# WHOLESALE ELECTRICITY SPOT MARKET RULES

## **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 2002**

# **TABLE OF CONTENTS**

| Cł | napter       | Description   | Page |
|----|--------------|---|------|
|    | Foreword     |   | ii   |
| 1  | Introduction | on  | 1    |
|    | 1.1 Scope    | of chapter 1  | 1    |
|    | 1.2 Purpos   | e and Application of Rules                              | 1    |
|    | 1.2.1        | The Philippines Wholesale Electricity Spot Market Rules |      |
|    | 1.2.2        | Purpose of the WESM Rules                               |      |
|    | 1.2.3        | The Regulatory Framework                                | 2    |
|    | 1.2.4        | Scope of Application                                    |      |
|    | 1.2.5        | WESM Objectives   |      |
|    |              | Operator and SYSTEM OPERATOR                            |      |
|    | 1.3.1        | Responsibilities of the Market Operator                 |      |
|    | 1.3.2        | Market Operator Performance                             |      |
|    | 1.3.3        | Responsibilities of the System Operator                 |      |
|    |              | ance of the Market                                      |      |
|    | 1.4.1        | Philippine Electricity Market (PEM) Board               |      |
|    | 1.4.2        | Composition of the PEM Board                            |      |
|    | 1.4.3        | Appointment to the PEM Board                            |      |
|    | 1.4.4        | Voting Rights   | 8    |
|    | 1.4.5        | Obligations of the PEM Board                            |      |
|    | 1.4.6        | Formation of Committees                                 |      |
|    | 1.5 The Ph   | illippines Electricity Market Auditor                   |      |
|    | 1.5.1        | Responsibilities of the AuditorReview of WESM Rules     |      |
|    | _            | Surveillance Committee                                  |      |
|    | 1.6.1        | Appointment to the Market Surveillance Committee        |      |
|    | 1.6.2        | Responsibilities of the Market Surveillance Committee   |      |
|    | _            | cal Committee   |      |
|    | 1.7.1        | Appointment to the Technical Committee                  |      |
|    | 1.7.2        | Responsibilities of the Technical Committee             |      |
|    |              | eability and Amendment of These Rules                   |      |
|    | 1.8.1        | Enforceability  |      |
|    | 1.8.2        | Changes to the WESM Rules                               | 13   |
|    |              | Consultation Procedures                                 |      |
| 2  | Registration | on  | 15   |
|    | 2.1 Scope    | of chapter 2  | 15   |
|    |              | al  |      |
|    | 2.2.1        | Scope of Application                                    |      |
|    | 2.2.2        | Registration  |      |
|    |              | <del>-</del>  |      |

| The Marke            | ·t  | 29       |
|----------------------|---|----------|
| <u></u>              |   | 20       |
| 2.12.1               | Providing copy of report  |          |
| 2.12.1               | Market Operator to prepare report                               |          |
|                      | ancial Year Report  |          |
| 2.11 Bud<br>2.11.1   | IgetSubmission of annual statements and other documents         |          |
| 2.10.5               |   |          |
| 2.10.4               | Components of Market Fees  Publication of Market Fees Structure | ∠b       |
| 2.10.3               | Guiding Principles  |          |
| 2.10.2               | Structure and Level of Market Fees                              |          |
| 2.10.1               | Imposing Market Fees  |          |
|                      | ket Fees  |          |
| 2.9.5                | Rights and obligations of Intending WESM Members                |          |
| 2.9.4                |   |          |
| 2.9.3                | Notice of cessation of registration                             |          |
|                      | Applications for registration                                   |          |
| 2.9.1                | Applications for registration                                   | ∠5<br>⊃⊆ |
| 2.9 interior         | Registration as an Intending WESM Member                        |          |
|                      | ng WESM Members   |          |
| 2.8.3                | Deregistration procedure development                            |          |
| 2.8.2                | Obligations and liabilities following deregistration            |          |
| 2.6 Deregis<br>2.8.1 | Deregistration of a Trading Participant                         |          |
|                      | stration  |          |
| 2.7.1                | Effect of a suspension notice                                   |          |
| 2.7 Suspen<br>2.7.1  | sionGrounds for Suspension                                      |          |
|                      |   |          |
| 2.6.3<br>2.6.4       | Market Operator notification of cessation                       |          |
| 2.6.2                | Notifying all WESM Members                                      |          |
| 2.6.1                | Date of cessation   |          |
| 2.6 Ceasing<br>2.6.1 | Notifying the Market Operator                                   |          |
|                      | g to be a WESM Member   |          |
| 2.5.7                | Market Operator to maintain a list                              |          |
| 2.5.6                | Notice of non-approval of application                           |          |
| 2.5.5                | Notice of approval of application                               |          |
| 2.5.4                | Approval of applications  |          |
| 2.5.3                | Further information to assess application                       |          |
| 2.5.1                | Prerequisites for applicants                                    |          |
| 2.5 Applica<br>2.5.1 | Application process   |          |
|                      | tions for Registration  |          |
|                      | WESM Members  |          |
| 2.3.7                | System Operator   |          |
| 2.3.6                | Metering Services Provider                                      |          |
| 2.3.5                | Ancillary Services Provider                                     |          |
| 2.3.4                | Network Service Provider  |          |
| 2.3.2                | Trading Participant   |          |
| 2.3.2                | Customer  |          |
| 2.3 Catego           | Generation Company  |          |
|                      | ries of WESM member   |          |
| 2.2.4                | WESM Members  |          |
| 2.2.3                | Registration in Multiple Categories                             | 16       |

| 0.4 | 0         | all and an O  | 00 |
|-----|-----------|---|----|
|     |           | chapter 3   |    |
| 3.2 |           | etwork Model, Trading Nodes, and Pricing Zones                |    |
|     | 3.2.1     | Market Network Model  |    |
|     | 3.2.2     | Market Trading Nodes  |    |
| 0 0 | 3.2.3     | Customer Pricing Zones  |    |
| 3.3 | •         | services  |    |
|     | 3.3.1     | Introduction  |    |
|     | 3.3.2     | Ancillary Services Contracting by the System Operator         |    |
|     | 3.3.3     | Ancillary Services Agreements                                 |    |
|     | 3.3.4     | Reserve Market Arrangements                                   |    |
|     | 3.3.5     | Ancillary Services Cost Recovery                              |    |
|     | 3.3.6     | Provision of Ancillary Services                               | 35 |
|     | 3.3.7     | Approval, Periodic Review and Evaluation of Ancillary Service |    |
|     |           | gements   |    |
| 3.4 |           | ading interval and timetable                                  |    |
|     | 3.4.1     | Trading Intervals   |    |
|     | 3.4.2     | Timetable   |    |
| 3.5 |           | on of Offers, Bids, and Data                                  |    |
|     | 3.5.1     | Communications of Offers and Bids                             |    |
|     | 3.5.2     | Network Service Provider Data                                 |    |
|     | 3.5.3     | System Operator Data  |    |
|     | 3.5.4     | Load Forecasting  |    |
|     | 3.5.5     | Generation Offers and Data                                    |    |
|     | 3.5.6     | Customer Demand Bids  |    |
|     | 3.5.7     | Generation Company Reserve Offers                             |    |
|     | 3.5.8     | Customer Reserve Offers                                       |    |
|     | 3.5.9     | Revision of Standing Offers/Bids                              |    |
|     | 3.5.10    | Initial setting of Market Offers/Bids                         |    |
|     | 3.5.11    | Revision of Market Offers/Bids                                |    |
|     | 3.5.12    | Confirmation of Receipt of Valid Offers and Bids              |    |
|     | 3.5.13    | Over-riding Constraints                                       |    |
| 3.6 | Market D  | ispatch Optimization Model                                    |    |
|     | 3.6.1     | Model Definition  |    |
|     | 3.6.2     | Constraint Violation Coefficients                             |    |
|     | 3.6.3     | Interpretation of Model Outputs                               |    |
|     | 3.6.4     | Modelling Approximations                                      |    |
|     | 3.6.5     | Model Development   | 47 |
|     | 3.6.6     | Market Settlement   |    |
| 3.7 | Market P  | rojections  |    |
|     | 3.7.1     | Week Ahead Projections  | 48 |
|     | 3.7.2     | Day Ahead Projections   | 48 |
|     | 3.7.3     | Preparation of Market Projections                             | 48 |
|     | 3.7.4     | Published Information   |    |
| 3.8 | Schedulir | ng and Dispatch Implementation                                | 51 |
|     | 3.8.1     | Responsibilites of the Market Operator                        | 51 |
|     | 3.8.2     | Responsibilities of the System Operator                       | 51 |
|     | 3.8.3     | Communication of target loading levels                        | 52 |
|     | 3.8.4     | Dispatched Trading Participants                               |    |
|     | 3.8.5     | Ramp Rate of Trading Participant                              |    |
|     | 3.8.6     | Deviations from the Ramp Rate                                 |    |

|     | 3.8.7    | Dispatch Tolerances  |     |
|-----|----------|--|-----|
|     | 3.8.8    | Sanctions of Trading Participants                                | .53 |
| 3.9 | Treatmer | nt of Load Shedding and Excess Generation                        | .53 |
|     | 3.9.1    | Direction To Conduct Load Shedding                               |     |
|     | 3.9.2    | Market Operator Advice On Load Shedding                          |     |
|     | 3.9.3    | System Operator Responsibility to Initiate Load Shedding         | .53 |
|     | 3.9.4    | Advising of Load Shedding  | .54 |
|     | 3.9.5    | Revising Forecasts   |     |
|     | 3.9.6    | Pricing Error Notice   |     |
|     | 3.9.7    | Management of Load Shedding                                      |     |
|     | 3.9.8    | Management Procedures for Excess Generation                      |     |
| 3.1 |          | mination of Market Prices  | .55 |
|     | 3.10.1   | Calculation of Prices  |     |
|     | 3.10.2   | Determination of Ex-Ante Nodal Energy Price                      |     |
|     | 3.10.3   | Determination of Ex-Ante Zonal Energy Prices                     |     |
|     | 3.10.4   | Publishing Ex-Ante Prices According to Timetable                 |     |
|     | 3.10.5   | Pricing Error Notice   |     |
|     | 3.10.6   | Determination of Ex-Post Nodal Energy Price                      | .56 |
|     | 3.10.7   | Procedures for Ex-Post Nodal Energy Price                        | .57 |
|     | 3.10.8   | Determination of Ex-Post Zonal Energy Prices                     | .57 |
|     | 3.10.9   | Determination of Ex-Ante And Ex-Post Energy Settlement Prices    | .57 |
|     | 3.10.10  | Determination of Zonal Reserve Price                             | .57 |
| 3.1 |          | et Information   |     |
|     | 3.11.1   | Market Information   | .58 |
|     | 3.11.2   | Access to Information  |     |
| 3.1 |          | cial Transmission Rights   |     |
|     | 3.12.1   | Market for transmission rights.                                  |     |
|     | 3.12.2   | Publication of Rental Information                                |     |
|     | 3.12.3   | Further Transmission Rights                                      |     |
|     | 3.12.4   | Matters to Consider in Assessment                                |     |
|     | 3.12.5   | Issuing Transmission Rights                                      |     |
|     | 3.12.6   | Accounting for Net Income  |     |
| 3.1 |          | ment Quantities and Amounts                                      |     |
|     | 3.13.1   | Submission of Bilateral Contract Data                            |     |
|     | 3.13.2   | Submission of Transmission Right Data                            |     |
|     | 3.13.3   | Data for Bilateral Contracts and Transmission Rights             |     |
|     | 3.13.4   | Zonal Reserve Settlement Quantity                                | .61 |
|     | 3.13.5   | Defining the Gross Ex-Ante Energy Settlement Quantity for Market |     |
|     |          | ng Nodes   | .62 |
|     | 3.13.6   | Defining the Gross Ex-Post Energy Settlement Quantity for Market |     |
|     |          | ng Nodes   |     |
|     | 3.13.7   | Energy Settlement Quantity Adjustments for Bilaterals            |     |
|     | 3.13.8   | Determining the Ex Ante Energy Trading Amount                    |     |
|     | 3.13.9   | Determining the Ex Post Energy Trading Amount                    |     |
|     | 3.13.10  | Determining the Reserve Trading Amount                           |     |
|     | 3.13.11  | Determining the Reserve Cost Recovery Charge                     |     |
|     | 3.13.12  | Calculation of Line Rental Trading Amounts                       |     |
|     | 3.13.13  | Determining the Transmission Rights Trading Amount               |     |
|     | 3.13.14  | Settlement Amounts for Trading Participants                      |     |
|     | 3.13.15  | Settlement Amounts for the Network Service Provider              | .00 |

