee*; and
- (c) The person who proposed the change to the *WESM Rules*,

within 10 *working days* of reaching that conclusion and shall provide reasons for its decision.

(As amended by DOE DC No. DC2015-07-0013 dated 29 June 2015)

#### **8.6.4 Approval of a proposal**

If the *DOE* concludes that a proposal is consistent with the Act and the public interest and satisfies the criteria, which are set out in *WESM Rules*

Clause 8.4.2, it shall approve the proposal and cause its publication. The proposal approved by the *DOE* will take effect within fifteen (15) *working days* from its publication or on such later date as the *DOE*, determines or upon such time that the amendment may be implemented. (As amended by DOE DC No. 2005-11-010 dated 11 November 2005 and further amended by DOE DC No. DC2015-07-0013 dated 29 June 2015)

#### **8.6.5 Report by the Rules Change Committee**

The *Rules Change Committee* and the *PEM Board* shall develop and make available to *WESM members* a periodic report, which sets out:

- (a) All proposals to change the *WESM Rules* or *Market Manuals*, or adopt new *Market Manuals*, that have been made in the previous six-month period;
- (b) The progress of those proposals in accordance with the procedures prescribed in this chapter 8;
- (c) The reason for any delays in relation to the progress of those proposals and any action the *Rules Change Committee*, the *PEM Board* or the *DOE* has taken to overcome those delays; and
- (d) Any other matter which the *Rules Change Committee*, the *PEM Board* or the *DOE* reasonably considers to be relevant to the progress of proposals, including but not limited to any policies developed by the *Rules Change Committee*, the *PEM Board* or the *DOE* in relation to:
  - (1) The way in which it intends to deal with any procedure specified in this chapter 8; and
  - (2) The facts, matters or circumstances which the *Rule Change Committee*, the *PEM Board* or the *DOE* may take into account in making a decision and otherwise discharging its functions and obligations under this chapter 8, Provided that nothing in this clause 8.6.5 is to be taken to limit the exercise by the *Rules Change Committee*, the *PEM Board* or the *DOE*, as the case may be, of its discretion under this chapter 8.

(As amended by DOE DC No. DC2015-07-0013 dated 29 June 2015)

## 8.7 RULES CHANGE COMMITTEE INDEMNITY

The *Rules Change Committee* and its members, and any working group to whom any task or obligation is delegated under clause 8.4, are not to be personally liable in any way for any change, which is made to the *WESM Rules*.

## CHAPTER 9

### INTERPRETATION

#### 9.1 GENERAL

In the *WESM Rules*, unless the context otherwise requires:

- (a) Headings are for convenience only and do not affect the interpretation of the *WESM Rules*;
- (b) Words importing the singular include the plural and vice versa;
- (c) Words importing a gender include any gender;
- (d) Where italicized, a word or phrase has the definition given to that word or phrase in chapter 10;
- (e) Other parts of speech and grammatical forms of a word or phrase defined in the *WESM Rules* have a corresponding meaning;
- (f) An expression importing a natural person includes any legal entity, company, partnership, joint venture, association, corporation or other body corporate and any government authority;
- (g) A reference to any thing (including, but not limited to, any right) includes a part of that thing;
- (h) A reference to a clause, paragraph, part, annexure, exhibit or schedule is a reference to a clause and paragraph and part of, and an annexure, exhibit and schedule to the *WESM Rules* and a reference to the *WESM Rules* includes any annexure, exhibit and schedule;
- (i) A reference to a statute, regulation, proclamation, order in council, ordinance or by-law includes all statutes, regulations, proclamations, orders in council, ordinances or by-laws amending, consolidating or replacing it, and a reference to a statute includes all regulations, proclamations, orders in council, ordinances, and by-laws issued under that statute;
- (j) A reference to the *WESM Rules* or to a document or a provision of a document includes an amendment or supplement to, or replacement or novation of, the *WESM Rules* or that document or that provision of that document;

- (k) A reference to a person includes that person's executors, administrators, successors, substitutes (including, without limitation, persons taking by novation) and permitted assignees;
- (l) A reference to a body other than a *WESM member* or the *Market Operator* (including, without limitation, an institute, association or authority), whether statutory or not:
  - (1) Which ceases to exist; or
  - (2) Whose powers or functions are transferred to another body, is a reference to the body which replaces it or which substantially succeeds to its powers or functions; and
- (m) A reference in the context of any provision of the *WESM Rules* to a "representative" of any person is a reference to any director, officer or employee of that person or any agent, consultant or contractor appointed or engaged by that person for purposes connected with the subject matter of the relevant provision of the *WESM Rules*.

## 9.2 TIME AND DATES

- 9.2.1.1 Unless the context otherwise requires, a reference in the *WESM Rules*:
  - (a) To a calendar day (such as 1 January) or a day of the week (such as Sunday) is to the day which begins at 00:00 hours on that day;
  - (b) To a week is to the period from 00:00 hours on a day until 00:00 hours on the seventh day following;
  - (c) To a month (or a number of months) or a calendar month is to the period from 00:00 hours on a day in one month until 00:00 hours on the same day of the month which follows (or follows by the relevant number of months), or if there is no such day in that month, 00:00 hours on the first day of the next following month;
  - (d) To a year is to the period from 00:00 hours on a day in one year until 00:00 hours on the same day (or where the day in the first year was 29 February, on 1 March) in the following year, and a reference to a calendar year (such as 1997) is to be construed accordingly; and

- (e) To times of the day are to Philippines standard time.
- 9.2.1.2 Unless the context otherwise requires, a period of time:
  - (a) Which dates from a given day or the day of an act or event is to be calculated exclusive of that day; or
  - (b) Which commences on a given day or the day of an act or event is to be calculated inclusive of that day.
- 9.2.1.3 Where under any provision of the *WESM Rules* a person is required to provide any information by a certain date or time, the relevant provision is to be taken to include a requirement that that the relevant information shall be given as soon as possible and no later than the date or time given.

### **9.3 ASSIGNMENT**

Unless otherwise expressly permitted by the *WESM Rules*, a *WESM member* shall not assign or transfer and shall not purport to assign or transfer any of its rights or obligations under the *WESM Rules*.

### **9.4 WAIVER**

A person does not waive its rights, powers and discretions under the *WESM Rules* by:

- (a) Failing to exercise its rights;
- (b) Only exercising part of its rights; or
- (c) Delaying the exercise of its rights.

### **9.5 PAYMENT**

#### **9.5.1 Method of payment**

Unless otherwise provided in the *WESM Rules*, any payment to be made under the *WESM Rules* shall be made either by the EFT facility or in cash or by a draft or check drawn by a bank as defined in legislation applicable to the conduct of banking activities in the Philippines.

#### **9.5.2 Interest rates**

Unless the context otherwise requires, a reference in the *WESM Rules* to an interest rate published in respect of a specified day shall, if that interest rate is not *published*, authorized or otherwise available in respect

of that day, be taken to be the relevant interest rate *published* immediately prior to that day; and if that interest rate is suspended, modified, discontinued, or its method of calculation substantially alters or if the relevant publication ceases to publish that interest rate for more than seven consecutive days, the *Market Operator* shall provide a substitute rate of interest that in the *Market Operator's* reasonable opinion is the nearest equivalent to the interest rate and that substitute rate of interest shall be taken to be the applicable interest rate.

## **9.6 NOTICES**

### **9.6.1 Properly giving notices**

A notice is properly given under the *WESM Rules* to a person if:

- (a) It is personally served;
- (b) A letter containing the notice is sent by registered mail to the person at an address (if any) supplied by the person to the sender for service of notices or, where the person is a *WESM member*, an address shown for that person in the register of *WESM members* maintained by the *Market Operator*, or, where the addressee is the *Market Operator*, the registered office of the *Market Operator*,
- (c) It is sent to the person by facsimile or electronic mail to a number or reference which corresponds with the address referred to in clause 9.6.1(b) or which is supplied by the person to the *Market Operator* for service of notices and, if sent by electronic mail, the person sending the notice also sends a copy of the notice by letter or facsimile to the person on the same day; or
- (d) The person actually receives the notice by any other means.

### **9.6.2 Notices treated as being given**

A notice is treated as being given to a person by the sender:

- (a) Where sent by registered mail to an address in the central business district of a region in the Philippines, on the second *business day* after the day on which it is posted;
- (b) Where sent by post in accordance with clause 9.6.1(b) to any other address, on the third *business day* after the day on which it is posted;

- (c) Where sent by facsimile in accordance with clause 9.6.1(c) and a complete and correct transmission report is received:
  - (1) Where the notice is of the type in relation to which the addressee is obliged under the *WESM Rules* to monitor the receipt by facsimile outside of, as well as during, business hours, on the day of transmission; and
  - (2) In all other cases, on the day of transmission if a *business day* or, if the transmission is on a day which is not a *business day* or is after 4.00 pm (addressee's time), at 9.00 am on the following *business day*;
- (d) Where sent by electronic mail in accordance with clause 9.6.1 (c):
  - (1) Where the notice is of a type in relation to which the addressee is obliged under the *WESM Rules* to monitor receipt by electronic mail outside of, as well as during, business hours, on the day when the notice is recorded as having been first received at the electronic mail destination; and
  - (2) In all other cases, on the day when the notice is recorded as having been first received at the electronic mail destination, if a *Business day* or if that time is after 4.00 pm (addressee's time), or the day is not a *business day*, at 9.00 am on the following *business day*; or
- (e) In any other case, when the person actually receives the notice.

#### **9.6.3 Form of notice**

Any notice to or by a person under the *WESM Rules*:

- (a) Shall be in legible writing and in English; and
- (b) Where the sender is a company, shall be signed by a responsible employee or officer thereof or under the corporate or official seal of the sender (except where the notice is sent by electronic mail).

#### **9.6.4 Calculating a specified period for notices**

Where a specified period (including, without limitation, a particular number of days) is provided, for purposes of calculating the number of days indicated in the period, the first day shall be excluded while the last day is included in said computation.



#### **9.6.5 General**

In this clause 9.6, a reference to:

- (a) An addressee includes a reference to an addressee's officers, agents, or employees or any person reasonably believed by the sender to be an officer, agent or employee of the addressee; and
- (b) A notice includes any request, demand, consent or approval or other communication to or by a person under the *WESM Rules*.

### **9.7 RETENTION OF RECORDS AND DOCUMENTS**

Unless otherwise specified in the *WESM Rules*, all records and documents prepared for or in connection with the *WESM Rules* shall be retained for a period of at least seven years.

### **9.8 SEVERABILITY**

Each part or all of a provision of the *WESM Rules*:

- (a) Will be construed so as to be valid and enforceable to the greatest extent possible; and
- (b) May be so construed (or deleted if necessary) regardless of the effect which that may have on the provision in question or any other provision or the *WESM Rules* as a whole.

## CHAPTER 10

### TRANSITORY PROVISIONS

#### 10.1 PURPOSE AND SCOPE

##### 10.1.1 Purpose

To provide guidelines for the transition of the electric power industry from the existing structure to the new structure as specified in the Act;

##### 10.1.2 Scope of Application

This Chapter applies to the following:

- (a) *Market Operator*,
- (b) *System operator*,
- (c) *Generation Companies*;
- (d) *Ancillary Services Provider*,
- (e) *Distribution Utilities*;
- (f) *Suppliers*;
- (g) *Metering Services Providers*;
- (h) Bulk Users/End-users; and
- (i) Other similar entities authorized by the *ERC* to become members of the *WESM*.

