



Corporate Strategy & Communications Department
 Corporate Communications Division
 Knowledge Management Section
Course Syllabus
Advanced WESM Training on Trading Operations

COURSE TITLE	Advanced WESM Training on Trading Operations
COURSE REQUIREMENT	This course serves as a higher-level training for all qualified participants. To enroll, the Basic WESM training shall have been completed. Interested parties must comply with the training enrollment process in order to be accommodated to the course.
DURATION	1 day (approximately 8 lecture hours + 0.5 hour for pre-lecture introductions)

I. COURSE DESCRIPTION

This course will equip the participants with the essential knowledge on the operations of WESM, in greater detail. This is aimed at providing a deeper understanding of the Trading Operations in the WESM by employing in-depth discussions, illustrations using real market data and case studies, if applicable.

II. COURSE OUTLINE

#	TOPIC	DESCRIPTION	APPROX. LENGTH
I	Market Network Model (MNM) Development and Maintenance		1.5 hours
I-1	-What is the market network model (MNM)	Procedures in development of Market Network Model (MNM), including the rationale for MNM development and the responsibilities of the Market Operator on MNM.	
II-2	-MNM development and maintenance	Criteria for the Market Network Model MNM Components and Modeling; Sample MNM Updating the MNM	
II	Load Forecasting Methodology		45 mins
II-1	Forecasting Basics	Background, concept and processes in performing Load Forecasting.	
II-2	SDLF Methodology	Load Forecasting Methodologies: Similar Day Load Forecast (SDLF) Methodology and Load Predictor (LPD) Methodology	
II-3	LDP Methodology		
II-4	WESM Forecasting Method	Application of TOD Method and Load forecasting considerations including weather data, load demand, power system condition, among others.	



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III Procedures For Normal System Condition			3 hours
III-1	-Pre-dispatch market projection	Week-Ahead Projection (WAP) and Day-Ahead Projection (DAP) and the execution timelines	
III-2	-RTD and RTX processes	Real-Time Dispatch and Ex-post Processes <ul style="list-style-type: none"> - Information Requirements - Dispatch Engine Workflow - Timeline of RTD and RTX Processes - Determination of Ex-Ante Quantity - Conditions for Initial Quantity 	
III-3	-Bids and offers	Generator Categories as defined in the WESM Rules (Scheduled, Non-scheduled, NRE)	
III-4	-Outage scheduling	Market Offer Design for scheduled and non-scheduled generators; Standing offers/bids, Market Closing, Generation Offer and bilateral arrangements; Tie-breaking Rule	
III-5	-Contingency planning		
III-6	-System status report		
III-7	-Dispatch implementation		
III-8	-Daily operations report		
III-9	-Market information publication	Impact on market results of non-compliances	
Other Considerations and Reporting			
IV Management Procedure for Load Shedding			1 hour
IV-1	Background	Introduction to load shedding	
IV-2	Responsibilities	Responsibilities of involved parties	
IV-3	Load Shedding Procedures	Pre-conditions/requirements for Load Shedding; Manual and Automatic Load Dropping; Load Shedding Allocation Program	
V Procedures for Start-up and Shutdown of Generators			1 hour
V-1 V-2 V-3	-Start-up of generating units -Shutdown of generating units -Courses of action if trading requirement is violated	Principles for the Start-up of Generating Units; Trading and Dispatch Requirements; Unit Start-up Sequence; Provisions for Starting-up Generating Units; Unit Shutdown Sequence; Provisions for Shutting Down Generating Units	
VI	Management of Must-Run Units		45 mins



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#	TOPIC	DESCRIPTION	APPROX. LENGTH
VI-1 VI-2 VI-3	-Introduction to must-run units -Responsibilities of involved parties -Considerations and criteria for selection	Procedures and criteria for the selection and management of Must-Run Units (MRU)	
VII	Procedures for Emergency System Condition		
VII-1 VII-2 VII-3	-Market Suspension and Intervention -System Emergency Restoration -Report and Documentation of Events	Establishes the guidelines and procedures that will be implemented in the WESM for declaring market intervention and for the actions that will be carried out during market intervention. It also describes the procedures to be implemented when the ERC suspends the market or declares market failure and responsibilities of each entity for system restoration.	