|   | 3.13.16      | Treatment of Remaining Settlement Surplus                 | 66 |
|---|--------------|---|----|
|   | 3.14 Settle  | ement Process   |    |
|   | 3.14.1       | Settlements Management by Market Operator                 | 67 |
|   | 3.14.2       | Electronic Funds Transfer                                 | 67 |
|   | 3.14.3       | Payment of Settlement Amount                              | 67 |
|   | 3.14.4       | Preliminary Statements                                    | 67 |
|   | 3.14.5       | Final Statements  | 68 |
|   | 3.14.6       | Payment by Trading Participants                           | 68 |
|   | 3.14.7       | Payment to Trading Participants                           |    |
|   | 3.14.8       | Disputes  |    |
|   | 3.14.9       | Settlement Revisions                                      | 69 |
|   | 3.14.10      | Payment of Adjustments                                    |    |
|   | 3.14.11      | Payment Default Procedure                                 |    |
|   | 3.14.12      | Interest on Overdue Amounts                               |    |
|   | 3.15 Prud    | ential Requirements                                       | 72 |
|   | 3.15.1       | Purpose   |    |
|   | 3.15.2       | Provision of Security                                     |    |
|   | 3.15.3       | Form of Security  |    |
|   | 3.15.4       | Amount of Security  |    |
|   | 3.15.5       | Replacement Security                                      |    |
|   | 3.15.6       | Drawdown of Security                                      |    |
|   | 3.15.7       | Suspension of a WESM Member                               |    |
|   | 3.15.8       | Trading Limits  |    |
|   | 3.15.9       | Monitoring  |    |
|   | 3.15.10      | Margin Calls  |    |
|   | 3.15.11      | Confidentiality   |    |
|   |              | ·   |    |
| 4 | Metering     |   | 79 |
|   | 4.1 Scope of | f chapter 4   | 79 |
|   | 4.2 APPLICA  | ATION OF CHAPTER  | 79 |
|   |              | ons of TRADING Participants                               |    |
|   | 4.3.1        | •   |    |
|   | 4.3.2        |   |    |
|   | 4.3.3        | Metering Services Provider Obligations                    |    |
|   |              | tion of Metering Services Providers                       |    |
|   |              | Installation  |    |
|   | 4.5.1        | Metering Installation Components                          |    |
|   | 4.5.2        | Location of Metering Point                                |    |
|   | 4.5.3        | Meter Accuracy  |    |
|   | 4.5.4        | Use of Meters   |    |
|   | 4.5.5        | Security of Metering Equipment                            |    |
|   | 4.5.6        | Security of Metering Data Held in a Metering Installation |    |
|   | 4.5.7        | Performance of Metering Installations                     |    |
|   | 4.5.8        | Meter Time  |    |
|   |              | Data  |    |
|   | 4.6.1        | Changes to Metering Data                                  |    |
|   | 4.6.2        | Data Transfer and Collection                              |    |
|   | _            | ration of Metering Services Providers                     |    |
|   | 4.7.1        | Settlement with inaccurate metering information           |    |
|   | 4.7.2        | Sanctions for inaccurate metering information             |    |
|   |              |   |    |

|   | 4.7.3        | Notice following material breach of WESM Rules        |    |
|---|--------------|---|----|
|   | 4.7.4        | Deregistration following unethical act                |    |
|   | 4.7.5        | Effect of deregistration for unethical act            | 85 |
|   | 4.8 Databa   | ses   | 85 |
|   | 4.8.1        | Installation Databases                                | 85 |
|   | 4.8.2        | Metering Database                                     | 86 |
|   | 4.8.3        | Rights of Access to Metering Data                     | 86 |
|   | 4.8.4        | Confidentiality                                       |    |
|   | 4.8.5        | Payment for Access to Metering Data                   |    |
|   | 4.9 Data Va  | alidation and Substitution                            |    |
|   | 4.10 Pro     | cesses and Review                                     | 87 |
|   | 4.11 Tra     | nsitory Provision                                     | 87 |
| 5 | Market Inf   | ormation and Confidentiality                          | 88 |
|   | 5.1 Scope    | of chapter 5  | 88 |
|   | 5.2 Market   | Information and Confidentiality                       | 88 |
|   | 5.2.1        | Provision of Information                              |    |
|   | 5.2.2        | Systems and Procedures                                |    |
|   | 5.2.3        | Participant Data                                      |    |
|   | 5.2.4        | Planning and Design Data                              |    |
|   | 5.2.5        | Information Records                                   |    |
|   | 5.2.6        | Market Audit  |    |
|   |              | entiality   |    |
|   | 5.3.1        | Confidentiality                                       |    |
|   | 5.3.2        | Exceptions  |    |
|   | 5.3.3        | Conditions  |    |
|   | 5.3.4        | Indemnity to the Market Operator                      |    |
|   | 5.3.5        | Survival  |    |
|   | 5.3.6        | The Market Operator Information                       |    |
| 6 | Intervention | on and Market Suspension                              | 95 |
|   | 6.1 Scope    | of chapter 6  | 95 |
|   |              | 9W  |    |
|   | 6.2.1        | Preparation and Responses                             |    |
|   | 6.2.2        | Exemption from Liability due to Market Suspension and |    |
|   |              | ervention   |    |
|   | 6.2.3        | Administered Price Cap                                |    |
|   |              | encies  |    |
|   | 6.3.1        | Emergency   |    |
|   | 6.3.2        | Emergency Procedures                                  |    |
|   |              | ency Planning by WESM Participants                    |    |
|   | 6.4.1        | WESM Participant Emergency Contacts                   |    |
|   | 6.4.2        | WESM Participant Procedures                           |    |
|   | 6.4.3        | Emergency Procedures Awareness                        |    |
|   |              | nse to an Emergency                                   |    |
|   | 6.5.1        | Declarations and Directions in an Emergency           |    |
|   | 6.5.2        | Intervention Due to Emergency                         |    |
|   |              | Security  |    |
|   | 6.6.1        | System Security and Reliability Guidelines            |    |

|   | 6.6.2        | Notice of Threat to System Security                             |       |
|---|--------------|---|-------|
|   | 6.6.3        | Response to System Security Threat                              |       |
|   | 6.6.4        | Market Response to Threat to System Security                    | 103   |
|   | 6.6.5        | Intervention Due to System Security Threat                      |       |
|   | 6.7 Force Ma | ajeure  |       |
|   | 6.7.1        | Force majeure event   | 104   |
|   | 6.7.2        | Force majeure event   | 105   |
|   | 6.7.3        | Notification  | 105   |
|   | 6.7.4        | Obligations of WESM Participants                                | 105   |
|   | 6.8 Market S | Suspension  |       |
|   | 6.8.1        | Conditions for Suspension of the Market                         |       |
|   | 6.8.2        | Declaration of Market Suspension                                |       |
|   | 6.8.3        | Effect of Market Suspension                                     |       |
|   | 6.8.4        | Intervention Report   |       |
|   | 6.8.5        | Market Suspension Report  | 107   |
| 7 | Enforcemen   | nt and Disputes   | 108   |
|   | 7.1 Scope of | f chapter 7   | 108   |
|   | 7.2 Enforcer | nent  | 108   |
|   | 7.2.1        | Compliance  | 108   |
|   | 7.2.2        | Breaches of the WESM Rules by WESM Participants                 | 108   |
|   | 7.2.3        | Alleged Breaches of the WESM Rules by the Market Operator or    |       |
|   |              | em Operator   | 110   |
|   | 7.2.4        | Investigations  |       |
|   | 7.2.5        | Sanctions   |       |
|   | 7.2.6        | Actions by Agents, Employees or Officers of Participants        |       |
|   | 7.2.7        | Publication   |       |
|   |              | E RESOLUTION  |       |
|   | 7.3.1        | Application and Guiding Principles                              |       |
|   | 7.3.2        | Appointment of Dispute Resolution Administrator and Panel Group |       |
|   | 7.3.3        | Dispute Management Systems                                      |       |
|   | 7.3.4        | Dispute Resolution Process                                      |       |
|   | 7.3.5        | The Dispute Resolution Panel                                    |       |
|   | 7.3.6        | Disputes About Payment  |       |
|   | 7.3.7        | Disputes Affecting Final Statements                             |       |
|   | 7.3.8        | Legal Representation  |       |
|   | 7.3.9        | Cost of Dispute Resolution                                      |       |
|   | 7.3.10       | Effect of Resolution  |       |
|   | 7.3.11       | Recording and Publication                                       |       |
|   | 7.3.12       | Judicial Review   |       |
|   | 7.3.13       | Limitation of Liability   |       |
|   | 7.3.14       | Indemnity   | 119   |
| 8 | Rule Chang   | le  | 120   |
|   | 8.1 Scope of | f chapter 8   | 120   |
|   | 8.2 Rule Cha | ange Committee  | . 120 |
|   | 8.2.1        | Establishment of Rule Change Committee                          | 120   |
|   | 8.2.2        | Composition of Rule Change Committee                            | 120   |
|   | 8.2.3        | Membership requirements – PEM Board                             | 120   |