#### 10.2 MARKET TRANSITION

##### 10.2.1 Establishment of the Wholesale Electricity Spot market

10.2.1.1 Within one (1) year from the effectivity of the Act, the DOE shall establish a *WESM* composed of the *WESM participants*. The market shall provide the mechanism for identifying and setting the price of actual variations from the quantities transacted under contracts between sellers and purchasers of electricity.

10.2.1.2 The *DOE* shall constitute the *Autonomous Group Market Operator* ("AGMO"), initially under the administrative supervision of the *TRANSCO*.

##### 10.2.2 The Market Operator

- 10.2.2.1 The WESM shall be primarily operated by a Market Operator subject to the overall supervision of the PEM Board and in accordance with the WESM Rules.
- 10.2.2.2 The AGMO shall undertake the preparatory work, and initial operation of the WESM for a period of twelve months from the spot market commencement date and, for the avoidance of doubt, during that initial twelve-month period, all references in the *WESM Rules* to "*Market Operator*" shall be construed to mean "*AGMO*".
- 10.2.2.3 Not later than one (1) year after the implementation of the *WESM*, an Independent *Market Operator* ("*IMO*") shall be formed and the functions, assets and liabilities of the *AGMO* shall be transferred to such entity with the joint endorsement of the *DOE* and the electric power industry participants. Thereafter, the administrative supervision of the *TRANSCO* over such entity shall cease.

#### **10.2.3 The Governing Board**

- 10.2.3.1 The WESM shall be governed, and its powers and functions exercised by a governing body with equitable representation from electric power industry participants. The representatives of the AGMO governing body shall be selected, in accordance with the WESM Rules. The DOE Secretary shall chair the AGMO governing board.
- 10.2.3.2 The AGMO governing board shall govern the operation of the AGMO until the formation or selection of an *IMO*. Until such time, all references in the *WESM Rules* to "*PEM Board*" shall be construed to mean "*AGMO governing board*".

#### **10.2.4 Membership to the WESM**

- 10.2.4.1 Subject to compliance with the membership criteria, all Generating Companies, Distribution Utilities, Suppliers, Bulk consumers/End-users and Other Similar Entities authorized by the ERC shall be eligible to become members of the WESM. The ERC may authorize other similar entities to become eligible as members, either directly or indirectly, of the WESM.

- 10.2.4.2 A *Generation Company* shall comply with the membership criteria as prescribed under the *WESM Rules* as set forth in Rule 9 of the IRR of the Act on *WESM*.
- 10.2.4.3 Pursuant to Section 9 (e) of the Act, a *Generation Company* with facilities connected to a Grid shall make information available to the *Market Operator* to enable the *Market Operator* to implement the appropriate *dispatch* scheduling and shall comply with the said scheduling in accordance with the *WESM Rules*. A *Generation Company* shall likewise make information available to the *System operator* to facilitate central dispatch by the *System operator*.
- 10.2.4.4 For the first five (5) years from the establishment of the *WESM*, *Distribution Utilities* shall source at least ten percent (10%) of its total demand from the *spot market*. For this purpose, each *Distribution Utility* may submit a *demand bid* corresponding to a load, which has been certified as dispatchable in accordance with the *Grid Code* and *Distribution Code*.
- 10.2.4.5 *NEA* may, in exchange for adequate security and a guarantee fee, act as a guarantor for purchases of electricity in the *WESM* by any *Electric Cooperative* or small *Distribution Utility* to support their credit standing consistent with the provision hereof.

#### **10.2.5 Price Determination Methodology**

The *price determination methodology* contained in the *WESM Rules* shall be subject to the approval of *ERC*.

### **10.3 PROVISIONS FOR THE INTERIM WESM**

The following provisions shall be applicable during the operation of the interim *WESM*.

#### **10.3.1 Spot market Trading**

- 10.3.1.1 Initially, only *energy* shall be traded upon commencement of the *interim WESM*.
- 10.3.1.2 The composition of the *market network model* may be limited in scope during the operation of the interim *WESM*.

### 10.3.2 Ancillary Services

- 10.3.2.1 The *System operator* shall arrange for the provision of adequate ancillary services for each region either:
- (a) By competitive tendering process, administered by the *Market Operator*, whereby a number of *Ancillary Services Providers* can provide a particular category of *ancillary services*; or
  - (b) By negotiating contracts directly with an *Ancillary Services Provider* who is a *Direct WESM member*, where only one *Ancillary Services Provider* can provide the required *ancillary services*; or
  - (c) Where applicable, by competitive *spot market* trading in accordance with clause 3.3.4.
- 10.3.2.2 The *reserve-trading amount* shall be based on the cost of *reserves* contracted for by the *System operator*.
- 10.3.2.3 When applicable and reasonably feasible, the *Market Operator* shall establish a *spot market* mechanism for competitive *spot market* trading in the purchase of certain *reserve categories*. The *DOE* shall declare the commencement of the *spot market ancillary services*.

### 10.3.3 Market Dispatch Optimization Model

The *interim market dispatch model* is of lesser scope than the final *market optimization model* and determines *dispatch* targets for the end of a *trading interval*, *reserve* allocations for the *trading interval*, associated *energy prices* at all *trading nodes* in the *power system*, and *reserve prices* for all *reserve regions*.

### 10.3.4 Metering

- 10.3.4.1 The installation and maintenance of *metering installations* shall initially be carried out by the *TRANSCO*.
- 10.3.4.2 A *Trading Participant* who is a direct *WESM member* shall:
- (a) Arrange with the *TRANSCO* for the provision, installation and maintenance of each *metering*

*installation* for which that *Trading Participant's* financially responsible;

- (b) Enter into an agreement with the *TRANSCO* for the provision, installation and maintenance of the relevant *metering installation* by the *TRANSCO*; and
- (c) Provide the *Market Operator* with the relevant details of the metering installation in accordance with Appendix B2 within ten (10) *business days* of entering into an agreement with the *TRANSCO* under clause 4.3.4 (b).

#### 10.3.4.3 Metering Installation Components

The following requirements may be relaxed during the operation of the interim WESM:

- (a) Facilities to enable *metering data* to be transmitted from the *metering installation* to the *metering database*, and be capable of communication with the *metering database*; and
- (b) Adequate communication facility that will enable the *Market Operator* to obtain remote access to the *metering data* from, the *metering database*.

## 10.4 ACTIONS TO BE TAKEN PRIOR TO SPOT MARKET COMMENCEMENT DATE

### 10.4.1 Significant Variations

The *Market Operator* shall, in consultation with *WESM Participants*, develop guidelines as to what constitutes a significant variation in and between *trading intervals* subject to the approval of the *PEM Board*.

### 10.4.2 Market Operator Performance

- 10.4.2.1. Prior to the *spot market commencement date*, the *Market Operator* shall develop performance indicators which provide an indication of, and monitor, the *Market Operator's* performance under the *WESM Rules* in respect of:

- (a) The *Market Operator's* responsibilities under the *WESM Rules*; and
  - (b) The achievement of the *WESM* objectives as defined in clause 1.2.5.
- 10.4.2.2. The performance indicators developed under clause 10.4.2.1 shall be approved by the *PEM Board*.

#### 10.4.3 Formulation of PEM Board By-law

Prior to the *spot market commencement date* and, if applicable, subject always to any relevant law or regulation of the Philippines in relation to processes and procedures of corporate entities or the formulation of corporate constitutions, the *DOE* shall formulate the by-law of the *PEM Board* which shall set out, among others, the following:

- (a) Conduct of meetings, including but not limited to the frequency of meetings, the quorum required to conduct a meeting, the manner in which a meeting may be conducted and the location of meetings;
- (b) Appointments on the *PEM Board*;
- (c) Tenure of *Directors* appointed to the *PEM Board*;
- (d) Allowance, if any, to be made to *Directors* appointed to the *PEM Board*;
- (e) Disclosure of information by and between *Directors* appointed to the *PEM Board*;
- (f) Detailed procedures for voting;
- (g) Formulation of a budget for the *PEM Board*;
- (h) Appointment of a Chief Executive Officer or General Manager to conduct the daily business of the *PEM Board*, if necessary and appropriate;
- (i) Procedure to be followed by the *PEM Board* for amending its own by-law; and
- (j) Any other matter considered relevant by the *DOE*.

#### 10.4.4 Determination of Market Network Model

- 10.4.4.1. Prior to the *spot market* commencement date, the *Market Operator*, in consultation with *WESM Participants* and the *System operator* shall:
- (a) In accordance with clauses 3.2.1.2 and 3.2.1.3, recommend the composition of the *market network model*;
  - (b) Seek approval of the *market network model* from the *PEM Board*; and *Publish* details of the *market network model*, once approved.

#### 10.4.5 Determination of Market Trading Nodes

- 10.4.5.1. Prior to the *spot market commencement date*, the *Market Operator* shall, in accordance with clauses 3.2.2.1, 3.2.2.2 and 3.2.2.3, determine the identity of each *market trading node* for trading and settlement purposes.
- 10.4.5.2. Prior to the *spot market commencement date*, the *Market Operator* shall *publish* a register of *market trading nodes* and of the *Trading Participant* responsible for each.

#### 10.4.6 Determination of Customer Pricing Zones

- 10.4.6.1. When Customer Pricing Zones are adopted and prior to the spot market commencement date, the *Market Operator* shall: [\(As amended by DOE DC No. 2004-07-008 dated 7 July 2004\)](#)
- (a) Partition the set of *customer nodes* into *pricing zones* for *Customers*, to be called *customer pricing zones*;
  - (b) Determine formula to calculate *ex ante zonal energy prices* and *ex post zonal energy prices* as the



- appropriate toad-weighted averages of *nodal energy prices* for nodes within each *customer pricing zone*;
- (c) Determine the nature of information to be *published* for each *customer pricing zone*;
- (d) Submit to the *PEM Board* for approval relevant details of all *customer pricing zones*, allocation of *market trading nodes* to each *customer pricing zone* and price calculation formula; and
- (e) After obtaining the approval of the *PEM Board* under clause 10.4.6.1(d), *publish* the following:
  - (1) *Customer pricing zones*; and
  - (2) Allocation of *market trading nodes*.

- 10.4.6.2. The *PEM Board* shall develop and thereafter shall *publish guidelines* regarding:
- (a) The allocation of market trading nodes to customer pricing zones; and
  - (b) Any other matter relevant to *pricing zones*.

## 10.4.7 Ancillary Services

### 10.4.7.1. Ancillary Services Agreements

- 10.4.7.1.1 The *System operator* shall, prior to the *spot market commencement date* and in consultation with the *Market Operator*, develop and *publish* procedures in relation to any competitive tendering process for *ancillary services*, or any other procedure which the *System operator* plans to develop for the provision of *ancillary services*.
- 10.4.7.1.2. Prior to the *spot market* commencement date, the *System operator* shall:
- (a) In consultation with the *Market Operator* and *WESM Participants*, develop:

- (1) *Ancillary service* arrangements and *interim market* contract requirements;
  - (2) *Ancillary service categories* including *reserve categories*;
  - (3) *Reserve facility categories*;
  - (4) *Reserve effectiveness factors*;
  - (5) *Reserve regions*;
  - (6) *Reserve cost recovery zones*; and
  - (7) *Ancillary service cost recovery formula* to be developed in accordance with the principles set out in clause 3.3.5.4;
- (b) Submit to the PEM Board to endorse to the ERC for approval relevant details of each of the matters set out in clause 10.4.7.1.2 (a); and
- (c) After obtaining the approval of the *ERC* under clause 10.4.7.1.2 (b) *publish* the following:
- (1) *Ancillary service* arrangements and *ancillary service categories* including *reserve categories*,
  - (2) *Reserve cost recovery zones*;
  - (3) Allocation of *market trading nodes* to *reserve cost recovery zones*; and
  - (4) *Reserve cost recovery formula*.

#### 10.4.7.2. Reserve Market Arrangements

10.4.7.2.1. When reasonably feasible, the *Market Operator*, in consultation with the *System operator*, shall establish a *market* for the purchase of certain *reserve categories*.

10.4.7.2.2. The *System operator* shall define:

- (a) *Reserve categories*;

- (b) General requirements relating to each *reserve category*; and
- (c) The criteria to be satisfied by various *reserve facility categories offering reserve* to meet those requirements, in accordance with the *Grid Code and Distribution Code*.

10.4.7.3. The *System operator*, in consultation with the *Market Operator*, shall:

- (a) Establish locationally specific requirements for each *reserve category*;
- (b) Specify *reserve effectiveness factors* for each *reserve facility category*;
- (c) Establish *reserve regions* within which *reserve offers* may be accepted to meet each such locationally specific requirement;
- (d) Determine a corresponding set of locationally specific *reserve requirements constraints* to be incorporated into the *dispatch optimization*; and
- (e) Establish *reserve cost recovery zones* within which *reserve cost recovery charges* may be recovered to meet each locationally specific requirement.

10.4.7.4. The *Market Operator* shall:

- (a) Declare the form in which *reserve offers* for each *reserve category* will be accepted from various *reserve facility categories*; and
- (b) Determine the frequency with which, and a process by which, *reserve offers* may be updated.

#### 10.4.8 Timetable

- 10.4.8.1. Prior to the *spot market commencement date*, the *Market Operator*, in consultation with the *System Operator and WESM Participants*, shall develop a *timetable* for operation of the *spot market*.

- 10.4.8.2. The *Market Operator* shall *publish* the *timetable* subject to the approval of the *PEM Board*.

#### **10.4.9 Load Forecasting**

Prior to the *spot market commencement date*, the *Market Operator* shall, in consultation with the *System operator* and with the approval of the *PEM Board*, develop procedures for preparation of net load forecasts as required by clause 3.5.4.

#### **10.4.10 Market Dispatch Optimization Model**

10.4.10.1. Prior to the *spot market commencement date*, the *Market Operator* shall develop the formulation of the *market dispatch optimization model* to be used for the purposes of central scheduling and *dispatch*, and *pricing* in accordance with clauses 3.8 and 3.10.

10.4.10.2. Prior to the *spot market commencement date*, the *Market Operator* shall develop performance standards, including standards for reliability and processing time, which shall be met by the *market dispatch optimization model*, once implemented.

10.4.10.3. The formulation of the *market dispatch optimization model* developed under clause 10.4.10.1 and the performance standards developed under clause 10.4.10.2 are to be approved by the *PEM Board*, having been certified as compliant with the *WESM Rules* by an independent reviewer appointed by the *PEM Board*.

10.4.10.4. The *Market Operator* shall publish details of the *market dispatch optimization model* once approved by the *PEM Board* under clause 10.4.10.4.

#### **10.4.11 Constraint Violation Coefficients**

10.4.11.1. Prior to the *spot market commencement date*, the *Market Operator* shall develop and *publish constraint violation coefficients* or procedures for calculating *constraint violation coefficients* for each *constraint*

detailed in clause 3.6.1.4, to be used in the *market dispatch optimization model*.

10.4.11.2. The *constraint violation coefficients* shall be:

- (a) Developed in consultation with *WESM Participants*;
- (b) Appropriate for and commensurate with the particular *constraint* to which it is to be applied; and
- (c) Approved by the *PEM Board*.

#### **10.4.12 Dispatch Tolerances**

Prior to the *spot market commencement date*, the *Market Operator* shall, subject to *PEM Board* approval, develop guidelines on *dispatch tolerances* for each type of *plant*, and location, taking into account *plant* characteristics, local *network* conditions and any other matter considered relevant for purposes of scheduling and dispatch, and in accordance with the *Grid Code and Distribution Code*

#### **10.4.13 Management Procedures During Load Shedding**

Prior to the *spot market commencement date*, the *System operator* and the *Market Operator*, in consultation with *WESM Participants*, and subject to approval by the *PEM Board*, shall develop and *publish* detailed procedures for the management of all aspects of *dispatch* and *pricing* during periods when *load shedding* is required under clause 3.9.7.

#### **10.4.14 Management Procedures for Excess Generation**

Prior to the *spot market commencement date*, the *System operator* and the *Market Operator*, in consultation with *WESM Participants*, and subject to approval by the *PEM Board*, shall each develop and publish the procedures which they plan to adopt with respect to the management of all aspects of *dispatch and pricing* should it be necessary to shut down *generating systems* under clause 3.9.8.1.

#### **10.4.15 Management Procedures for Excess Generation**

Prior to the *spot market commencement date*, the *System operator* and the *Market Operator*, in consultation with *WESM Participants*, and subject to approval by the *PEM Board*, shall each develop and *publish* the

procedures which they plan to adopt with respect to the management of all aspects of *dispatch and pricing* should it be necessary to shut down *generating systems* in the event the *dispatch optimization*, or any *market projection*, indicate *excess generation* at any *node*.

#### **10.4.16 Procedures for Ex-Post Nodal Energy Price**

Prior to the *spot market commencement date*, the *Market Operator*, in consultation with *WESM Participants*, and subject to approval by the *PEM Board*, shall develop and publish the procedures to be employed in clauses 3.10.6 (d) and (e) in establishing the *network configuration* and other *constraints* to be assumed for the determination of *ex-post nodal energy prices* for circumstances in which *power system* conditions materially change during the *trading interval*, with a view to ensuring that:

- (a) Consistency is maintained between the *market network configuration* and state determined in accordance with clause 3.10.6 (d), any *constraints* determined in accordance with clause 3.10.6 (e) and the *unrestrained net loads* measured or estimated for each *market network node* in accordance with clause 3.10.6 (c); and
- (b) The *ex-post prices* produced in accordance with clause 3.10.6, properly and fairly represent average conditions over the *trading interval*.

#### **10.4.17 Emergency Procedures**

The *System operator*, in consultation with the *Market Operator* shall develop appropriate *emergency* procedures in accordance with the *Grid Code and Distribution Code*. Such procedures shall be subject to approval of the *PEM Board*.

#### **10.4.18 Harmonization**

Harmonization of *WESM Rules* with the *Grid Code, Distribution Code* and other rules and regulations issued by the *DOE* and *ERC* shall be undertaken upon promulgation of these Rules.

#### 10.4.19 The Technical Working Group (TWG)

##### 10.4.19.1. Creation of the TWG

The *DOE* shall create and chair a Technical Working Group ("TWG") to be composed of the *Government* and industry participants immediately after the promulgation of these Rules.

Industry Participants, for purposes of this clause, shall be composed of individual representatives coming from:

- (1) Philippine Independent Power Producers' Association (PIPPA);
- (2) Private Electric Plant Owners Association (PEPOA);
- (3) Philippine Rural Electric Cooperative Association (PHILRECA);
- (4) Manila Electric Company (MERALCO);
- (5) National Power Corporation (NPC);
- (6) National Transmission Company (TRANSCO);
- (7) Power Sector Assets and Liabilities Management Corp. (PSALM);

##### 10.4.19.2. Responsibilities

To ensure a smooth transition from promulgation of these Rules to actual commercial operation of the *spot market*, the TWG shall recommend to the *DOE* for its appropriate action, supplemental, modificatory, clarificatory and other amendments or additional provisions to the *WESM Rules* which the TWG finds necessary and reasonable, including but not limited to:

- (a) Refinements in the dispute resolution process;
- (b) Governance issues;
- (c) Financial transmission rights;
- (d) *Market network model*; and
- (e) *Market dispatch optimization* model;

##### 10.4.19.3. Applicability

Consistent with clause 8.1 that specified Rules change procedure will apply when the *WESM* is in actual operation, the proposed amendments of the TWG and the corresponding official issuance(s) by the *DOE* shall not be covered by the provisions of the Rules change process contained in Chapter 8.

#### **10.4.19.4. Tenure**

The TWG shall be constituted, as soon as possible, meet as often as practicable and shall continue to undertake its functions until the actual operation of the *spot market*.



## CHAPTER 11

### GLOSSARY

**AC.** Alternating current.

**Act.** Refers to Republic Act No. 9136 also known as the "Electric Power Industry Reform Act of 2001".

**Active Energy.** A measure of electrical *energy* flow, being the time integral of the product of voltage and the in-phase component of current flow across a *connection point*, expressed in Watt hours (Wh) and multiples thereof.

**Actual Exposure.** The total amount of obligation that a *WESM member* is required to pay on due date. [\(Added per DOE DC No. 2014-13-0008 dated 26 March 2014\)](#)

**Administered Price.** A price imposed by the *Market Operator* to the *Trading Participants* during *market suspension* and *market intervention* to be used for settlements, which price is determined in accordance with the methodology developed and published by the Market Operator and approved by the *ERC*. [\(As amended by DOE DC No. 2005-11-010 dated 11 November 2005 and further amended by DOE DC No. 2016-06-0008 dated 17 June 2016\)](#)

**Affected Participants.** A *WESM member* who is affected by a decision or has a pecuniary interest in a decision.

**AGC.** Automatic Generation Control.

**Ancillary Services.** Those services that are necessary to support the transmission of capacity and *energy* from resources to loads while maintaining reliable operation of the *transmission system* in accordance with good utility practice, the *Grid Code* and *Distribution Code*.

**Ancillary Services Agreement.** An agreement under which a *WESM member*, registered as an *Ancillary Service Provider*, agrees to provide *ancillary services*.

**Ancillary services cost recovery charge.** The charge payable by *WESM members* for recovery of the cost incurred by the *Market Operator* for the provision of *Ancillary Services*.

**Ancillary Services Provider.** A person or an entity providing *ancillary services* and registered with the *Market Operator*.

**Anti-Competitive Behavior.** This refers to anti-competitive behavior as defined in the *Act*, *IRR* and other rules and regulations that *ERC* may promulgate.

**Authorization.** A permit, consent, approval, license or other form of authority issued under the *Act* which may be required as a prerequisite for undertaking certain activities in the Philippines electric power industry.

**Autonomous Group Market Operator or "AGMO".** The Autonomous Group *Market Operator* constituted by the *DOE* under Section 30 of the *Act*, which shall undertake the preparatory work and initial operation of the *WESM* for a period of twelve months from the *spot market commencement date*, initially under the administrative supervision of the *TRANSCO*. For the avoidance of doubt, during that initial twelve month period, all references in the *WESM Rules* to "*Market Operator*" shall be construed to mean "*AGMO*".