|   | 8.2.4          | Termination   | .121  |
|---|----------------|---|-------|
|   | 8.2.5          | Appointment termination                                       | .121  |
|   | 8.2.6          | Resignation   |       |
|   | 8.2.7          | Conduct of meetings   |       |
|   | 8.2.8          | Advice and assistance   |       |
|   |                | of Matters to the Rule Change Committee                       |       |
|   | 8.3.1          | Rule change proposals   |       |
|   | 8.3.2          | Form of submission  |       |
|   | 8.3.3          | PEM Board obligations   |       |
|   |                | ration of Proposed Rules Change by the Rules Change Committee |       |
|   | 8.4.1          | Assessment of proposed Rule change                            |       |
|   | 8.4.2          | Discretions when assessment proposed Rule change              |       |
|   | 8.4.3          | Notification following failure to satisfy criteria            |       |
|   | 8.4.4          | Notification following satisfying criteria                    |       |
|   | 8.4.5          | Submissions regarding proposed Rule change                    |       |
|   | 8.4.6          | Consideration of submissions                                  |       |
|   | 8.4.7          | Approval of proposed Rule change                              |       |
|   | 8.5 Consider   | ration of Proposed Rules changes by the PEM Board             |       |
|   | 8.5.1          | PEM Board assessment of proposed Rule change                  |       |
|   | 8.5.2          | PEM Board discretions when assessing proposed Rule change     |       |
|   | 8.5.3          | Notification following unsuccessful proposal                  |       |
|   | 8.5.4          | Submitting proposed Rule change for approval                  |       |
|   | 8.6 Approval   | of Proposed Rules Changes                                     | .125  |
|   | 8.6.1          | DOE assessment of proposed Rule change                        |       |
|   | 8.6.2          | DOE discretions when assessing proposed Rule change           | .125  |
|   | 8.6.3          | Notification following failure to satisfy criteria            | .125  |
|   | 8.6.4          | Approval of proposed Rule change                              |       |
|   | 8.6.5          | Report by the Rules Change Committee                          |       |
|   | 8.7 Rules Ch   | nange Committee Indemnity                                     | .126  |
|   |                |   |       |
| 9 | Interpretation | on  | .127  |
|   | 0.1 General    |   | 127   |
|   |                | Dates   |       |
|   |                | ent   |       |
|   | •              |   |       |
|   |                |   |       |
|   | 9.5.1          | Method of payment   |       |
|   | 9.5.2          | Interest rates  |       |
|   |                |   |       |
|   | 9.6.1          | Properly giving notices                                       |       |
|   | 9.6.2          | Notices treated as being given                                |       |
|   | 9.6.3          | Form of notice  |       |
|   | 9.6.4          | Calculating a specified period for notices                    |       |
|   | 9.6.5          | General   |       |
|   |                | n of Records and Documents                                    |       |
|   |                | lity  |       |
|   | 10.1 PURI      | POSE AND SCOPE  | .132  |
|   | 10.1.1         | Purpose   |       |
|   | 10.1.2         | Scope of Application  |       |
|   | -              |   | . 132 |

|    | 10.2.1  | Establishment of the Wholesale Electricity Spot Market                          | 132                              |
|----|---|---|----------------------------------|
|    | 10.2.2  | The Market Operator   | 132                              |
|    | 10.2.3  | The Governing Board   | 133                              |
|    | 10.2.4  | Membership to the WESM  | 133                              |
|    | 10.3 Prov   | sions for the interim wesm  | 134                              |
|    | 10.3.1  | Spot Market Trading   | 134                              |
|    | 10.3.2  | Ancillary Services  | 134                              |
|    | 10.3.3  | Market Dispatch Optimization Model  | 134                              |
|    | 10.3.4  | Metering  |                                  |
|    | 10.4 ACT  | ONS TO BE TAKEN PRIOR TO SPOT MARKET COMMENC                                    | EMENT                            |
|    | DATE  |   | 135                              |
| 10 | Glossary  |   | 143                              |
| 10 | 01033ai y   |   | 173                              |
|    | Appendices  | <u></u>   | 159                              |
|    | Appendix A  |   | 160                              |
|    |   |   |                                  |
|    | Appendices  | to Chapter 3  | 160                              |
|    | • •   | •   |                                  |
|    | Appendix A  | . Information to be Supplied with Offers to Supply and to Buy                   | Electricity                      |
|    | Appendix A  | . Information to be Supplied with Offers to Supply and to Buy                   | Electricity<br>161               |
|    | Appendix A  | Information to be Supplied with Offers to Supply and to Buy                     | Electricity<br>161               |
|    | Appendix A  | . Information to be Supplied with Offers to Supply and to Buy                   | Electricity<br>161<br>161        |
|    | A1.1 Genera<br>A1.2 Reserv<br>A1.3 Demar  | Information to be Supplied with Offers to Supply and to Buy                     | Electricity<br>161<br>161<br>162 |
|    | A1.1 Genera<br>A1.2 Reserv<br>A1.3 Deman  | Information to be Supplied with Offers to Supply and to Buy                     | Electricity161161162163          |
|    | A1.1 Genera<br>A1.2 Reserv<br>A1.3 Demar<br>Appendix A2   | Information to be Supplied with Offers to Supply and to Buy                     | Electricity                      |
|    | Appendix A2  A1.1 Genera A1.2 Reserv A1.3 Deman Appendix A2  Appendix B  Appendices Appendix B                          | Information to be Supplied with Offers to Supply and to Buy ation Offere Offers | Electricity                      |
|    | Appendix Az  A1.1 Genera A1.2 Reserv A1.3 Deman Appendix Az  Appendix B  Appendix B  Appendix B  Appendix B  Appendix B | Information to be Supplied with Offers to Supply and to Buy ation Offere Offers | Electricity                      |

#### 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 Operator* in 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 anticompetitive 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 provide a printed copy of the completed report referred to in clause 1.3.1.4 to:
  - (a) The DOE and the ERC;
  - (b) The PEM Board; and
  - (c) WESM Members and interested entities on request.
- 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 Every year, the *Market Operator* shall prepare and *publish* performance indicators which monitors and provides an indication of, the *Market Operator*'s performance under the *WESM Rules* with respect to:
  - (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.

## 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 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 an employee, contractor, agent, manager, director or shareholder of a *WESM Member*;
- (b) Is not a relative of a person, within the fourth civil degree of consanguinity or affinity, of an employee, contractor, agent, manager, director or shareholder of a *WESM Member*;
- (c) Is not an employee, contractor, agent, manager, director or shareholder of a company, affiliate or any other entity related to or associated with a WESM Member, where:
  - (1) A related company or body, is a parent or holding company of the WESM Member, a subsidiary or affiliate of the WESM Member or a subsidiary of a holding company of the WESM Member; and
  - (2) An associate is a person who is a director, manager or shareholder of that related company or entity or a relative of such a person;
- (d) Has not been employed by any electric power industry participant, or a company or body related to or associated with a *WESM Participant* (as defined in clause 1.4.2.7 (c)) within two years prior to the nomination date; and
- (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.

## 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.

#### 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; and
- (d) A Rules Change Committee to assist the DOE in relation to the revision and amendment of the WESM Rules in accordance with chapter 8.
- (e) A *Dispute Resolution Administrator* to facilitate the mediation of the dispute between the parties to reach resolution within a specified period of time in accordance with the dispute resolution process under chapter 7.

#### 1.5 THE PHILIPPINES ELECTRICITY MARKET AUDITOR

## 1.5.1 Responsibilities of the Auditor

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.

#### 1.5.2 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*.

#### 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) Assist the PEM Board to verify and assess:

- (1) Applications for registration of *WESM Members* under the *WESM Rules*; and
- (2) The eligibility of *WESM Members* to be registered under the *WESM Rules*;
- (d) Assist the PEM Board to investigate:
  - (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.

#### 1.7 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

In addition to its obligations and functions under the *Grid Code* and *Distribution Code* (if any), the Technical Committee shall from time to time as necessary and appropriate, and whenever the *PEM Board* directs:

- (a) Monitor technical matters relating to the operation of the spot market,
- (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 at least two (2) newspapers of national circulation particulars of the matter to WESM Participants and other interested persons, inviting written submissions concerning the matter to be made by a specified date;
- (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:
  - (1) A scheduled generating unit, or
  - (2) A non-scheduled generating unit, or
  - (3) A new and renewable energy (NRE) generating unit with intermittent energy resource;
- (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 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 shall be classified as a scheduled generating unit.
- 2.3.1.4 A generating unit or a group of generating units connected at a common connection 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 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.
- 2.3.1.5 A generating unit or group of generating units connected at a common connection point whose energy resource is location specific and has a natural variability which renders the output unpredictable and the availability of the resource inherently uncontrollable shall be classified as an NRE generating unit with intermittent energy resource, but may at its option be classified as a scheduled generating unit.
- 2.3.1.6 A Generation Company is taken to be a Scheduled Generation Company only so far as its activities relate to any scheduled generating unit.
- 2.3.1.7 A Scheduled Generation Company is required to operate any scheduled generating unit in accordance with the scheduling and dispatch procedures described in chapter 3, within the dispatch tolerances specified in accordance with clause 2.3.3.5.

#### 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 generation 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.
- 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 Scheduled Generation Company may appeal to the PEM Board in respect of a ruling provided under this section that is relevant to that person or entity.
- 2.3.3.9 If at any time a *Trading Participant* ceases to be eligible to be registered as a *Trading Participant* in 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 Provider* in 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 *business 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.
- 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 *business days*, the *Market Operator* may treat the application as withdrawn.
- 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 *business days* from receipt of:
  - (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 days after the date on which the *Market Operator* sends the notice of approval under clause 2.5.5.1.

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

- 2.5.6.1 If the *Market Operator* does not approve an application for registration in a category to which an application relates, the *Market Operator* shall send within fifteen (15) business 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.
- 2.5.6.2 The *ERC* shall be provided a copy of such written notice within five (5) business days after issuance to the applicant.
- 2.5.6.3 If an application for registration is rejected by the *Market Operator* under clause 2.5.6.1 an applicant may:
  - (a) Rectify the shortcomings in his previous application as notified by the *Market Operator* as being the reasons for the application being unsuccessful and re-submit an application for registration; or
  - (b) Refer the matter for resolution as a dispute under clause 7.3.

#### 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 reregister 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* or the *System Operator* may recommend alterations to the *market network model*, 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 recommended under clause 3.2.1.4 shall be approved by the *PEM Board*.
- 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 shall be defined for each node in the market network model that lies at the boundary between a network operated by the System Operator and any apparatus, network or equipment used to generate, convey or control the conveyance of energy and operated by a person other than the System Operator.
- 3.2.2.2 Each market trading node defined under clause 3.2.2.1 shall:
  - (a) Represent a *metering installation* capable of measuring all relevant flows of *energy* into, or out of, the power *system* operated by the *System Operator* at that *market trading node*;
  - (b) Be associated with a *Trading Participant* who is required to pay, or who shall be paid, for that *metered* quantity of *energy*, or any adjusted quantity calculated in accordance with clause 3.13.7,

and shall be classified either as:

- (c) A generator node if the node represents a registered generating unit or generating system directly connected to a network operated by the System Operator at that market trading node; or
- (d) A customer node.

- 3.2.2.3 If a node in the market network model for which settlement is required lies at the interface between two networks, or pieces of apparatus or equipment, used to generate, convey or control the conveyance of energy and both are operated by persons other than the System Operator then a pair or pairs of market trading nodes shall be defined for that node and:
  - (a) Each pair of *market trading node*s shall represent a *metering installation* capable of measuring all relevant flows of *energy* between the relevant *networks*, apparatus or equipment at that *market network node*;
  - (b) One node from this pair of market trading nodes shall be classified as a *generator node* and the other as a *customer node* depending on the normal direction of *energy* flow, prior to any adjustment for *bilaterals* under clause 3.13.7; and
  - (c) Each of those *market trading nodes* shall be associated with a *Trading Participant* who is required to pay, or who shall be paid, for that *metered quantity* of *energy*, or any adjusted quantity calculated in accordance with clause 3.13.7.
- 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 The *Market Operator* shall maintain and *publish* the *customer pricing* zones to be used for the settlement of energy for *Customers*.
- 3.2.3.2 Customer nodes may be grouped into a *customer pricing zone*. All *Customers* within a *customer pricing zone* shall face the same price for electricity consumed.
- 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 regioneither:
  - (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 under an *ancillary services agreement* shall be determined by the *Dispute Resolution Administrator* in accordance with clause 7.3.

## 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*, a *trading interval* is 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, over-riding 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.

## 3.5.4 Load Forecasting

- 3.5.4.1 The *Market Operator* shall prepare the *net load forecasts* for each *market trading node* at which *load* can be expected to occur.
- 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 *scheduled generation*, including losses occurring outside the system represented by the *market network model*, but excluding any *scheduled load*, and less:
  - (a) Non-scheduled generation, and
  - (b) Generation from *NRE* generating units with intermittent energy resource.
- 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.
- 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 schedule 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*.
- 3.5.5.5 Each NRE Generation Company with intermittent energy resource shall submit its projected output for each of its generating units for each trading interval in each trading day of the week in accordance with the timetable.