**Bilateral contract.** A contract between parties, the net effect of which is that a defined quantity of electricity has been sold by one party to another, at a particular node.

**Billing Period.** The period of one month commencing at 00:00 hours of the twenty sixth (26<sup>th</sup>) day of each calendar month to 24:00 hours of the Twenty-fifth (25<sup>th</sup>) day of the next calendar month. [\(As amended by DOE DC No.2006-07-0010 dated 20July 2006\)](#)

**Black Start Capability.** In relation to a *generating unit*, the ability to start and synchronize without using supply from the *power system*.

**Black Start-up Facilities.** Facilities which provide black start capability.

**Business Day.** Any day on which the spot market is open for business. [\(As amended by DOE DC No. 2005-11-010 dated 11 November 2005\)](#)

**Business Continuity.** Refers to the activity performed by the *Market Operator* to ensure that critical business functions will be available to the *Trading Participants*, *System Operator*, *Metering Services Provider*, *ERC*, *DOE*, and other entities that must have access to those functions. [\(Added per DOE DC No. 2013-12-0028 dated 16 December 2013\)](#)

**Central Dispatch.** The process of scheduling by the *Market Operator* and issuing direct instructions to electric power industry participants by the *System operator*^ achieve the economic operation of the *transmission system* while maintaining its quality, stability, reliability and security.

**Chairperson.** The person appointed by the *DOE* to chair meetings of the *PEM Board*.

**Check data.** Data supplied to the *Market Operator* by a *Trading Participant* in accordance with clause 3.5.5.3 for the purpose of checking the validity of any future offer or demand bid in accordance with clause 3.5.12.

**Confidential Information.** Information which is or has been provided to, or by, a Participant or the *Market Operator* under, or in connection with, the *WESM Rules* and

is stated under the *WESM Rules* to be, or is classified by the *Market Operator* as, confidential information or is otherwise confidential or commercially sensitive information or is information which is derived from any such information.

**Connect, Connected, Connection.** To form a physical link to or through the *transmission network* or a *distribution network* in such a way as to allow transmission of electricity in accordance with the standards set out in the *Grid Code*.

**Connection Assets.** Any component of a *transmission system* or *distribution system* which, in the reasonable opinion of the *Market Operator*, is associated with a *connection point*, including *metering installations*.

**Connection Point.** The agreed point of supply established between a *Network Service Provider* and a *Trading Participant*.

**Constrain-off.** In respect of a generating unit the output of that *generating unit* is re-dispatched by the *System Operator* below its *Real-Time Dispatch schedule* in accordance with the *WESM Merit Order Table*. [\(As amended by DOE DC No.2014-10-0021 dated 24 October 2014\)](#)

**Constrain-on.** In respect of a *generating unit*, the output of that *generating unit* is re-dispatched by the *System Operator* above its *Real-Time Dispatch schedule* in accordance with the *WESM Merit Order Table*. [\(As amended by DOE DC No.2014-10-0021 dated 24 October 2014\)](#)

**Constraint.** A limitation on the capability of any combination of *network elements*, *loads*, *generating units* or *Ancillary Service Providers* such that it is, or is deemed by the *System operator* to be, unacceptable to adopt the pattern of transfer, consumption, generation or production of electrical power or other services that would be most desirable if the limitation were removed.

**Constraint violation.** A constraint is violated when the loadings of *network elements*, *loads*, *generating units* or *Ancillary Service Providers* involved in that *constraint* combine in such a way as to exceed the limit specified by that *constraint*.

**Constraint Violation Coefficients.** Coefficients set by the *Market Operator* in accordance with clause 3.6.2. The *Market Operator* is to ensure that, if constraints shall be violated, such violation will occur in appropriate priority order.

**Contestable Market.** Refers to the electricity End-users who have a choice of a Supplier of electricity, as may be determined by the *ERC* in accordance with the *Act*.

**Contingency Reserve.** The ability to respond so as to arrest a significant drop in system frequency such as would arise as a result of a credible contingency affecting one (or more) *generating units* within a region, or transmission flows into a region.

**Credit Support.** An obligation owed to the *Market Operator* by a third party supporting the obligations of a *Trading Participant* under clause 3.14.11.

**Credit Support Provider.** The party which assumes credit support obligations to the *Market Operator* under clause 3.14.11.

**Customer.** A person who:

- (a) engages in the activity of purchasing electricity supplied through a transmission or distribution system other than where all that person's electricity requirements are purchased from a Supplier, and
- (b) registers with the *Market Operator* in that capacity under clause 2.3.2.

**Customer Node.** A *market trading node* at which electricity will normally be purchased from the *spot market* and which is classified as a customer node in accordance with clause 3.2.2.2.

**Customer Pricing Zone.** A zone within which all customers will face the same price for electricity consumed, as published by the *Market Operator* in accordance with clause 3.2.3.1.

**Data Collection System.** All equipment and arrangements that lie between the *metering database* and the point where the *metering data* enters the public *telecommunications network*.

**Data Logger.** A device that collects *energy data* and is capable of being accessed electronically by the *Market Operator* via the data collection system.

**Day Ahead Projections.** Projections of *market* conditions for the day ahead determined and *published* by the *Market Operator* in accordance with clause 3.7.2.

**DC.** Direct Current.

**Default Event.** Any one or more of the events listed in clause 3.14.11.1.

**Default Interest Rate.** An interest rate of three percent (3%) per annum or the approved default interest by the *PEM Board*, in addition to the *Interest Rate*, to be applied to the remaining default amount. [\(As amended by DOE DC No. 2014-13-0008 dated 26 March 2014\)](#)

**Default Notice.** A notice issued by the *Market Operator* under clause 3.14.11.2.

**Demand Bid.** A *standing bid*, or *market bid* to buy electricity submitted, or revised, by a *Customer* in accordance with clause 3.5.6, 3.5.9, 3.5.12 or 3.5.13, and containing the information specified in Appendix A1.

**Department of Energy or "DOE".** The government agency created pursuant to Republic Act No. 7638 whose expanded functions are provided in the *Act*.

**Deregistered WESM member.** A person who is registered as a *WESM member* until deregistered under clauses 2.5 and 2.6.

**Direct WESM member.** A person or an entity who is registered with the *Market Operator* under clause 2.3.

**Director.** A member of the *PEM Board* appointed by the *DOE* under clause 1.4.3 having a duty to, among other matters, perform the duties of management of the *PEM Board*, in accordance with clause 1.4.5.

**Disaster.** Refers to natural or man-made event that results in physical damage, destruction of property or loss of life. Disasters shall include, but are not limited to earthquakes, typhoons, floods, storms, fires, bomb threats, acts of terrorism or sabotage, power system blackouts or civil disturbances. [\(Added per DOE DC No. 2013-12-0028 dated 16 December 2013\)](#)

**Disaster Recovery.** Refers to a subset of business continuity. This is the process, policies and procedures that are related to preparing for recovery or continuation of technology infrastructure which are vital to the *Market Operator* after a natural or human-induced disaster. [\(Added per DOE DC No. 2013-12-0028 dated 16 December 2013\)](#)

**Disconnect.** The operation of switching equipment or other action so as to prevent the flow of electricity at a *connection point*.

**Dispatch.** The act by which the *System operator* initiates all or part of the response offered or bid by a scheduled *generating unit* or *scheduled load* in accordance with clause 3.8.2.

**Dispatch Schedule.** The target loading levels in MW for each *scheduled generating unit*, *must dispatch generating unit*, *priority dispatch generating unit*, *non-scheduled generating unit*, *scheduled load* and *reserve facility* for the end of that *trading interval*, determined by the *Market Operator* through the use of a *market dispatch optimization model* in accordance with Clause 3.8.1. [\(As amended by DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

**Dispatch Tolerances.** Limits on the extent to which *Trading Participants* may deviate from *dispatch* targets determined by the *System operator* in accordance with clause 3.8.7.

**Dispatchable Load.** A load which is able to respond to dispatch instructions and so may be treated as a scheduled load' in the dispatch process.

**Dispatchable Reserve.** The ability to respond to a re-dispatch performed by the *System operator* during a *trading interval*, on either a regular or an ad hoc basis.

**Displaced Generator.** A generating unit identified and instructed by the *System Operator* in an *Out of Merit Dispatch* to reduce the provision of energy specified in its *Real Time Dispatch* instruction exclusively caused by excess generation due to non-compliance of generators to dispatch instructions and use of reactive support reserve.  
[\(As amended by DOE DC No.2014-10-0021 dated 24 October 2014\)](#)

**Dispute Management Protocol or "DMP".** The DMP is a system to be followed by the disputing parties and shall form part of the negotiation stage of the WESM dispute resolution framework. (As amended by DOE DC No. 2012-02-0001 dated 15 February 2012)

**Dispute Resolution Administrator.** A person appointed by the *PEM Board* under clause 7.3.2.1.

**Distribution Code.** The set of rules, requirements, procedures, and standards governing *Distribution Utilities* and users in the operation, maintenance, and development of their distribution systems. It also defines and establishes the relationship of the distribution systems with the facilities or installations of the parties connected thereto.

**Distribution Line.** A *power line*, including underground cables that is part of a *distribution network*.

**Distribution Network.** A *network* which is not a *transmission network*.

**Distribution Service.** The services provided by a *Distribution Utility* which are associated with the conveyance of electric power from *transmission facilities* or embedded generators to End-users by a *Distribution Utility* through its distribution system pursuant to the provisions of the Act and the IRR.

**Distribution System.** The system of wires and associated facilities belonging to a franchised *Distribution Utility*, extending between the delivery points on the *transmission or sub-transmission system*, or generator connection and the point of connection to the premises of the End-User.

**Distribution Utility.** An *Electric Cooperative*, private corporation, government-owned utility, or existing local government unit, that has an exclusive franchise to operate a *distribution system* in accordance with its franchise and the Act, and registered with the *Market Operator* as a *Network Service Provider* under clause 2.3.4.

**Economic Rental.** Means, for a constraint in the *market dispatch optimization model* where the *constraint* is in linear programming canonical form (that is, for a *maximizing optimization model*: the sum of the variable terms less than or equal to the constant term), the *shadow price* of the *constraint* multiplied by the constant term of the *constraint*.

**EFT Facility.** An electronic funds transfer facility.

**Electric Cooperative.** A cooperative or corporation authorized to provide electric services pursuant to Presidential Decree No. 269, as amended, and Republic Act No. 6938 within the framework of the national rural electrification plan.

**Electronic Communication Procedures.** The procedures established by the *Market Operator* and updated from time to time in accordance with clause 5.2.2.5.

**Electronic Communication System.** A system used by *Trading Participants* and the *Market Operator* for exchange of information in accordance with clause 5.2.2.1.

**Embedded Generators.** *Generating units* that are indirectly connected to the Grid through the *Distribution Utilities'* lines or industrial *generation facilities* that are synchronized with the Grid.

**Emergency.** An event or situation described in clauses 6.3.1.1 and 6.3.1.2.

**Emergency Instructions.** Instructions issued by the *System Operator* in an *emergency* under Clause 6.5.1.

**Emergency State.** The grid shall be considered in the emergency state when:

- (a) Single Outage Contingency (N-1) Criterion is not met. Imminent threat in system security would exist should a credible n-1 contingency occur that would result in the cascading outages of lines and equipment if not corrected immediately.
- (b) There is generation deficiency or operating margin is zero.
- (c) Grid transmission voltage is outside the limits of -10% or +10% of the nominal value.
- (d) The loading levels of all transmission lines and substation equipment are beyond the threshold as set by the Grid Code.
- (e) The grid frequency is beyond the limits of 59.4Hz and 60.6Hz

( Added pursuant to DOE DC No. 2016-06-0008 dated 17 June 2016)

**End-user.** Any person or entity requiring the supply and delivery of electricity for its own use.

**Energy.** Generally, *active energy* and/or *reactive energy* but for the purposes for chapter 3 means active energy only.

**Energy Balance Equation.** An equation determined by the *Market Operator* in accordance with clause 3.6.1.4 (c), representing the balance between generation, load and *transmission flows* at a particular node of the *market network model*.



**Energy Data.** The data that results from the measurement of the flow of electricity in a power conductor. The measurement is carried out at a *metering point*.

**Energy Regulatory Commission or "ERC".** The independent, quasi-judicial regulatory body created under the Act.

**Enforcement and Compliance Officer.** A person tasked to perform compliance and enforcement functions pursuant to clause 7.2, including the investigation of alleged breach of the *WESM Rules* and imposition of appropriate sanctions and such other functions as may, from time to time, be assigned to him by PEMC. (Added as per DOE DC No. 2006-01-0001 dated 10 January 2006)

**Ex-Ante.** A matter determined in relation to a *trading interval* before that *trading interval* commences.

**Ex-Ante Dispatch.** The *dispatch targets* set for the end of a *trading interval*, immediately preceding the beginning of that *trading interval*.

**Ex-Ante Energy Settlement Price.** The *ex-ante nodal energy price* or the *ex-ante zonal reserve price*, as may be appropriate, determined in accordance with clause 3.10.12.

**Ex-Ante Energy Settlement Quantity.** The gross amount determined by the *Market Operator* in accordance with clause 3.13.5, and adjusted for *bilateral contracts* in accordance with clause 3.13.7.

**Ex-Ante Nodal Energy Price.** The price determined by the *Market Operator* for a particular *market network node* and *trading interval*, immediately prior to commencement of that *trading interval*, directly from the dispatch optimization for that *trading interval* in accordance with clause 3.10.2.

**Ex-Ante Zonal Energy Price.** The price determined by averaging *ex-ante nodal energy prices* in accordance with clause 3.10.3.

**Excess Generation.** Generations which may be scheduled to occur in excess of load requirements, even though *market energy prices* have fallen to the *market price floor*, and which shall then be dealt with in accordance with clause 3.9.8.

**Ex-post.** A matter determined in relation to a *trading interval* after that *trading interval* concludes.

**Ex-Post Energy Settlement Price.** The *ex-post nodal energy price* or the *ex-post zonal energy price*, as appropriate, determined in accordance with clause 3.10.12.

**Ex-Post Energy Settlement Quantity.** The amount determined by the *Market Operator* in accordance with clause 3.13.6.. (As amended by DOE DC No. 2013-03-0005 dated 22 March 2013)



**Ex-Post Nodal Energy Price.** The price determined by the *Market Operator* for a particular *market node* and *trading interval*, after the end of that *trading interval* in accordance with clause 3.10.6.

**Ex-Post Zonal Energy Price.** A price determined by averaging *ex-post nodal energy prices* in accordance with clause 3.10.11.

**Facility.** A generic term associated with apparatus, equipment, buildings and necessary supporting resources for the generation, transmission, supply, sale and consumption of electricity.

**Feed-In Tariff Certificate of Compliance.** Refers to the certificate secured from the ERC before commercial operation of eligible RE plants that authorizes it to engage in the operation of a renewable energy power plant facility used to generate electricity pursuant to the Feed-In Tariff Rules and the Feed-In Tariff -Allowance (FIT-All) Guidelines. [\(Added per DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

**Feed-In Tariff Rules.** Annex A of ERC Resolution No 16, Series of 2010, Resolution adopting the Feed-In Tariff Rules, promulgated pursuant to the *Renewable Energy Act*. [\(Added per DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

**Feed-In Tariff Allowance (FIT-All) Guidelines.** Resolution No. 24, Series of 2013 issued by the ERC adopting the Guidelines on the Collection of the FIT-All and the Disbursement of the FIT-All Fund. [\(Added per DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

**Feed-In Tariff (FIT)-Eligible Renewable Energy (RE) Plant.** A *Generating Unit* or *Generating System* in respect of which ERC has issued, in accordance with the *Feed-In Tariff Rules*, a certificate of compliance authorizing the *Generating Unit* to operate as a FIT-eligible RE plant. [\(Added per DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

**Feed-In Tariff System (FIT) System.** Program established under the Renewable Energy Act to accelerate the development of emerging renewable energy resources whose mechanisms are provided by the Feed-In Tariff Rules. [\(Added per DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

**Final Statement.** A statement issued by the *Market Operator* under clause 3.14.5.

**Final WESM.** The *spot market* operated by an independent entity to which the functions, assets and liabilities of the AGMO are transferred in accordance with Section 30 of the Act.

**Financial Year.** A period referring to calendar year that commences on January 1 and ends on December 31 of the same year. [\(As amended by DOE Circular No. DC2013-06-0010 dated 31 May 2013\)](#)

**Force Majeure Event.** An event arising from major network trouble that caused partial or system-wide blackout, market system software failure, and any other event, circumstance or occurrence in nature of, or similar in effect to any of the foregoing.

**Formulation.** A mathematical specification of an optimization model.

**Franchise Area.** A geographical area exclusively assigned or granted to a *Distribution Utility* for distribution of electricity.

**Frequency.** For alternating current electricity, the number of cycles occurring in each second. The term Hertz (Hz) corresponds to cycles per second.

**Generating System.** A system comprising one or more *generating units*.

**Generating Unit.** A single machine generating electricity and all the related equipment essential to its functioning as a single entity and having a nameplate rating of 1 MW or more.

**Generation.** The production of electrical power by converting one form of *energy* to another in a *generating unit*.

**Generation Company.** A person or entity authorized by the *ERC* to operate facilities used in the generation of electricity, and registered with the *Market Operator* in that capacity in accordance with clause 2.3.1.

**Generation Offer.** A *standing offer*, or *market offer* to supply electricity, submitted or revised by a *Generation Company* in accordance with clauses 3.5.5, 3.5.9, 3.5.10 or 3.5.11.

**Generator Node.** A *market trading node* at which electricity will normally be sold to the *spot market* and which is classified as a *generator node* in accordance with clause 3.2.2.2.

**Government.** The Government of the Philippines.

**Government Authority.** Any government or governmental, semi-governmental, administrative or judicial body, department, commission, authority, tribunal, agency or entity.

**Grid.** The high voltage backbone system of interconnected *transmission lines*, substations and related facilities, located in each of Luzon, Visayas and Mindanao, or as may otherwise be determined by the *ERC* in accordance with Section 45 of the *Act*.

**Grid Code.** The set of rules, requirements, procedures, and standards to ensure the safe, reliable, secured and efficient operation, maintenance, and development of the high voltage backbone Transmission Systems and its related facilities.

**Gross Ex-Ante/Ex-Post Energy Settlement Quantity.** The *ex-ante/ex-post energy settlement quantity* determined in accordance with clauses 3.13.5/3.13.6 for a *market trading node*, in a *trading interval* before any adjustment for bilateral contracts.

**HVDC.** High Voltage Direct Current.

**ICT Change Management Process or “ICMP”.** The process instituted by the *Market Operator* that ensures proper and timely review, approval, implementation, monitoring and documentation of all ICT changes requirements of the *Market Operator*. **(Added as per DOE DC No. 2011-12-0012 dated December 2011)**

**Indirect WESM member.** A person or an entity who wishes to indirectly trade in the *spot market*. However, an *Indirect WESM member* may only transact through a direct *WESM member*.

**Installation Database.** The database which a *Market Operator* is required to keep in respect of its *metering installations* pursuant to clause 4.7.

**Interest Rate.** In relation to any period for which an interest rate is to be determined hereunder, a rate per annum equal to the lending rate published by the Bangko Sentral ng Pilipinas at the time of payment. **(As amended by DOE DC No. 2014-13-0008 dated 26 March 2014)**

**Interim WESM.** The *spot market* operated by AGMO for a period of twelve months from the *spot market commencement date* or until such time that AGMO ceases to exist.

**Intermittent Renewable Energy Resource.** A *Renewable Energy Resource* specified in Section 20 of the *Renewable Energy Act*, those being: wind energy, solar energy, run-of-river hydro, ocean energy or any other *Renewable Energy Resource* designated as such by the DOE. **(Added per DOE DC No. 16-01-0002 dated 12 January 2016)**

**Intending WESM member.** A person who wishes to become a *WESM member* and who registers with the *Market Operator* under clause 2.9.

**Interruptible Load.** Means load that a *Customer* is able to interrupt at very short notice in response to:

- (a) A *frequency deviation*; or
- (b) A request of the *System operator*,

in order to meet contingency *reserve* requirements, subject to the requirements of the *Grid Code and Distribution Code*.

**Line Rental.** The economic rental arising from the use of a *transmission line*, calculated as the difference in value between flows out of the *receiving node* of that line and flows into the *sending node*, in accordance with clause 3.13.12.

**Load.** The amount of *energy* consumed in a defined period via a node.

**Load Forecast.** Has the same meaning as *net load forecast*.

**Load Shedding.** Reducing or disconnecting load from the *power system*.

**Load Weighted Average.** An average produced by multiplying each *nodal energy price* by the load at that node, summing the results, and then dividing by the sum of the loads involved.

**Loading Level.** The instantaneous level of output or consumption (in MW) of a *generating unit or load*.

**Local Supplier.** In relation to a local area, the *Market Customer* who is responsible for the supply of electricity to franchise *customers* in that local area.

**Locationally Specific Reserve Requirement.** A requirement for a particular *reserve category* to be met at a particular location, by *reserve facilities* in a particular *reserve region* in accordance with clause 3.3.5, and with costs to be recovered from a particular *reserve cost recovery zone*, in accordance with clause 3.3.5.

**Loss Differential.** Has the same meaning as agreed loss differential.

**Margin Call.** An amount which the *Market Operator* calls to be paid by a *Trading Participant* in accordance with clause 3.15.10.1 to make up any anticipated shortfall between that *Trading Participant's* trading limit and the *Market Operator's* exposure in respect of that *Trading Participant*.

**Market Bid.** A *demand bid* for a particular *trading interval* of a particular *trading day* in the current *market horizon*, whether formed from a standing bid in accordance with clause 3.5.10 or revised by the relevant *Trading Participant*, in accordance with clause 3.5.11.

**Market Dispatch Optimization Model.** The *optimization model* which contains the mathematical algorithm approved by the *PEM Board* to be used for the purposes of determining dispatch schedules and *energy prices*, and preparing *market projections* based on the price determination methodology approved by *ERC*.

**Market Fees.** The charges imposed on all *WESM members* by the *Market Operator* to cover the cost of administering and operating the WESM, as approved by the *ERC*.

**Market Horizon.** A period for which *day-ahead or week-ahead projections* are performed, as defined in the *timetable*.