#### 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.
- 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 schedule of *loading levels* 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*.
- 3.5.9.2 A standing generation offer, a standing reserve offer, or a standing demand bid which is revised under clause 3.5.9.1:
  - (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* and *standing bids* shall be effective in the absence of revised *market offers* and *market bids* for the corresponding *trading interval* and day of the week.

## 3.5.11 Revision of Market Offers/Bids

- 3.5.11.1Each 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 3.5.11.3 and each revised *market offer* or *market bid* submitted shall provide the information set out in Appendix A2.
- 3.5.11.2Each Generation Company which has submitted a schedule of loading levels for its non-scheduled generating units shall revise its schedule of loading levels if it reasonably expects that any of its anticipated loading levels will differ materially from those previously submitted.
- 3.5.11.3In accordance with the *timetable*, a revised *market offer or market bid* submitted under clause 3.5.11.1 shall take effect the next time a *dispatch*, *pricing* or *day-ahead projection* run is initiated.
- 3.5.11.4 Market bids or market offers for any trading interval shall be revised by Trading Participants if, at any time, 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*.
- 3.5.11.5The *Market Operator*, in consultation with the *System Operator* and *WESM Members*, and with the approval of the *PEM Board*, shall determine and *publish* criteria to determine the meaning of "reasonable estimate" under clause 3.5.11.4, taking account of:
  - (a) The time remaining until the occurrence of the relevant *trading interval* involved,
  - (b) The impact on the *market* of any variations to offers or *demand bids*,
  - (c) The different categories of WESM Members, and
  - (d) The different circumstances which may have given rise to the need to make the relevant variation.
- 3.5.11.6 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.
- 3.5.11.7Prior 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 3.5.11.6.

3.5.11.8Each market offer 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 is accepted by the Market Operator.

# 3.5.12 Confirmation of Receipt of Valid Offers and Bids

- 3.5.12.1To be valid, *generation offers*, *reserve offers* 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, 3.5.6.3, and 3.5.7.4 as appropriate.
- 3.5.12.2The Market Operator shall send to each Trading Participant from whom it has received a valid generation offer, reserve offer or valid demand bid, an electronic confirmation of receipt and acceptance of that generation offer, reserve offer or demand bid in accordance with the timetable.
- 3.5.12.3If a *Trading Participant* does not receive confirmation of receipt under clause 3.5.12.2, from the *Market Operator* in accordance with the *timetable*, the *Trading Participant* shall contact the *Market Operator* to determine whether or not the *generation offer*, reserve offer or demand bid was received.
- 3.5.12.4If the offer or bid is invalid, the *Market Operator* shall promptly inform the *Trading Participant* to resubmit a corrected *generation offer*, *reserve* offer or demand bid in accordance with clause 3.5.11.

## 3.5.13 Over-riding Constraints

- 3.5.13.1 Subject to clause 3.5.13.3, the *System Operator* may recommend to the *Market Operator* that *constraints* be imposed on the *energy dispatch* or *reserve dispatch* of a specific *facility* which may have the effect of fixing or bounding the *generation* or *reserve scheduled* from that *plant*, if the *System Operator* reasonably believes that the *generation offer*, *reserve offer* or *demand bid* does not provide a valid representation of the actual or expected capability of that *facility* in that *trading interval*, and where, in the reasonable opinion of the *System Operator*, such misrepresentation seems likely to impact materially on *dispatch* or *pricing*.
- 3.5.13.2In 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 increased production of either *reserve* or *generation*, as appropriate, having regard to:
- (a) The commercial interests of *Trading Participants*; and
- (b) Market priorities, as reflected by the relevant *market prices* for energy and *reserves* in the relevant *reserve region*.
- 3.5.13.3Prior 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.
- 3.5.13.4When 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.
- 3.5.13.5At 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.
- 3.5.13.6If 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 *Disputes Resolution Administrator* 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.

## 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 offer, demand bid and when applicable reserve quantities 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:
  - (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;
  - 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 3.6.1.3, and the *constraint* structure defined by clause 3.6.1.4, and specifying *dispatch* targets for each *scheduled* generating unit, scheduled load and reserve facility;
  - (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*.

#### 3.6.2 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;
  - (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.

# 3.6.3 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 Modelling 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 public consultation.

#### 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 loading levels for each non-scheduled and *NRE generating* units with intermittent energy resource in accordance with clause 3.5.5; and
- (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* shall contain the following information for each *trading interval* in the period covered by the *market projection*:
  - (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 and scheduled load at each market network node:
  - (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 Responsibilites 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*:

- (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;
- (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 or scheduled load and for each reserve facility for the end of that trading interval using the latest data from the System Operator and Trading Participants; and
- (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).

# 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: and
  - (d) Intervene, where necessary, as provided by clauses 6.3 and 6.5.
- 3.8.2.2 After each *trading interval*, in accordance with the *timetable*, the *System Operator* shall advise the *Market Operator* of:
  - (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;

- (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*.

## 3.8.3 Communication of target loading levels

The System Operator shall communicate the target loading levels to Trading Participants for each trading interval prior to the commencement of that trading interval in accordance with the timetable and consistent with the Grid Code.

# 3.8.4 Dispatched Trading Participants

Trading Participants 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 will 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.

## 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.

## 3.8.7 Dispatch Tolerances

3.8.7.1 *Dispatch tolerances* shall be set to allow limits on the extent to which *Trading Participants* may deviate from dispatch targets issued by the *System Operator*.

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 the *Grid Code* and *Distribution Code*.

## 3.8.8 Sanctions of Trading Participants

Any *Trading Participant* who consistently fails to use its reasonable endeavors to act in accordance with *dispatch* instructions issued under clause 3.8.3, 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.

#### 3.9 TREATMENT OF LOAD SHEDDING AND EXCESS GENERATION

## 3.9.1 Direction To Conduct Load Shedding

The System Operator may direct a Trading Participant to conduct load shedding in response to:

- (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 Operator* in 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) Trading Participants who are likely to be directly affected by such load shedding.

#### 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 forecast*s 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

At the commencement of each *trading interval* in which the *load forecast* has been adjusted to account for possible *load shedding*, or as soon as possible thereafter, the *Market Operator* shall issue a *pricing error notice*, in accordance with clause 3.10.5.

# 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.

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*.

## 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 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.

## 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* or for any other reason:

- (a) The *Market Operator* may issue a *pricing error notice*, in which case the *ex post prices* determined according to clause 3.10.7 shall also serve as *ex-ante prices*.
- (b) If no pricing error notice is issued within the time specified in the timetable after the start of a trading interval, the ex-post prices shall serve as ex-ante prices and shall stand irrespective of the outcome of any subsequent investigations or resolution of any dispute.

# 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 for that market trading node, formed in accordance with clause 3.6.1.4 (c), in a expost dispatch optimization performed, in accordance with the timetable, to determine target dispatch levels for the end of that trading interval, assuming:

- (a) The *plant* status for the beginning of that *trading interval* as determined for the *ex-ante dispatch optimization* or, if *load shedding* occurred in the previous *trading interval*, the *plant* status which would have pertained at the end of the previous *trading interval*, as indicated by the targets determined by the *ex-post dispatch* for the previous *trading interval*;
- (b) The *generation offers* which applied at the beginning of the *trading interval*;
- (c) The *unrestrained load* determined from *metering data*, or estimated, after the occurrence of the *trading interval*, to apply at each *market network node* on average, over the *trading interval*;
- (d) 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
- (e) 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.

# 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) 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*.

## 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*:
  - (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 the case may be;
  - (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 scheduled generation or scheduled load and scheduled reserves for each scheduled generating unit and scheduled load, respectively, in each trading interval for the previous trading day; and
  - (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 *market 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 *timetable*:
  - (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
  - (c) Provide evidence that the counterparty to the *bilateral* contract agrees with the submission made under this clause 3.13.1.1.
- 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

- 3.13.2.1This 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

- 3.13.5.1For each *trading interval*, the gross *ex-ante energy settlement quantity* 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-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*, both adjusted for *bilateral contracts* in accordance with clause 3.13.7:
  - (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*, both adjusted for *bilateral contracts* in accordance with clause 3.13.7: 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 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, adjusted for *bilateral contracts* in accordance with clause 3.13.7:

- (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* adjusted for *bilateral contracts* in accordance with clause 3.13.7; 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-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).

## 3.13.7 Energy Settlement Quantity Adjustments for Bilaterals

For settlement purposes, the ex-ante energy settlement quantity and the expost 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 or gross ex-post energy settlement quantity, as appropriate, for that market trading node and any trading interval, as measured in accordance with clause 3.13.5 or estimated in accordance with clause 3.13.6, for bilateral contract quantities notified to the Market Operator under clause 3.13.1.1, or inferred by the Market Operator under clause 3.13.1.2 by:

- (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 ex-post energy settlement quantity for that node in that trading interval (in MWh); minus

(b) The ex-post energy settlement price for that node in that trading interval multiplied by the ex-ante energy settlement quantity for that node in that trading interval (in MWh).

#### 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 *transmission line* in the *market network model* as:

- (a) The expected flow of energy out of the receiving node of the market network line as determined by the market dispatch optimization model by the ex-ante nodal energy settlement price at that node; less
- (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:
  - (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*).

#### 3.13.15 Settlement Amounts for the Network Service Provider

- 3.13.15.1 For each *billing period*, the *Market Operator* shall determine the *settlement amount* for the *Network Service Provider* as the sum over all *trading intervals* in that *billing period* of:
  - (a) The *line rental trading amounts* calculated for each *transmission line* owned by the *TRANSCO* in accordance with clause 3.13.12 (which will typically be positive); minus the sum of
  - (b) The *transmission right trading amounts* for each *transmission right* for which the System *Operator* has agreed to support in accordance with clause 3.13.2 calculated in accordance with clause 3.13.13 (which will typically be positive).

### 3.13.16 Treatment of Remaining Settlement Surplus

3.13.16.1 If the transactions required by clauses 3.13.14 and 3.13.15, in aggregate, result in a surplus or deficit remaining, this will be known as the *net settlement surplus*.

## 3.13.16.2 The net settlement surplus:

- (a) May be retained by the *Market Operator*, or paid to the *System Operator*, according to a formula to be developed by the *Market Operator* subject to approval of the *PEM Board*; and
- (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:

- (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*; and
- (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*.

#### 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 Operator* in 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 business 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.
- 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 Operator 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 under clause 3.14.4.3, the *Market Operator* shall notify all *WESM Members* whose *final statements* will be affected by the error or discrepancy within 7 days of the date on which the error or discrepancy first came to the attention of the *Market Operator* and the *Market Operator* shall ensure that the error or discrepancy is corrected in the relevant *final statements*.

#### 3.14.5 Final Statements

- 3.14.5.1 No later than eighteen business 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.
- 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 thirtieth business day after the end of a billing period or 3.00 pm on the twelfth business day after receiving a final statement under clause 3.14.5, whichever is the later, 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.

#### 3.14.7 Payment to Trading Participants

By no later than 3.00 pm on the day on which the *Market Operator* is to be paid under clause 3.14.6, the *Market Operator* shall pay to each *WESM Member* in cleared funds the *settlement amount* (if any) stated to be payable to that *WESM Member* in that *WESM Member's final statement*.