**Market Information Web Site.** A facility to be established by the *Market Operator* on the *electronic communication system* on which it may publish information which is then available to and may be accessed by *WESM members*.

**Market Intervention.** A measure taken by the *System Operator* when the grid is in alert or emergency state as established in the *Grid Code* arising from a threat to system

security, *force majeure event* or *emergency*, or by the *Market Operator* in relation to the simulation or implementation of the *business continuity* or *disaster recovery* procedures developed in accordance with Clause 6.8.1. During such event, the *administered price* shall be used for *settlements* [\(As amended by DOE DC No. 2013-12-0028 dated 16 December 2013 and further amended by DOE DC No. 2016-06-0008 dated 17 June 2016 \)](#)

**Market Load.** The electricity delivered to a *connection point* and purchased by a *Customer* from the *spot market*.

**Market Manual.** Refers to specific procedures, systems or protocols for the implementation of the WESM Rules and Retail Rules. [\(As amended by DOE DC No. DC2018-07-0018 dated 02 July 2018\)](#)

**Market Network Lines.** Actual or notional network lines joining *market network nodes* within the *market network model*.

**Market Network Model.** A mathematical representation of the *power system*, which will be used for the purpose of determining *dispatch schedules* and *energy prices*, and preparing *market projections*.

**Market Offer.** A *generation offer* for a particular *trading interval* of a particular *trading day* in the current *market horizon*, whether formed from a *standing offer* in accordance with clause 3.5.10 or revised by the relevant *Trading Participant*, in accordance with clause 3.5.11.

**Market Operator.** The entity responsible for the operation of the *spot market* governed by the *PEM Board* in accordance with clause 1.4 which, for the avoidance of doubt, is the *AGMO* for a period of twelve months from the *spot market commencement date* and thereafter the entity to which the functions, assets and liabilities of the *AGMO* are transferred in accordance with section 30 of the *Act*.

**Market Price.** A generic term covering prices for *energy* and *reserve*, *ex-ante* or *ex-post*, *nodal* or *zonal*, as appropriate.

**Market Projections.** *Week ahead* or *day ahead* *projections* of *spot market* conditions, performed in accordance with clause 3.7.

**Market Surveillance Committee.** The Committee appointed under clause 1.6.

**Market Suspension.** An event wherein the *ERC* declares the operation of the *spot market* to be suspended in cases of natural calamities or national and international security emergencies. During such event, the *administered price cap* shall be used for *settlements*.

**Market Trading Nodes.** Those nodes at which electricity will be either bought or sold from the *spot market*, defined in accordance with clause 3.2.2.

**Market Transaction.** A sale or purchase of electricity, or other services, made through the *spot market*.

**Maximum Available Output.** The highest MW generation output that a *must dispatch generating unit* is capable of producing at each instant given the instantaneous and intermittent characteristics of the *Renewable Energy Resource* which fuels the *Generating Unit*. [\(Added per DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

**Maximum Exposure.** The *maximum exposure* of a *WESM member* shall mean the computed average monthly settlement amount of the billing periods covering 26 March through 25 September prior to the end of the *Financial Year* multiplied by the factor 35/30 and shall set the level of security deposit that a *WESM member* is required to maintain. [\(As per DOE DC No. 2014-13-0008 dated 26 March 2014\)](#)

**Meter.** A device, which measures and records the consumption or production of electricity.

**Metered Quantity.** The quantity of electricity sold or purchased from the *spot market* (as applicable), determined by the *Market Operator* from *metering data*.

**Metering.** Recording the production or consumption of *electrical energy*.

**Metering Data.** The data obtained or derived from a *metering installation*.

**Metering Database.** The database kept by the *Market Operator* pursuant to clause 4.7.

**Metering Installation.** The meter and associated equipment and installations installed or to be installed for the collection of metering data required for *settlement* purposes.

**Metering Point.** The point of physical connection of the device measuring the current in the power conductor.

**Metering Services Provider.** A person or entity authorized by the *ERC* to provide *metering services* and registered with the *Market Operator* in that capacity in accordance with clause 2.3.6.

**Metering Register.** A register of information relating to *metering installations* kept by the *Market Operator* and forming part of the *metering database*.

**MW.** Mega Watt.

**Must-Run Unit (MRU).** A generating unit identified and instructed, by the *System Operator* to either a) come on-line, or b) provide additional energy on a particular *Trading Interval* but the dispatch of which is said to be Out of Merit, to address *System Security* requirements. For clarity, MRU shall be utilized only after the *System Operator* has exhausted all available *Ancillary Services*. MRUs are classified as follows: a.

Scheduled MRU - MRU designated by the System Operator before the trading interval and included in the Real Time Dispatch schedule through the imposition of Security Limit as defined in the WESM Dispatch Protocol Manual. b Real- Time MRU - MRU designated by the *System Operator* within a *trading interval*. [\(As amended by DOE DC No.2014-10-0021 dated 24 October 2014\)](#)

**Must- Stop Unit (MSU).** A generating unit identified and instructed by the *System Operator* to reduce the provision of energy due to its non compliance of the *Dispatch Schedule* to address or prevent possible threat to the System Security requirements of the Grid. [\(As amended by DOE DC No.2014-10-0021 dated 24 October 2014\)](#)

**Must Dispatch.** Preference to intermittent RE-based plants, whether or not under *FIT system*, such as wind, solar, run-of-river hydro, or ocean energy, in the dispatch schedule whenever generation is available pursuant to Section 20 of the *Renewable Energy Act*. [\(Added per DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

**Must Dispatch Generating Unit.** A *Generating Unit* or *Generating System* so designated by the *Market Operator* under Clause 2.3.1.5 and is provided *Must Dispatch*. [\(Added per DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

**Nameplate Rating.** The maximum continuous output or consumption in MW of an item of equipment as specified by the manufacturer.

**National Power Corporation or "NPC".** The government corporation created under Republic Act No. 6395, as amended.

**National Transmission Corporation or "TRANSCO".** The corporation organized pursuant to the *Act* to acquire all the transmission assets of the NPC.

**Net Load Forecast.** A *forecast*, prepared by the *Market Operator* in accordance with the procedures to be developed under Clause 3.5.4, of the load, to be matched, along with any *scheduled load*, by generation from *scheduled generating units*, *non-scheduled generating units*, *must dispatch generating units*, and *priority dispatch generating units*. [\(As amended by DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

**Net Settlement Surplus.** The *settlement surplus* remaining after all market transactions have been accounted for, including the assignment of *transmission line rentals* to *Network Service Providers*. This remainder is assumed to be attributable to economic rentals arising from other binding *constraints*, and accounted for in accordance with clause 3.13.16.

**Network.** The apparatus, equipment and plant used to convey, and control the conveyance of, electricity to customers (whether wholesale or retail) excluding any



connection equipment. In relation to a *Network Service Provider*, a *network* owned, operated or controlled by the *Network Service Provider*.

**Network Constraints.** *Constraints* representing *network* characteristics, such as limits on *transmission line flows* to be included in the *market dispatch optimization model* in accordance with clause 3.6.1.4 (f).

**Network Lines.** The:

- (a) *transmission lines*;
- (b) *distribution lines*;
- (c) *transformer* elements; and
- (d) other plant associated with transmission lines and distribution lines.

**Network Service.** *Transmission services* or *distribution services* associated with the conveyance, and with controlling the conveyance, of electricity through the *network*.

**Network Service Provider.** A person who engages in the activity of owning, controlling, or operating a *transmission or distribution system* and who is registered with the *Market Operators* that capacity under clause 2.3.4.

**Nodal Energy Price.** The *energy price* at a node determined *ex ante* or *ex-post*.

**Nodal Value of Lost Load (Nodal VoLL).** Means the *constraint violation coefficient* of the *energy balance equations* for each node set by the *Market Operator* in accordance with clause 3.6.2.3.

**Node.** A *connection point* on a *network*, or junction point within a *network model*, whether physical, or notional.

**Normal State.** The grid operating condition when:

- (a) The operating margin is sufficient;
- (b) System frequency is within the limits as set in the *Grid Code*;
- (c) Voltages at all connection points are within the limits of 0.95 and 1.05 of the nominal value;
- (d) The loading levels of all transmission lines and transformers are below the limit as set in the *Grid Code*;
- (e) The grid configuration is such that any potential fault current can be interrupted and the faulted equipment can be isolated from the grid;
- (f) The static and dynamic stability of the power system is maintained; and
- (g) The Single Outage Contingency (N-1) Criterion is met.”

( Added pursuant to DOE DC No. 2016-06-0008 dated 17 June 2016)

**Non-Scheduled Generating Unit.** A *generating unit* or a group of *generating units* connected at a common point with a nameplate rating and a combined *nameplate* rating



of less than one tenth of one percent (<0.1%) of the *peak load* in a particular *reserve region*, or less than ten percent (<10%) of the size of the *interconnection facilities*, whichever is lower.

**Non-Working Day.** A day which is not a Working Day. (Added per DOE DC No. 2013-03-0005 dated 22 March 2013)

**Normal Operating State.** The operating state defined in Section 7.2.1.1 of the *Grid Code*. (Added per DOE DC No. 16-01-0002 dated 12 January 2016)

**Normally Off.** A situation in which a load does not exist unless it is bid into the *spot market*.

**Opportunity Cost.** The economic loss suffered by some party as a result of losing an opportunity, such as the opportunity to sell energy to the *spot market*.

**Out of Merit Dispatch-** Dispatch instructions issued by the System Operator that is not in accordance with the WESM Merit Order Table to address System Security. As amended by DOE DC No.2014-10-0021 dated 24 October 2014)

**Outage.** Any full or partial unavailability of equipment or facility.

**Over-Riding Constraints.** *Constraints* imposed in the *market dispatch optimization model* by the *Market Operator*, at the recommendation of the *System operator*, with the intention of over-riding the effect of a *Trading Participant's* offers or demand bids in accordance with clause 3.5.13.

**Payment Date.** The relevant date on which a *Trading Participant* shall pay to the *Market Operator* the settlement amount in accordance with clause 3.14.9.

**PEM Auditor.** The auditor appointed by the *PEM Board* under clause 1.4.6 to undertake functions as set out in clause 1.5.

**PEM Board.** The group of *Directors* serving from time to time on the board that is responsible for governing the *WESM*.

**Philippine Electricity Market Corporation or PEMC.** The corporation incorporated upon the initiative of the *DOE* composed of all *WESM members* and whose Board of Directors will be the *PEM Board*. (Added as per DOE DC No. 2006-01-0001 dated 10 January 2006)

**Plant.** Any equipment involved in generating, utilizing or transmitting electrical *energy*.

**Power System.** The integrated system of *transmission* and *distribution networks* for the supply of electricity in the Philippines.

**Pricing error notice.** A notice issued in accordance with clause 3.9.6 advising the *market* that the *ex ante prices* for a particular *trading interval* are unavailable, or invalid.