#### 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 clause 3.14.5 shall be raised within twelve months of the relevant *billing period*.
- 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 in any way which causes the amount payable to differ from the amount payable as set out in the *final* statement; or
  - (b) Has been identified as being in error in accordance with clause 3.14.9.2 and the correct amount has been determined by the *Market Operator*,
  - (c) The *Market Operator* shall issue to each *WESM Member* affected by the resolution of the dispute or the correction of the error a revised statement for the relevant *billing period* setting out:
  - (d) The amount payable by the WESM Member to the Market Operator or the amount payable by the Market Operator to the WESM Member; and
  - (e) The adjustment to the final statement as agreed or determined plus interest calculated on a daily basis at the *interest rate* for the period from the *payment date* applicable to 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.
- 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 revised statements for the relevant *billing period* in accordance with clause 3.14.9.1.

#### 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 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.

## 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 credit support for that WESM Member enters into or takes any action to enter into an 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;
- (I) 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 3.15.7 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/or

(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.

#### 3.14.11.3 If:

- (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 *Trading Participant* wishing to participate in *market transactions* shall provide and maintain a security complying with the requirements of this clause 3.15.2.
- 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) the *Trading Participant* is a *Distribution Utility* that demonstrates the financial capability by complying with agreed upon financial covenants and that such exemption is subject to the approval of the *PEM Board*.
- 3.15.2.3 If, under clause 3.15.2.2, the *Market Operator* has exempted a *WESM Member* from the requirement to provide a security under clause 3.15.2.1, then the *Market Operator* may vary or cancel the exemption at any time by giving written notice of the variation or cancellation of the exemption to the *WESM Member*.

## 3.15.3 Form of Security

The security provided by a *WESM Member* under this clause 3.15 shall be either:

- (a) A bank guarantee in a form and from a bank acceptable to the *Market Operator*, 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.

#### 3.15.4 Amount of Security

- 3.15.4.1Subject 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*.
- 3.15.4.2The *Market Operator* may review its 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 days following notification by the *Market Operator* to that *WESM Member* of that change or such earlier period agreed by the *PEM Board*.
- 3.15.4.3Each 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.

3.15.4.4To diminish the possibility of incurring a *margin call* under clause 3.15.10, a *WESM Member* may in its absolute discretion provide to the *Market Operator* a security or securities in accordance with clause 3.15.3 for an aggregate amount which exceeds its maximum exposure.

## 3.15.5 Replacement Security

#### 3.15.5.1 lf:

- (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,
- (c) Then the WESM Member shall deliver to the Market Operator, at least ten business 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) Will take effect no later than the date on which the existing security is due to expire or terminate.

#### 3.15.5.2If:

- (a) A WESM Member fails to comply with clause 3.15.5.1; and
- (b) That WESM Member does not remedy that failure within 24 hours after being notified by the Market Operator of the failure,

then the *Market Operator* shall give the *WESM Member* a suspension notice in accordance with clause 3.15.7.

#### 3.15.6 Drawdown of Security

- 3.15.6.1 If the *Market Operator* exercises its rights in accordance with this clause 3.15 under a security provided by a *WESM Member* under this clause 3.15, then the *Market Operator* shall notify the *WESM Member*.
- 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 24 hours of receiving a 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.

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 Suspension of a WESM Member

- 3.15.7.1 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
  - (b) Place a notice in a newspaper of general circulation that the *WESM Member* has been suspended.
- 3.15.7.2 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*.

except that the *Market Operator* shall not revoke a *suspension* notice more than one month after it was issued.

- 3.15.7.3 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.
- 3.15.7.4 From the time that the *Market Operator* issues a *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 *Trading Participants* that the *suspension notice* has been revoked.
- 3.15.7.5 A WESM Member shall comply with a suspension notice issued to it under the WESM Rules.
- 3.15.7.6 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 opinion 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 opinion the *WESM Member* is incapable of rectifying that failure for any reason,

the *Market Operator* shall deregister that *WESM Member* as soon as practicable and promptly *publish* a notice of that fact.

## 3.15.8 Trading Limits

- 3.15.8.1 Subject to clause 3.15.8.2, the *Market Operator* shall set a *trading limit* for each *WESM Member* who participates in *market transactions*.
- 3.15.8.2 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.
- 3.15.8.3 The *trading limit* for a *WESM Member* at any time shall not be greater than 85% of the total value of the security provided by the *WESM Member* to the *Market Operator* under clauses 3.15.3 (a), (b) and (c).

## 3.15.9 Monitoring

- 3.15.9.1 Each day, the *Market Operator* shall review its actual exposure to each *WESM Member* in respect of previous *billing periods* under the *WESM Rules*.
- 3.15.9.2 In calculating the *Market Operator's* actual exposure to a *WESM Member* under clause 3.15.9.1, the period between the start of the *billing period* in which the review occurs and the start of the *trading day* immediately following the day on which the review occurs is to be treated as a previous *billing period*.
- 3.15.9.3 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 trading intervals from the start of the billing period in which the review occurs to the end of the trading day on which the review occurs based on:
    - (1) Actual market prices or, if actual market prices are not available for all or part of a trading day, the market prices forecast for the relevant trading day as specified in the relevant day ahead projection; and

- (2) Actual metered quantities for the WESM Member or, if actual metered quantities are not available for a trading interval, then a trading imbalance for that trading interval determined by the Market Operator as the average of the trading imbalances of that WESM Member for the corresponding trading interval on the corresponding trading days of the four previous weeks.
- 3.15.9.4 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.

#### 3.15.10 Margin Calls

- 3.15.10.1 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*.
- 3.15.10.2 If the *Market Operator* makes a *margin call* on a *WESM Member* under clause 3.15.10.1, then the *WESM Member* must satisfy the *margin call* within the period determined in accordance with clause 3.15.10.3 by either:
  - (a) Providing to the *Market Operator* an additional security or securities complying with the requirements of this clause 3.15 which enables the *Market Operator* to increase the *WESM Member's trading limit* to a level which exceeds the *Market Operator's* actual exposure to the *WESM Member*, or
  - (b) Prepaying a portion of the amount payable or which will become payable in respect of previous billing periods sufficient to reduce the Market Operator's actual exposure to the WESM Member to below the WESM Member's trading limit.
- 3.15.10.3 The period within which a *margin call* must be satisfied under clause 3.15.10.2 is:
  - (a) If the *margin call* is made on a *business day* before 10:00 am, then the period commences at the time the *margin call* is made and finishes at 3:00 pm on that *business day*; and
  - (b) If clause 3.15.10.3 (a) does not apply, then the period commences when the *margin call* is made and ends at 10:00 am on the first *business day* to occur after the *margin call* is made.
- 3.15.10.4 For the purposes of the *WESM Rules*, a prepayment under clause 3.15.10.2(b) is taken to relate to the earliest *billing period* in respect of which the relevant *WESM Member* owes the *Market Operator* an

amount of money under the WESM Rules and, if the amount the WESM Member owes under the WESM Rules in respect of that billing period is less than the amount of the prepayment, then the excess is taken to relate to the billing periods occurring immediately after the earliest billing period in respect of which the relevant WESM Member owes the Market Operator an amount of money under the WESM Rules in chronological order until there is no excess.

3.15.10.5 If a WESM Member fails to satisfy a margin call by providing an additional security or making a prepayment under clause 3.15.10.2 within the time referred to in that clause, then the Market Operator shall give the WESM Member a suspension notice.

## 3.15.11 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 *connection point* through which it purchases electricity from the *spot market*;
- (b) A Generation Company in respect of a connection point through which it sells electricity to the spot market;
- (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 *connection point*, the *Trading Participant* shall ensure that:
  - (a) Each of its connection points has a metering installation;
  - (b) Each *metering installation* has been installed in accordance with this chapter 4 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 connection point if the metering installation at that connection point does

- not comply with the provisions or requirements of this chapter 4, the *Grid Code* and *Distribution Code*.
- 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 Subject to clause 4.3.3.3, a *Generation Company* or *Customer* which is involved in the trading of *energy* shall not be registered as a *Metering Services Provider* for any *connection point* in respect of which the *metering data* relates to its own use of *energy*.
- 4.4.3 If a *Trading Participant* is a *Customer* and also a *Network Service Provider*, the *Trading Participant* may register as a *Metering Services Provider* only for connection points that it does not own.

#### 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 *connection point*.

- 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* that is recorded in the *metering database* to allow for physical losses between the *metering point* and the relevant *connection point*.
- 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 Market Operator shall collect metering data from all metering installations from which metering data is required for settlement purposes unless otherwise agreed by the Market Operator and the affected Participants.
- 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:
  - 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 who purchases electricity at the associated connection point:
- (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* to 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 *Market Operator* shall arrange for a *spot market* audit to be performed once each quarter, or such other period as determined by the *Market Operator* in consultation with the *PEM Auditor*.
- 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 versions 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; and
  - (f) The Market Operator's compliance with the WESM Rules.
- 5.2.6.3 The *PEM Auditor* shall prepare a report on the results of the *spot market* audit.

5.2.6.4 Following consideration by the *Market Operator*, the *spot market* audit report shall be made available by the *Market Operator* to the *ERC*, the *PEM Board* and *WESM Members*.

#### 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 any one 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.

#### 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*.

#### **CHAPTER 6**

## INTERVENTION AND MARKET SUSPENSION

#### 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; and
- (d) The circumstances and manner in which the *ERC* through the *Market Operator* may *intervene* or suspend the *spot market*.

#### 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 *intervention*.
- 6.2.1.2 *Intervention* is warranted when the *grid* is in extreme state condition as established in the *Grid Code* arising from:
  - (a) An emergency;
  - (b) A threat to system security; or
  - (c) An event of force majeure.
- 6.2.1.3 During *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.
- 6.2.1.4 WESM Participants acknowledge that:
  - (a) The operation of the power system involves risks to public safety and property and therefore accept 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 System Operator to implement emergency procedures in accordance with the Grid Code

- and clause 6.3.2 and to make declarations and issue *emergency directions* under clause 6.5 in an *emergency*;
- (c) Subject to clause 6.2.1.1, the *System Operator* shall issue *emergency directions* in accordance with the *Grid Code*, and shall report such action to the *Market Operator*.

#### 6.2.2 Exemption from Liability due to Market Suspension and Intervention

- 6.2.2.1 In the events of market suspension or 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 shall not be liable for any loss incurred by a WESM Participant as a result of any action taken by the System Operator or Market Operator under this chapter 6.
- 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 Cap

During *market suspension* and *intervention*, the *Market Operator* shall impose an *administered price cap* to be used as basis for settlements.

Prior to the *spot market commencement date*, the *Market Operator* shall develop and publish an *administered price cap* to be used during *market suspension* or intervention of the *spot market*. Said *administered price cap* is to be endorsed by the *PEM Board* for *ERC* approval.

#### 6.3 EMERGENCIES

#### 6.3.1 Emergency

- 6.3.1.1 The System Operator shall declare an emergency 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. The System Operator shall report an emergency to the ERC.
- 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* for which market processes are inadequate for recovery;
- (c) A significant environmental phenomenon, including weather, storms or fires which are likely to or are significantly affecting the power system for which market processes are inadequate for recovery;
- (d) A system blackout or significant power system undervoltage 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* and the *DOE* that the *emergency* or the effect of such *emergency* has ended.