**Priority Dispatch.** Preference to biomass plants under the Feed-In Tariff *System* in the dispatch schedule pursuant to Section 7 of the *Renewable Energy Act*. [\(Added per DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

**Priority Dispatch Generating Unit.** A *generating unit* or *Generating System* so designated by the *Market Operator* under Clause 2.3.1.5 and is provided *Priority Dispatch*. [\(Added per DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

**Projected Output.** The loading level nominated by a generation company for its *must dispatch generating units* or *priority dispatch generating units* indicating the forecasted output of its *must dispatch generating unit* or *priority dispatch generating unit* at the end of a *trading interval*. [\(Added per DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

**Projection.** A set of results derived in accordance with clause 3.7 from a series of market *dispatch optimization model* runs describing projected *market* conditions over a *day-ahead* or *week-ahead market horizon* for a particular scenario of *net forecast load*, and set of assumptions with respect to availability of key system elements.

**Prudential Requirements.** The requirements imposed on a *Trading Participant* to provide and maintain a security in accordance with clause 3.15.

**Publish, Publication.** To make available information.

**Ramp Rate.** The rate of change in electricity production or consumption from a *generating unit* or *scheduled load*.

**Reactive Energy.** A measure in varhours (varh) of the alternating exchange of stored *energy* in inductors and capacitors, which is the time integral product of voltage and the quadrature component of current flow across a *connection point*.

**Reactive Power.** The rate at which reactive *energy* is transferred produced or purchased by a *Customer*.

**Reactive Support.** Unutilized sources of reactive power arranged by the *Market Operator* to be available to cater for the possibility of unavailability of another source of reactive power or increased requirements for reactive power.

**Receiving node.** For a transmission line, the *node* from which there is a *net flow* of electricity out of that line in a particular *trading interval* to be accounted for in determining the *line rental*, in accordance with clause 3.13.12. For a *transmission right*, the node to which the issuer of the *transmission right* is deemed to guarantee transfer of electricity, to be advised to the *Market Operator* in accordance with clause 3.13.2 and accounted for in accordance with clause 3.13.15.

**Regulating Reserve.** The ability to adjust generation continuously in response to small frequency changes, so as to cover load fluctuations or minor breakdowns, defined as an *ancillary service* in clause 3.3.4.2 (a).

**Reliability.** The probability of a system, device, plant or equipment performing its function adequately for the period of time intended, under the operating conditions encountered.

**Renewable Energy Act.** Republic Act No. 9513: An Act Promoting the Development, Utilization and Commercialization of the Renewable Energy Resources and for Other Purposes. [\(Added per DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

**Renewable Energy Resource.** An energy resource as defined in Section 4 (uu) of the *Renewable Energy Act*. [\(Added per DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

**Reserve.** *Contingency reserve* or *regulating reserve*.

**Reserve Category.** A particular kind or class of *reserve* as under clause 3.3.4.2.

**Reserve Cost Recovery Charges.** Charges to recover the costs incurred in purchasing *reserve*, to be determined by a formula approved by the *ERC*.

**Reserve Cost Recovery Zone.** A zone within which *reserve cost recovery* charges may be recovered to meet each locationally specific requirement.

**Reserve Effectiveness Factor.** A factor to define the effectiveness of *reserve* from a particular type of reserve provider in meeting requirements for particular *reserve categories*.

**Reserve Facility.** A facility capable of providing *reserves*.

**Reserve Facility Category.** A particular type of *reserve facility*, characterized by its technology (eg interruptible load, synchronized *generation*, non-synchronized *generation*) which is reflected in the type of offer it can make, and the *reserve effectiveness factor*.

**Reserve Offer.** A *standing offer*, or *market offer* to *supply reserves*, submitted or revised by a *Customer* or *Generation Company* in accordance with clause 3.5.7, 3.5.8, 3.5.10 or 3.5.11.

**Reserve Region.** A zone of the power system from which a particular reserve category can be supplied to meet a particular locationally specific requirement.

**Reserve Requirement Constraint** A mathematical representation of a locationally specific reserve requirement, and included in the market dispatch optimization model in accordance with clause 3.6.1.4 (e).

**Rules Change Committee.** The committee of that name established in accordance with clause 8.2 and which acts in accordance with chapter 8.

**Run.** A particular instance of the *market dispatch optimization model* performed for a particular *trading interval*, or a set of such instances model performed for all the *trading intervals* in a *market horizon*.

**Safety Plan.** A plan which shall be developed by certain *WESM members* in accordance with the *Grid Code and Distribution Code*, and applicable safety legislation and regulations in the Philippines.

**Scenario.** A *net load forecast* covering a *market horizon*.

**Scheduled Generating Unit.** A *generating unit* so classified in accordance with clause 2.3.1.2 (a)(1). A *generating unit* or a group of *generating units* connected at a common connection point with a nameplate rating or a combined nameplate rating of greater than or one tenth of one percent ( $>0.1\%$ ) of the peak load in a particular *reserve region*.

**Scheduled Generation Company.** A *Generation Company* that is required to play an active role in the *spot market* by submitting *generation offers*, and being subject to central dispatch.

**Scheduled Load.** A load which is able to respond to dispatch instructions, and has been bid into the *spot market* using a *demand bid* and so may be scheduled and dispatched via the scheduling and dispatch procedures.

**Sending node.** For a *transmission line*, the node into which there is a net flow of electricity out of that line in a particular *trading interval* to be accounted for in determining the line rental, in accordance with clause 3.13.12. For a *transmission right*, the node from which the issuer of the *transmission right* is deemed to guarantee transfer of electricity, to be advised to the *Market Operator* in accordance with clause 3.13.2 and accounted for in accordance with clause 3.13.15.

**Settlement.** The activity of producing bills and credit notes for *WESM members* in accordance with clause 3.13, and with the processes defined in clause 3.14.

**Settlement Amount.** The amount payable by or to a *Trading Participant*, or *Network Service Provider*, in respect of a billing period as determined by the *Market Operator* under clause 3.13.14 or clause 3.13.15.

**Settlement Price.** An *ex-ante* or *ex-post* *energy settlement price*.

**Settlement Quantity.** An *ex-ante* or *ex-post* *energy settlement quantity*, or a *zonal reserve settlement quantity*.

**Settlement Surplus.** The settlement surplus remaining after all market transactions have been accounted for and is assumed to be attributable to economic rentals arising from other binding constraints. [\(As amended by DOE DC No. 2004-07-008 dated 7 July 2004\)](#)

**Settlement System.** The system, including the computerized system, for conducting *settlements*.

**Shadow Price.** Means the marginal net benefit from a unit relaxation of the capacity limitation of a constraint in the *market optimization model*.

**Spot market.** Has the same meaning as the *WESM*.

**Spot market Commencement Date.** The date on which the *spot market* commences operation as declared by the *DOE*.

**Standing network data.** Standing data describing a particular *network*, provided by the relevant *Network Service Provider* data in accordance with clause 3.5.2.

**Standing Offer/Bid.** A standing offer to sell *energy* or *reserve*, or a bid to buy energy, submitted by the relevant *Trading Participant* in accordance with clause 3.5.5, 3.5.6, 3.5.7 or 3.5.8, and revised from time to time in accordance with clause 3.5.9, and effective until over-ridden by submission of a specific *market offer* in accordance with clause 3.5.11.

**Status.** The actual operating condition of a *generation unit* or *facility*, including its current commitment state, generation level, and AGC activation status.

**Supplier.** Any person or entity licensed by the *ERC* to sell, broker, market or aggregate electricity to End-users, and registered with the *Market Operator* as a *Customer* under clause 2.3.2.

**Supply.** The sale of electricity by a party other than a *Generation Company* or a *Distribution Utility* in the franchise area of a *Distribution Utility* using the wires of such *Distribution Utility*.

**Suspension Notice.** A notice issued by the *Market Operator* under clause 3.15.7.

**System Blackout.** The absence of voltage on all or a significant part of the *transmission system* or within a region following a major supply disruption, after one or more *generating systems* and a significant number of *customers*.

**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 security of the grid.

**System Security.** The safe scheduling, operation and control of the *power system* on a continuous basis in accordance with the *system security* and reliability guidelines established under the *Grid Code*.

**System Security and Reliability Guidelines.** The standards governing *system security* and reliability of the *power system*, which may include but are not limited to standards

for the frequency of the *power system* in operation and *ancillary services* (including guidelines for assessing requirements and utilization), developed by the *Market Operator* and *System operators* accordance with the *Grid Code*.

**Target Loading Level.** The *loading level* determined as an end-of-period target for a scheduled generator or load by the *Market Operators* accordance with clause 3.8.1(e).

**Time Stamp.** The means of identifying the time and date at which data is transmitted or received.

**Timetable.** The *timetable* prepared by the *Market Operator* for operation of the *spot market* in accordance with clause 3.4.2.

**Trading Amount.** The amount to be paid by, or paid to a *Trading Participant*, or *Network Service Provider* in respect of *energy*, *reserve*, line rentals, or *transmission rights* calculated in accordance with clauses 3.13.7, 3.13.8, 3.13.9, 3.13.10, or 3.13.14 respectively.

**Trading Day.** The 24-hour period commencing according to the *Timetable*. *Trading interval*. A 1-hour period commencing on the hour.

**Trading Limit.** In respect of a *Trading Participant* at any time means the last trading limit set by the *Market Operator* for the *Trading Participant* under clause 3.15.8.

**Trading Participant.** A *Customer* or *Generation Company*.

**Transmission Line.** Means a *power line* that is part of a *transmission network*.

**Transmission Network.** A *network* operating at nominal voltages of 220 kV and above plus:

- (a) any part or a network operating at nominal voltages between 66kV and 220kV that operates in parallel to and provides support to the higher voltage *transmission network*;
- (b) any part of a network operating at nominal voltages between 66 kV and 220kV that does not operate in parallel to and provide support to the higher voltage *transmission network* but is deemed by the *Government* to be part of the *transmission network*.

**Transmission Right.** The right to financial compensation based on differences between *nodal energy prices* at different *market trading nodes* as notified under clause 3.13.2, and settled in accordance with clause 3.13.15.

**Transmission System.** The *transmission network* together with the connection assets associated with the *transmission network*, which is connected to another *transmission* or *distribution system*.

**Type.** Has the same meaning as *reserve facility category*.

**Unrestrained Load.** Means the unscheduled load which might have been expected by the *Market Operator*, at any particular point in time, with no *load shedding* and assuming *scheduled loads* normally off.

**Variable Renewable Energy (VRE) Aggregated Generation Forecast.** A short term forecast, performed by the *System Operator*, covering at least the following twenty-four (24) hours, of the total aggregated generation expected to be produced by *Generation Companies* that is authorized by the ERC to operate wind farms and photovoltaic generation systems in each interconnected system as defined under the *Grid Code*. [\(Added per DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

**Vital Loads.** Loads defined as sensitive by the *Trading Participants*.

**VoLL.** Has the same meaning as Nodal VoLL.

**Voltage.** The electronic force or electric potential between two points that give rise to the flow of electricity.

**Week Ahead Projections.** The projections performed for the *week-ahead market horizon* by the *Market Operators* accordance with clause 3.7.1.

**WESM member.** A person who is registered with the *Market Operator* in accordance with clauses 2.3 and 2.4.

**WESM Merit Order Table (WMOT)** - for purposes of dispatch protocol under the WESM, defined based on the *Grid Code* with an addition of unscheduled generating units arranged based on price offers; the WMOT is based on a single market. [As amended by DOE DC No.2014-10-0021 dated 24 October 2014\)](#)

**Working Day.** A day (excluding Saturdays and Sundays) on which banks and financial institutions are open in the city or municipality where the principal offices of the *Market Operator* are located. [\(Added per DOE DC No. 2013-03-0005 dated 22 March 2013, and further amended per DOE DC No. 2013-10-0025\)](#)

**Wholesale Electricity Spot market ("WESM").** The electricity market established by the *DOE* in accordance with the *Act*.

**WESM Participants.** All *Generation Companies*, *Distribution Utilities*, Suppliers, Aggregators, End-users, the *TRANSCO* or its Buyer or Concessionaire, IPP Administrators, and other entities authorized by the *ERC* to participate in the *WESM* in accordance with the *Act*.

**WESM Rules.** The detailed rules that govern the administration and operation of the *WESM*.

**Zonal Energy Price.** An *ex-ante* or *ex-post* zonal energy price.

**Zonal Reserve Price.** The price for *reserve* in a particular supply zone, and *trading interval*, determined in accordance with clause 3.10.10.

**Zonal Reserve Settlement Quantity.** The amount of reserve deemed to have been supplied by a reserve supplier in a particular reserve region and *trading interval*, determined in accordance with clause 3.13.4.



## APPENDICES

### APPENDIX A

#### APPENDICES TO CHAPTER 3

#### Appendix A1. Information to be Supplied with Offers to Supply and to Buy Electricity

##### A1.1 Generation Offer

Generation offers:

- (a) Shall include the location of the *connection point* and relevant *market network node*;
- (b) Shall include the *pricing zone* of the *connection point*,
- (c) May include up to ten (10) *energy offer* blocks per (aggregate) unit. The maximum combined capacity of *generation* and *reserve offers* must not be less than the maximum available capacity of the generator. [\(As amended by DOE DC No. 2006-01-0001 dated 10 January 2006\)](#)
- (d) Shall be for a minimum block size of one (1) MW; [\(As amended by DOE DC No. 2013-03-0004 dated 22 March 2013\)](#)
- (e) Shall have monotonically increasing prices, starting from *zero generation*;
- (f) May include negative prices;
- (g) Shall include maximum up/down *ramp rates*; and
- (h) Shall include an operating range (upper and lower limit).  
[\(As amended by DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

##### A1.2 Reserve Offers

Regulation reserve offers from *Generation Companies* shall consist of: [\(As amended by DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

- (a) A maximum response level for the relevant reserve category (MW);
- (b) A minimum and maximum *energy dispatch* level (MW) at which any AGC reserve response will be available;
- (c) Up to 3 reserve offer blocks per aggregate unit (MW/block);
- (d) A minimum block size of one (1) MW; and

- (e) Monotonically increasing prices starting from zero for the first offer block, which shall correspond to the mandatory *reserve* capability required from that *Generation Company* under its connection agreement.

[\(As amended by DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

Contingency *reserve offers* from *Generation Companies* shall consist of:

- (a) A maximum response level for the relevant *reserve category* (MW);
- (b) A minimum *energy dispatch* level (MW) at which that maximum *reserve* response will be available;
- (c) Up to 3 *reserve* offer blocks per aggregate unit (MW/block);
- (d) A minimum block size of one (1) MW; [\(As amended by DOE DC No. 2013-03-0004 dated 22 March 2013\)](#)
- (e) Monotonically increasing prices starting from zero to the first offer block, which shall correspond to the mandatory *reserve* capability required from that *Generation Company* under its connection agreement; and
- (f) Operating range (upper and lower limit).

[\(As amended by DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

Contingency *reserve offers* from Customers shall consist of: [\(As amended by DOE DC No. 2013-03-0004 dated 22 March 2013\)](#)

- (a) A maximum response level for the relevant *reserve category* (MW);
- (b) A maximum proportion of the forecast/*scheduled load*, which maybe interrupted;
- (c) Up to three (3) *reserve offer* blocks (MW/block);
- (d) A minimum block size of one (1) MW; and
- (e) Monotonically increasing prices.

[\(As amended by DOE DC No. 16-01-0002 dated 12 January 2016\)](#)

### **A1.3 Demand Bids**

Demand bids:

- (a) Shall have up to 10 bid blocks per take-off point;
- (b) Shall have a minimum block size of one (1) MW;
- (c) Shall have monotonically decreasing prices;
- (d) Shall start from a zero offtake;
- (e) May have bid prices that are negative; and
- (f) Shall include a validity period of bids.

## Appendix A2. Information to be Supplied by Network Service Provider

### Network Characteristics

Most of these information will be supplied as standing data which will be updated only as required for a *trading interval*.

*Network Service Providers* data submitted are to consist of:

- (a) Topology of the *market network model*;
- (b) Impedances of lines, and other system components;
- (c) Loss functions for each line and system component expressed as a quadratic function; and
- (d) Limits on lines and other system components including:
  - (1) Thermal limits for normal operations;
  - (2) Thermal overload limits of specific duration; and
  - (3) Contingency limits.
- (e) Limits on the operation of HVDC equipment

## APPENDIX B

### APPENDICES TO CHAPTER 4

#### Appendix B1. Metering Register

##### B1.1 General

The *metering register* forms part of the *metering database* and holds *metering* information relating to *metering installations*.

The purpose of the *metering register* is to facilitate:

- (1) The registration of *connection points*, *metering points* and affected Participants;
- (2) The verification of compliance with the *WESM Rules*; and
- (3) The audit flow of changes to the registered information.

##### B1.2 Metering register information

Metering information to be contained in the *metering register* should include such information, as the *Market Operator* considers reasonably necessary and by way of example, may include the following:

- (a) *Meter* identification:
  - (1) *Metering installation* identification number; and
  - (2) Identification of equipment related to, and associated with, the *metering installation*.
- (b) Location in *spot market*
  - (1) Transmission or distribution *connection point* identification; and
  - (2) Details of the site at which the *meter* is located, including the owner of the site.
- (c) Associated parties:
  - (1) *Metering data* agency identification;
  - (2) *Metering Services Provider* identification;
  - (3) *Market Trading Participant* settling account identification;
  - (4) *Local Supplier* identification; and
  - (5) Relevant *Network Service Provider* identification.

- (d) Data validation and substitution processes agreed between affected Participants, including:
  - (2) Algorithms;
  - (3) Data comparison techniques
  - (4) Processing and alarms; and
  - (5) Alternate data sources.

## Appendix B2. Installation

Each *installation database* shall contain the following installation information and such other installation information as specified by the *Market Operator*.

- (a) *Metering Point* reference details, including
  - (1) Location and reference details (e.g. drawing numbers);
  - (2) Site identification names;
  - (3) Standard equipment identification numbering (SEIN) in accordance with the *Grid Code and Distribution Code*.
  - (4) Details of *affected Participants* associated with the Metering point; and
  - (5) The *Metering Services Provider*
- (b) The identify and characteristics of metering equipments including:
  - (2) Serial numbers;
  - (3) *Metering installation* identification name;
  - (4) *Metering installation* types and models;
  - (5) Current test and calibration programme details, test results and references to test certificates as required under the *Grid Code and Distribution Code*;
  - (6) Calibration tables, where applied to achieve metering installation accuracy are required under the *Grid Code and Distribution Code*; and
  - (7) Data register coding details.
- (c) Data communication details, including;
  - (a) Telephone number(s) (or frequency details in case of telemetric equipment) for access to data.
  - (b) Communication equipment type and serial numbers.
  - (c) Communication protocol details or references;

- (d) Data conversion details;
- (e) User identification and access rights and
- (f) “Write” password (to be contained in a hidden or protected fields).

## APPENDIX C

### APPENDICES TO CHAPTER 7

#### Background Note to

#### Appendix C1 - Classification of Rules

The following Background Note is included for information purposes only - it does not form part of the *WESM Rules*. It is intended to provide a general indication of the basis on which the classification of the *WESM Rules* has been made, and a guide, only, for the classification of future new Rules.

#### The Act

The Act provides for the *ERC* to have responsibility for:

- (a) The enforcement of the *WESM Rules* and, as a consequence;
- (b) The imposition of fines and penalties for breaches of the *WESM Rules*.

To facilitate its responsibility in this regard, the *WESM Rules* have been classified into three categories as follows:

- (a) Administrative penalty provisions;
- (b) Conduct provisions;
- (c) Regulatory provisions.

Although the initial classification of the *WESM Rules* is included as part of this Background Note, for information purposes only, to provide an indication of the nature of provisions which are likely to be classified into each category, it is important to note that regulations made under the Act may be made which alter this initial classification. The classification of the *WESM Rules* is very much a policy issue, which may involve considerable consultation. However, this classification may assist in that process or be adopted if that process does not proceed.

The table below summarizes the information contained in this Background Note.

Classification of Rules	Who can bring action	
-------------------------	----------------------	--

		Nature of sanction (imposed by ERC)
Administrative Penalty Provisions	ERC	Penalties
Regulatory Provisions	ERC	Injunction declaration
Conduct Provisions	Any person	Damages injunction declaration

### ***Provisions Requiring Classification***

Those provisions of the *WESM Rules* which impose an obligation on a person have been classified. Where a provision of the *WESM Rules* allows a discretion on the relevant person as to whether or not to do something, that provision has not been classified, as it will not be a breach of that provision if the person decides not to perform in accordance with that provision.

### ***Administrative Penalty Provisions***

Administrative penalty provisions are provisions the breach of which is regarded as most serious. Generally, they are provisions which shall be complied with in order to ensure that the *spot market* and the *WESM Rules* work properly.

Administrative penalty provisions are enforceable only by the *ERC*, who may bring proceedings for the levy of a administrative penalty, i.e. a fine for an offence provable on the balance of probabilities. Any person can advise the *ERC* of an alleged breach of a administrative penalty provision, although it is up to the *ERC* to take the matter further. Clause 7.2.2 of the *WESM Rules* also provides a mechanism by which the *Market Operator*, on its own account or on the advice of a *WESM member*, can decide to bring an alleged breach to the attention of the *ERC*.

### ***Conduct Provisions***

A conduct provision is a provision involving an obligation to be performed by a person where the consequences of a breach are less serious than for a administrative penalty provision. Most provisions of the *WESM Rules* that are not of an administrative nature or are to be performed by the *Market Operator* will be classified as conduct provisions.



However, generally, an obligation to pay money, including one imposed on the *Market Operator*, will be classified as a conduct provision.

Conduct provisions are enforceable by any person by bringing injunction proceedings. In addition, anyone who suffers loss or damage by conduct in contravention of a conduct provision will also have a statutory right to recover the loss or damage in a civil action against the person whose breach of the *WESM Rules* caused it. However, this right is subject to the dispute resolution procedures in clause 7.3, which require a Participant to take any action relating to the *WESM Rules* in accordance with those dispute resolution procedures, before resorting to other formal legal recourse (such as the courts).

### ***Regulatory Provisions***

Regulatory provisions generally fall into two main categories:

- (a) Obligations to be performed by the *Market Operator* (other than obligations to pay money, which will be classified as conduct provisions); and
- (b) Obligations of an administrative nature.

The injunction remedy will be available for breaches of regulatory provisions, on application by the *Government*.

### ***Rules May be in Two Categories***

An administrative penalty provision may be a conduct provision or a regulatory provision as well, but conduct provisions and regulatory provisions are mutually exclusive.