### 6.3.2 Emergency Procedures

- 6.3.2.1 During the period when the *power system* may be or is affected by an *emergency* the *System Operator* shall carry out actions, in accordance with the *system security and reliability guidelines* and its obligations (if any) concerning *sensitive loads* to:
  - (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 procedures to be taken by or at the direction of the *System Operator* to:
  - (a) Maintain system security;
  - (b) Avert or reduce the effect of an *emergency*;
  - (c) Issue notifications and warnings to *Market Operator*, the *PEM Board*, the *DOE* and *ERC* where appropriate; and
  - (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 Prior to *spot market commencement date*, the *System Operator* in consultation with the *Market Operator* shall:
  - (a) Develop appropriate emergency procedures in accordance with the *Grid Code* and *Distribution Code*. Such procedures shall be subject to approval of the *PEM Board*; and
  - (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).
- 6.3.2.7 The *System Operator* shall make available a copy of the emergency procedures to all *WESM Participants* within seven (7) days after each occasion on which the emergency procedures have been updated.

### 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's 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 Declarations and Directions in an Emergency

## 6.5.1.1 During an emergency:

- (a) The System Operator shall, in coordination with the Market Operator, issue emergency directions as it reasonably considers necessary, which may include, but need not be limited to, directions to:
  - (1) Switch off, or re-route, *energy* delivery from a *Generation Company*;
  - (2) Call equipment into service;
  - (3) Take equipment out of service;
  - (4) Commence operation or maintain, increase or reduce *active* or *reactive power* output;
  - (5) Curtail, shut down or otherwise vary operation or output;
  - (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:
  - (1) Implement any *load shedding* in a manner consistent with the system security and reliability guidelines; and
  - (2) To the extent possible and in accordance with the Market Operator's responsibility in relation to vital loads, determine a rotating outage plan, and rotate any load shedding requirements.
- 6.5.1.2 When an emergency arises, the System Operator shall:
  - (a) Immediately notify the *Market Operator*,
  - (b) Notify the *ERC* and the *DOE*, as soon as reasonably practicable;
  - (c) Notify WESM Participants, as soon as reasonably practicable, of the commencement, nature, extent and expected duration of the emergency and the way in which the System Operator reasonably anticipates it will act in response to the emergency; and
  - (d) Notify the *ERC*, the *DOE*, and *WESM Participants* of any material changes in the nature, extent and expected duration of an *emergency*.
- 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 Intervention Due to Emergency

- 6.5.2.1 If, in the best judgment of the *System Operator*, insufficient time exists for the *spot market* to address an emergency, the *System Operator* shall take any measures it considers to be reasonable and necessary to overcome the emergency, including without limitation:
  - (a) Increase the *generation* or *supply* capability such as requesting available but not committed *generating units* to start-up, or recall *transmission* equipment *outages*;
  - (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 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 *PEM Board* in detail regarding the actions and circumstances under which the *intervention* was made.

#### 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 system security and reliability guidelines, subject to approval of the PEM Board.
- 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 Threat to System Security

- 6.6.2.1 Upon determination of the existence or the likely possibility of a threat to system security, the System Operator shall without delay notify the WESM Participants and the Market Operator of such threat. Said notice shall include the details of that threat as well as:
  - (a) The nature and general magnitude of the threat to *system security*, including an estimate of the likely duration thereof, and the likely shortfall in supply, likely to occur during that period;
  - (b) The timeframe, in which, the *System Operator* will need to *intervene* in the *spot market* if the threat to *system security* does not subside without *intervention* by the *System Operator*, and
  - (c) The regions of the *power system* in which the threat to *system* security is likely to be located.
- 6.6.2.2 If the *System Operator* provides the notice with details of a threat to system security to *WESM Participants*, in accordance with clause 6.6.2.1, the *System Operator* may issue instructions, requiring each *WESM Participant* to provide best estimates of the following:
  - (a) A Scheduled Generation Company's plant availability to either increase or decrease generation; and
  - (b) A Customer's ability to either increase or decrease market load.
- 6.6.2.3 Despite clause 5.3, a WESM Participant shall not withhold information required by the System Operator in accordance with clause 6.6.2.2. The WESM Participant shall comply with the instructions and provide the information required as soon as practicable.

- 6.6.2.4 The *System Operator* shall treat all information provided to it by a *WESM Participant* under clause 6.6.2.2 as *confidential information* and may only use that information for the following purposes:
  - (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 shall inform WESM Participants and the Market Operator immediately when it reasonably considers a threat to system security to be at an end.

## 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 *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*.
- 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 *intervention* then the *System Operator* shall:
  - (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 intervention, the *System Operator* shall:
  - (a) If it has not already done so, provide *WESM Participants* with the information set out under clause 6.6.2.1; and
  - (b) Advise the *Market Operator* and those *WESM Participants* who the *System Operator* considers would be required to take action or cease taking action if the threat to *system security* is not resolved without *intervention* of the following information:
    - (1) The existence of the threat to system security; and
    - (2) The likely nature of any requirement of the *Grid Operator* if the *System Operator* determines that it should *intervene*.
- 6.6.4.2 The action or cessation of action required under clause 6.6.4.1(b) 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.

# 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 Intervention Due to System Security Threat

- 6.6.5.1 If, in the best judgment of the *System Operator*, insufficient time exists for the *spot market* to address a threat to *system security*, the *System Operator* shall take any measures it considers to be reasonable and necessary to overcome the threat to *system security*, including without limitation:
  - (a) Increase the *generation* or *supply* capability such as requesting available but not committed *generating units* to start-up, or recall *transmission* equipment *outages*;
  - (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 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.
- 6.6.5.2 Thereafter, the *System Operator* shall report in detail to the *PEM Board* in detail regarding the actions and circumstances under which the *intervention* was made.

#### 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 not within the reasonable control, directly or indirectly, of the 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*.

# 6.7.2 Force majeure event

Events of *force majeure* shall include:

- (1) Major network trouble that caused partial or system-wide blackout;
- (2) Market system hardware or software failure that makes it impossible to receive or process market offer/bid information or dispatch the system in accordance with the WESM Rules; and
- (3) Any other event, circumstance or occurrence in nature of, or similar in effect to any of the foregoing.

#### 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 MARKET SUSPENSION

#### 6.8.1 Conditions for Suspension of the Market

- 6.8.1.1 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.

#### 6.8.2 Declaration of Market Suspension

- 6.8.2.1 The *spot market* can only be suspended by a declaration by the *ERC* under clause 6.8.1.1 and if the *spot market* is suspended:
  - (a) The ERC shall notify the Market Operator, and
  - (b) The Market Operator shall notify all WESM Participants,

- as soon as possible.
- 6.8.2.2 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.
- 6.8.2.3 Following a declaration by the *ERC* under clause 6.8.1.1, the *spot market* is to remain suspended until the *ERC* notifies the *Market Operator* that *spot market* operation is to resume.
- 6.8.2.4 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.
- 6.8.2.5 Notwithstanding a suspension of the *spot market*, the *Market Operator* may issue *emergency directions* to *WESM Participants* in accordance with clause 6.5.1.

# 6.8.3 Effect of Market Suspension

- 6.8.3.1 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.
- 6.8.3.2 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*.

### 6.8.4 Intervention Report

- 6.8.4.1 Upon the concurrence of one or more of the following events:
  - (a) An intervention;
  - (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.
- 6.8.4.2 A copy of the report prepared under clause 6.8.4.1 shall be provided to:
  - (a) The *PEM Board*;
  - (b) The ERC and the DOE; and
  - (c) WESM Participants and interested persons on request.

# 6.8.5 Market Suspension Report

- 6.8.5.1 Within ten *business days* following a declaration by the *ERC* under clause 6.8.1.1, the *Market Surveillance Committee* 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) The appropriateness of actions taken by the *Market Operator* in relation to the event or events which occurred; and
  - (c) The costs incurred by the *WESM Members* as a consequence of responding to the event or events.
- 6.8.5.2 A copy of the report prepared under clause 6.8.5.1 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; and
- (c) Other provisions on how disputes are to be resolved, including the appointment of a *Dispute Resolution Administrator* and *Dispute Resolution Panel*.

### 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 Participants

- 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 *Disputes Resolution Administrator* to investigate the alleged breach as soon as possible, when:
  - (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*.

- 7.2.2.3 The *Disputes Resolution Administrator* 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*.
- 7.2.2.4 The said notice issued by the *Disputes Resolution Administrator* shall:
  - (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 Dispute Resolution Administrator, 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.
- 7.2.2.5 The notice shall be copy furnished to:
  - (a) The PEM Board; and
  - (b) The ERC,
  - within five business days from issuance of notice.
- 7.2.2.6 The *Disputes Resolution Administrator* after according the parties due process shall determine whether the *WESM Member* in question is in breach of the *WESM Rules*.
- 7.2.2.7 If the *Disputes Resolution Administrator* determines that a *WESM Member* has indeed breached a *WESM Rule*, the *Disputes Resolution Administrator* 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 Disputes Resolution Administrator, 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.
- 7.2.2.8 The *Disputes Resolution Administrator* 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:
  - (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 *Disputes Resolution Administrator* 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 *Disputes Resolution Administrator* to investigate the alleged breach as soon as possible.
- 7.2.3.3 The *Disputes Resolution Administrator* 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*.
- 7.2.3.4 The notice which the *Disputes Resolution Administrator* is required to issue under clause 7.2.3.3 shall:
  - (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 *Disputes Resolution Administrator* may request from the *WESM Member* who is alleged to be in breach of the *WESM Rules* all information relating to the breach.
- 7.2.4.2 If the *Disputes Resolution Administrator* 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.
- 7.2.4.3 If a WESM Member fails to comply with a directive or request by the Disputes Resolution Administrator for information under clause 7.2.4.1, the Disputes Resolution Administrator may request the Market Surveillance Committee to investigate the matter and to prepare a report or such other documentation as the Disputes Resolution Administrator may determine.
- 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 may be 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 *Dispute Resolution Administrator* 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*.

# 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 which may arise between 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; and
  - (f) Persons who have been notified by the *Market Operator* under clause 2.4.6.2 that an application for registration as a *WESM Member* has been unsuccessful,

as to:

- (g) The application or interpretation of the WESM Rules; or
- (h) A dispute 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 that contract with respect to the application of the WESM Rules; or
- (i) A dispute under or in relation to the *Grid Code*, *Distribution Code* or other rules and regulations issued by the *ERC* and *DOE* under the *Act*, where such industry code or 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; or
- (j) 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; or

- (k) An obligation to settle payment under the WESM Rules; or
- (I) The failure of a person referred to in clause 7.3.1.1 (f) to become registered as a *WESM Member* under chapter 2.
- 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 procedures set out in clauses 7.3.2 to 7.3.14 before pursuing any other dispute resolution mechanism, including but not limited to court action in relation to the dispute.
- 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 and Panel Group

- 7.3.2.1 The *PEM Board* shall appoint a person to act as the *Dispute Resolution Administrator*.
- 7.3.2.2 The *Dispute Resolution Administrator* shall:
  - (a) Have a detailed understanding and experience of alternative dispute resolution practice and procedures which do not involve litigation;
  - (b) Have the capacity to determine the most appropriate alternative dispute resolution procedures in particular circumstances;
  - (c) Have an understanding of the electricity industry;
  - (d) Has 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; and

- (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 within one year after the person ceases to be a Dispute Resolution Administrator.
- 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.
- 7.3.2.4 The *Dispute Resolution Administrator*, shall select at least seven persons to constitute the *dispute resolution group* from which a *dispute resolution panel* can be selected in accordance with clause 7.3.5.1.
- 7.3.2.5 For the avoidance of doubt, the *dispute resolution group* selected under clause 7.3.2.4 may include any person the *Dispute Resolution Administrator* considers to be appropriately qualified in accordance with clause 7.3.2.7.
- 7.3.2.6 Each person appointed to the *dispute resolution group* under clause 7.3.2.4:
  - (a) Is appointed for one year and is then eligible for reappointment;
  - (b) Is appointed on such other terms and conditions as the *Dispute Resolution Administrator* determines; and
  - (c) Shall be approved by the *PEM Board*.

# 7.3.3 Dispute Management Systems

All of the parties which are listed in clauses 7.3.1.1 (a) to (e) shall implement and adopt a *dispute management system* which is approved by the *PEM Board*.

# 7.3.4 Dispute Resolution Process

- 7.3.4.1 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.
- 7.3.4.2 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.

- 7.3.4.3 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.
- 7.3.4.4 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*.
- 7.3.4.5 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.
- 7.3.4.6 If the *Dispute Resolution Administrator* is not reasonably satisfied that the dispute is one to which clause 7.3.1.1 applies, the procedures set out in clause 7.3.4.7 do not apply to the dispute.
- 7.3.4.7 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:
  - (a) Appoint a *dispute resolution panel* in accordance with clause 7.3.5; and
  - (b) Refer the dispute for resolution by the *dispute resolution panel* appointed under clause 7.3.5,
  - within five *business days* of receiving any information from the parties to the dispute under clause 7.3.5.4.
- 7.3.4.8 Subject to all time limits specified in clause 7.3.5, nothing in this clause 7.3 precludes the *Dispute Resolution Administrator* from facilitating resolution of the dispute by agreement between the parties to the satisfaction of the parties without appointing or involving a *dispute resolution panel*.

## 7.3.5 The Dispute Resolution Panel

- 7.3.5.1 Subject to clause 7.3.4.8, where the *Dispute Resolution Administrator* refers a dispute for resolution to a *dispute resolution panel* under clause 7.3.4.7, the *Dispute Resolution Administrator* shall:
  - (a) Appoint a dispute resolution panel consisting of three people chosen by the Dispute Resolution Administrator as appropriate in the particular circumstances of the dispute from the dispute resolution group selected by the Dispute Resolution Administrator under clause 7.3.2.4; and
  - (b) Nominate one of the members of the *dispute resolution panel* to be the chairperson.

### 7.3.5.2 Replacement of a Dispute Resolution Panel Member

- 7.3.5.2.1 Each party to a dispute may petition to the *Dispute Resolution Administrator* for the removal of any one person appointed to the Dispute Resolution Panel stating the reasons why that person should be replaced. The *Dispute Resolution Administrator* may replace the person in question for valid reasons.
- 7.3.5.2.1The replacement(s) shall come from the group established in clause 7.3.2.4.
- 7.3.5.3 A person who has previously served on a dispute resolution panel is not precluded from being appointed to another dispute resolution panel established in accordance with clause 7.3.5.1.
- 7.3.5.4 When a matter is referred to a *dispute resolution panel* under clause 7.3.4.7 (b), the *dispute resolution panel* shall select the form of, and procedures to apply to, the dispute resolution process which:
  - (a) The *dispute resolution panel* considers appropriate in the circumstances; and
  - (b) Shall:
    - (1) Be simple, quick and inexpensive;
    - (2) Take account of the skills and knowledge required for the relevant dispute;
    - (3) Observe the rules of law; and
    - (4) Encourage resolution of disputes without formal legal representation or reliance on legal procedures.
- 7.3.5.5 The dispute resolution process will take place at a venue determined by the *dispute resolution panel* in consultation with the parties and may include either party's premises or any other premises.
- 7.3.5.6 The parties shall comply with any procedural requirements imposed by the *dispute resolution panel* in the resolution of the dispute including a requirement to exchange submissions, documents and information.

- 7.3.5.7 The dispute resolution panel shall ensure that the dispute resolution process is completed and that the dispute resolution panel has given notice of its resolution of the dispute as soon as practicable but in any event within twenty business days of the dispute being referred to the dispute resolution panel (or such longer period as the Dispute Resolution Administrator may permit following a request by the dispute resolution panel for an extension of time).
- 7.3.5.8 Within ten *business days* of receiving notification from the *dispute resolution panel* of its resolution of the dispute, the parties shall provide written notice to the *dispute resolution panel* describing all action taken in accordance with the resolution of the *dispute resolution panel*.

## 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 Legal Representation

Legal representation before the *dispute resolution panel* may be permitted by the *dispute resolution panel* where the *dispute resolution panel* considers it appropriate or desirable.

# 7.3.9 Cost of Dispute Resolution

The reasonable costs of the parties to the dispute may be allocated by the *dispute resolution panel* for payment by one or more parties as part of its resolution.

#### 7.3.10 Effect of Resolution

- 7.3.10.1A 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.
- 7.3.10.2A 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.
- 7.3.10.3If a resolution of the *dispute resolution panel* applies to a person referred to in clauses 7.3.1.1(a) to (e) that person shall comply with the resolution of the *dispute resolution panel* to the extent that the resolution applies to that person, notwithstanding that the person was not a party to the dispute.
- 7.3.10.4If 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*.

#### 7.3.11 Recording and Publication

- 7.3.11.1When the *dispute resolution panel* resolves a dispute, the chairperson of the *dispute resolution panel* shall send written details of the resolution of the dispute to the *Dispute Resolution Administrator*, the *PEM Board*, the *ERC* and the *Market Operator* as soon as practicable.
- 7.3.11.2Subject to clause 5.3, the details and results of each dispute which the dispute resolution panel resolves (including the reasons why the Dispute Resolution Administrator decided to appoint particular people to the dispute resolution panel) shall be published and made available to WESM Members as soon as practicable after the resolution of the dispute by the dispute resolution panel.
- 7.3.11.3Claims 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.

#### 7.3.12 Judicial Review

Following *ERC* resolution of the dispute, any case which involves question of fact may be appealable to the Court of Appeals and those which involves question of law may be directly appealable to the Supreme Court.

### 7.3.13 Limitation of Liability

The Dispute Resolution Administrator, dispute resolution panel and its members are not to be 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, the dispute resolution panel, or its members, as the case may be, acted with malice, manifest impartiality, bad faith, gross incompetence or gross negligence.

## 7.3.14 Indemnity

Notwithstanding clause 7.3.13, except for liability arising out of conduct involving malice, manifest impartiality, bad faith, gross incompetence or gross negligence, if the *Dispute Resolution Administrator*, the *dispute resolution panel* or the members thereof is made liable to pay any amount for loss or damage suffered or incurred by a person referred to in clauses 7.3.1.1(a) to (f) or any other person as a consequence of any of its acts or omissions in performance of dispute resolution, the *PEM Board* shall indemnify said persons through an indemnification process to be developed by the *PEM Board*.

- (a) For the full amount adjudged; and
- (b) For costs and expenses incurred by that person in defending itself in the related proceedings.

#### **CHAPTER 8**

### **RULE CHANGE**

# 8.1 SCOPE OF CHAPTER 8

Upon the actual commercial operation of the *spot market*, changes, amendments, and modifications of the *WESM Rules* 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 *Rule Change Committee*;
- (b) The procedure for effecting a change to the WESM Rules; and
- (c) The procedure for approval of a change to the WESM Rules.

### 8.2 RULE CHANGE COMMITTEE

## 8.2.1 Establishment of Rule Change Committee

The *PEM Board* shall establish a *Rule Change Committee* in consultation with industry participants.

#### 8.2.2 Composition of Rule Change Committee

- 8.2.2.1 The *Rule Change Committee* shall be comprised in a manner that is consistent with the composition of the *PEM Board* except that the persons representing each of the sectors and other groups on the *Rule Change Committee* shall not be the same persons as those who are *Directors* on the *PEM Board*.
- 8.2.2.2 The principles applicable to the composition and operation of the *PEM Board* as set out in clause 1.4.2 apply also to the composition and operation of the *Rule Change Committee*.

#### 8.2.3 Membership requirements – PEM Board

Each member of the Rule 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.

#### 8.2.4 Termination

The *PEM Board* may terminate the appointment of any person appointed to the *Rule 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 resigns or dies; or
- (d) The person fails to discharge the obligations of their office.

#### 8.2.5 Appointment termination

If the *PEM Board* decides to terminate a person's appointment in accordance with clause 8.2.4, the *PEM Board* shall appoint another representative from the same membership category to fill that person's place on the *Rule Change Committee* within 20 *business days*.

#### 8.2.6 Resignation

A person may resign from the *Rule Change Committee* by giving notice in writing to the *PEM Board*.

# 8.2.7 Conduct of meetings

The *Rule Change Committee* shall meet and regulate its meetings and conduct its business in a manner which does not conflict with the *WESM Rules*.

#### 8.2.8 Advice and assistance

The Rule Change Committee may obtain such advice or other assistance as it thinks appropriate including, without limitation, advice or assistance from persons with experience relevant to any change to the WESM Rules which the Rule Change Committee is considering and from WESM Members who are likely to be affected by any change.

# 8.3 REFERRAL OF MATTERS TO THE RULE CHANGE COMMITTEE

### 8.3.1 Rule change proposals

The *Market Operator*, the *Government* or any *WESM Member* and other interested parties may submit proposals for changes to the *WESM Rules* to the *PEM Board*.

#### 8.3.2 Form of submission

Proposals for a change or changes to the WESM Rules shall:

(a) Be in writing and addressed to the *PEM Board*;

- (b) Include the name and address of the applicant;
- (c) Demonstrate that the change to the WESM Rules is:
  - (1) Consistent with the WESM objectives;
  - (2) Feasible;
  - (3) Not unreasonably costly to implement; and
  - (4) A more appropriate or better means of achieving the criteria set out in clauses 8.3.2 (c) (1) to (c) (3), where the effect of the change to the WESM Rules will be to replace an existing provision of the WESM Rules;
- (d) Include a brief statement of the reasons why a change to the WESM Rules is necessary or desirable; and
- (e) Contain sufficient information to permit a proper consideration by the *Rule Change Committee* of those reasons, including the public benefit (if any) of making the change to the *WESM Rules*.

# 8.3.3 PEM Board obligations

The PEM Board shall:

- (a) Keep a register of all proposals for a change in the WESM Rules submitted to it; and
- (b) Give due course to the proposal within 5 *business days* from receipt thereof.

# 8.4 CONSIDERATION OF PROPOSED RULES CHANGE BY THE RULES CHANGE COMMITTEE

# 8.4.1 Assessment of proposed Rule change

Within 10 business days from the referral from the *PEM Board*, the *Rules Change Committee* shall assess whether the proposed change to the *WESM Rules* is:

- (a) Consistent with the WESM objectives;
- (b) Feasible;
- (c) Not unreasonably costly to implement; and
- (d) A more appropriate or better means of achieving the criteria set out in clauses 8.4.1 (a) to (c), where the effect of the change to the WESM Rules will be to replace an existing rule.

# 8.4.2 Discretions when assessment proposed Rule change

In considering whether a proposed rule change satisfies the criteria, which are set out in clause 8.4.1, the *Rules Change Committee* may:

 (a) Take into account any information and documents which the Rules Change Committee reasonably considers to be relevant to its consideration of the proposed change to the WESM Rules;

- (b) Consult with such persons as the *Rules Change Committee* reasonably considers will be likely to be affected by the proposed change to the *WESM Rules*:
- (c) Seek such information and views from any person in relation to the proposed change to the WESM Rules as may be practicable under the circumstances; and
- (d) Refer the proposed change to the *WESM Rules* to a working group comprising of persons having such expertise as the *Rules Change Committee* in its absolute discretion considers to be reasonable in all the circumstances for the purpose of delegating to that working group any obligation or task of the *Rules Change Committee* set out in clauses 8.4.2, 8.4.4 and 8.4.6, other than this clause 8.4.2 (d).

## 8.4.3 Notification following failure to satisfy criteria

If the Rules Change Committee concludes that a proposed change to the WESM Rules does not satisfy the criteria set out in clause 8.4.1, the Rules Change Committee shall notify the proponent and the PEM Board within 10 business days after receipt of proposal of its non-adoption of the proposal including the reason for its decision.

## 8.4.4 Notification following satisfying criteria

If the Rules Change Committee concludes that a proposed change to the WESM Rules satisfies the criteria which are set out in clause 8.4.1, the Rules Change Committee shall:

- (a) Notify the *PEM Board*, all *WESM Members* and all other interested parties of the proposed change to the *WESM Rules*; and
- (b) Invite such parties to make written submissions regarding the proposed change to the *WESM Rules* within the next 30 *business days* after receipt of proposed rule change.

### 8.4.5 Submissions regarding proposed Rule change

To be validly considered, a written submission made in response to a proposed change to the *WESM Rules* invited under clause 8.4.4 (b) must be received by the *Rules Change Committee* no later than 30 *business days* after the notice referred to in clause 8.4.4 (a) is given.

#### 8.4.6 Consideration of submissions

The *Rules Change Committee* shall consider all valid submissions which it receives within 60 *business days* from the date the notification is given under clause 8.4.4(a).

# 8.4.7 Approval of proposed Rule change

If the Rules Change Committee, after having considered all valid submissions, concludes that it is necessary or desirable to give effect to the proposed change to

the WESM Rules, the proposed change to the WESM Rules shall be submitted to the PEM Board for approval.

# 8.5 CONSIDERATION OF PROPOSED RULES CHANGES BY THE PEM BOARD

## 8.5.1 PEM Board assessment of proposed Rule change

If the Rules Change Committee submits a proposed change to the WESM Rules to the PEM Board for approval in accordance with clause 8.4.7, the PEM Board shall, within 10 business days from receipt thereof, assess whether:

- (a) The proposed change to the *WESM Rules* satisfies the criteria which are set out in clause 8.4.1; and
- (b) The processes and procedures set out in clause 8.4 have been duly followed.

### 8.5.2 PEM Board discretions when assessing proposed Rule change

In considering whether a proposed change to the *WESM Rules* satisfies the criteria which are set out in clause 8.4.1, 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 proposed change to the *WESM Rules*;
- (b) Consult with such persons as the *PEM Board* reasonably considers will be likely to be affected by the proposed change to the *WESM Rules*; and
- (c) Seek such information and views from any person in relation to the proposed change to the *WESM Rules* as may be practicable in the circumstances.

### 8.5.3 Notification following unsuccessful proposal

- 8.5.3.1 If the *PEM Board* concludes that a proposed change to the *WESM Rules* does not satisfy the criteria set out in clause 8.4.1, the *PEM Board* shall notify:
  - (a) The Rules Change Committee:
  - (b) Any parties who made written submissions to the *Rule Change Committee* under clause 8.4.4; and
  - (c) The DOE and the ERC,

within 10 *business days* of reaching that conclusion and shall provide reasons for its decision.

- 8.5.3.2 If the *PEM Board* determines that the processes and procedures set out in clause 8.4 have not been duly followed, the *PEM Board* shall:
  - (a) Refer the proposed change to the WESM Rules back to the Rules Change Committee so that the procedural error can be

- rectified within the earliest possible time in accordance with 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 clause 8.4 in the future.

## 8.5.4 Submitting proposed Rule change for approval

If the *PEM Board* concludes that the proposed change to the *WESM Rules* satisfies the criteria which are set out in clause 8.4.1 and that the processes and procedures set out in clause 8.4 have been duly followed, the *PEM Board* shall submit the proposed change to the *WESM Rules* to the *DOE* for approval.

#### 8.6 APPROVAL OF PROPOSED RULES CHANGES

## 8.6.1 DOE assessment of proposed Rule change

If the *PEM Board* submits a proposed change to the *WESM Rules* to the *DOE*, for approval in accordance with clause 8.4.4, the *DOE* shall assess whether the proposed change to the *WESM Rules* satisfies the criteria which are set out in clause 8.4.1.

# 8.6.2 DOE discretions when assessing proposed Rule change

In considering whether a proposed change to the *WESM Rules* satisfies the criteria which are set out in clause 8.4.1, the *DOE*, may:

- (a) Take into account any information and documents which the *DOE*, reasonably considers to be relevant to its consideration of the proposed change to the *WESM Rules*;
- (b) Consult with such persons as the *DOE*, reasonably considers will be likely to be affected by the proposed change to the *WESM Rules*; and
- (c) Seek such information and views from any person in relation to the proposed change to the WESM Rules as may be practicable in the circumstances.

#### 8.6.3 Notification following failure to satisfy criteria

If the *DOE* concludes that a proposed change to the *WESM Rules* does not satisfy the criteria which are set out in clause 8.4.1, the *DOE*, shall notify:

- (a) The PEM Board;
- (b) The person who proposed the change to the WESM Rules; and
- (c) Any party who made written submissions to the *Rules Change Committee* under clause 8.4.4.

within 10 business days of reaching that conclusion and shall provide reasons for its decision.

### 8.6.4 Approval of proposed Rule change

- 8.6.4.1 If the *DOE* concludes that a proposed change to the *WESM Rules* is consistent with the Act and the public interest and satisfies the criteria which are set out in clause 8.4.1, the proposed change to the *WESM Rules* will take effect when the change to the *WESM Rules* is *published*, or on such later date as the *DOE*, determines.
- 8.6.4.2 The *PEM Board* shall develop a classification system of rule change proposals that will delineate proposals requiring *DOE* review and approval vis-à-vis proposals that can be acted upon at the *PEM Board* level. This classification shall be approved by the *DOE*.

## 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 WESM Rule change proposals which have been made in the previous six month period;
- (b) The progress of those *WESM Rule* change proposals in accordance with the procedures prescribed in this chapter 8;
- (c) The reason for any delays in relation to the progress of those WESM Rule change 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 *WESM Rule* change 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.

# 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;
- (I) 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
- (d) 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

- 10.2.1.1Within 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.
- 10.2.1.2The *DOE* shall constitute the *Autonomous Group Market Operator* ("*AGMO*"), initially under the administrative supervision of the *TRANSCO*.

## 10.2.2 The Market Operator

10.2.2.1The 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.

- 10.2.2.2The 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".
- 10.2.2.3Not 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

- 10.2.3.1The 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.
- 10.2.3.2The 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

- 10.2.4.1Subject 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*.
- 10.2.4.2A *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*.
- 10.2.4.3Pursuant 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.
- 10.2.4.4For 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

- 10.3.1.1Initially, only energy shall be traded upon commencement of the *interim WESM*.
- 10.3.1.2The composition of the *market network model* may be limited in scope during the operation of the *interim WESM*.

#### 10.3.2 Ancillary Services

- 10.3.2.1The *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.
- 10.3.2.2The reserve trading amount shall be based on the cost of *reserves* contracted for by the *System Operator*.
- 10.3.2.3When 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* for *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

- 10.3.4.1The installation and maintenance of *metering installations* shall initially be carried out by the *TRANSCO*.
- 10.3.4.2A *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* is 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
- (c) 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. Prior to the *spot market commencement date*, the *Market Operator* shall:
  - (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 load-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 Watthours (Wh) and multiples thereof.

**Administered Price Cap**. A price cap imposed by the *Market Operator* to the *Trading Participants* during *market suspension* and *intervention* to be used for settlements. Said price cap shall be developed and published by the *Market Operator* for *ERC* approval.

**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 calendar month commencing on 12.00 am on the first day of each calendar month.

**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 is open for business.

**Central Dispatch**. The process of scheduling by the *Market Operator* and issuing direct instructions to electric power industry participants by the *System Operator* to 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.

**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 limited below the level to which it would otherwise have been *dispatched* by the *Market Operator* on the basis of its *energy offer*.

**Constrain-on.** In respect of a *generating unit*, the output of that *generating unit* is limited above the level to which it would otherwise have been *dispatched* by the *Market Operator* on the basis of its *energy offer*.

**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 2% per annum above the *interest rate*.

**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.

**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 or scheduled load and for each 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.

**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.

**Dispute Management System.** A system for managing disputes privately between the relevant parties and without resorting to the formal dispute resolution process in clause 7.3, and which has been approved by the *PEM Board* under clause 7.3.3.

**Dispute Resolution Administrator.** A person appointed by the *PEM Board* under clause 7.3.2.1.

**Dispute Resolution Group.** A pool of at least seven experts appointed by the *Dispute Resolution Administrator* from which the *Dispute Resolution Panel* is formed.

**Dispute Resolution Panel.** The panel appointed by the *Dispute Resolution Administrator* in accordance with clause 7.3.5.1.

**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 Directions.** Directions issued by the *Market Operator* in an *emergency* under clause 6.5.1.

**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*.

**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.** Generation 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 *System Operator* in accordance with clause 3.8.14.

**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.

**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 commencing on 1 July in a calendar year and terminating on 1 July in the following calendar year.

**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.

**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 prevailing 91-day Treasury Bill rate published by the Bureau of Treasury.

**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.

**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*.

**Intervention.** A measure taken by the *System Operator* when the *grid* is in extreme state condition as established in the *Grid Code* arising from a threat to *system security*, force majeure or emergency. During such event, the administered price cap shall be used for settlements.

**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 Load.** The electricity delivered to a *connection point* and purchased by a *Customer* from the *spot market*.

**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*.

**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.

**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 in accordance with the procedures to be developed under clause 3.5.4, of the *load*, net of any non-scheduled generation, to be matched, along with any *scheduled load*, by generation from scheduled *generation facilities*.

**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 Operator* in 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.

**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.

**Normally Off.** A situation in which a *load* does not exist unless it is bid into the *spot* market.

**NRE Generating Unit with Intermittent Energy Resource.** A new and renewable energy generating unit or group of units connected to a common connection point whose energy resource is location specific and has a natural variability which renders the output unpredictable and the availability of the resource inherently uncontrollable, which include plants utilizing wind or ocean energy.

**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*.

**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*.

**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.

**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 a 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.

**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, 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 3.13.15.

**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 Operator* in 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 Operator* in 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 220 kV 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 220 kV 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*.

**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 Operator* in 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.

**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;
- (d) Shall be for a minimum block size of five (5) MW;
- (e) Shall have monotonically increasing prices, starting from zero *generation*;
- (f) May include negative prices;
- (g) Shall include maximum up/down ramp rates;
- (h) Shall include a validity period of offers (e.g. valid for specified period or valid until offer is revised.); and
- (i) Shall include an operating range (upper and lower limit).

#### A1.2 Reserve Offers

Regulation reserve offers from Generators shall consist of:

- (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;
- (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; and
- (f) Shall include validity period of reserve offers.

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 five (5) MW;

- (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;
- (f) Shall include validity period of reserve offers; and
- (g) Operating range (upper and lower limit).

Contingency reserve offers from Customers shall consist of:

- (h) A maximum response level for the relevant reserve category (MW);
- (i) A maximum proportion of the forecast/scheduled load which may be interrupted;
- (j) Up to 3 reserve offer blocks (MW/block);
- (k) A minimum block size of one (1) MW;
- (I) Monotonically increasing prices; and
- (m) Shall include validity period of reserve offers.

#### 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 Database**

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) Locations 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 identity and characteristics of *metering* equipment 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 as 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 the 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 identifications and access rights; and
  - (f) "Write" password (to be contained in a hidden or protected field).

# 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 <i>ERC</i> ) |
|-----------------------------------|----------------------|---|
| 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.