

**WHOLESALE ELECTRICITY SPOT MARKET
RULES CHANGE COMMITTEE**

RESOLUTION NO. 2010-09

**Proposed Changes to the WESM Rules and PEM Audit Manual
concerning Software Changes**

WHEREAS, on 24 March 2009, the PEMC IS/IT Management Department (IMD) submitted the Proposed Amendments to the WESM Rules and PEM Audit Manual concerning Software Changes to the Rules Change Committee (RCC), for consideration and approval;

WHEREAS, on 10 March 2010, the proposed amendments were approved;

WHEREAS, during the 47th PEM Board (the "Board") Meeting on 27 April 2010, the Board remanded to and directed the RCC to further deliberate the issues affecting the liability of the PEM Board and the process of approving the changes in the software;

WHEREAS, to address the issues raised by the Board, the PEMC developed an internal Information and Communication Technology (ICT) Change Management Process which establishes the process of evaluation, approval, implementation and certification of new or modified software;

WHEREAS, during the 35th RCC Meeting on 16 June 2010, the PEMC IMD presented to the RCC the revised proposed amendments to the WESM Rules and PEM Audit Manual which incorporate the ICT Change Management Process;

WHEREAS, during the said 35th RCC Meeting, the RCC, upon observation that most of the proposed provisions originally submitted by the PEMC IMD and subsequently approved by the RCC were removed, requested the PEMC IMD to withdraw their original proposal and submit a new one;

WHEREAS, on 18 June 2010, a new proposal which reflects the ICT Change Management Process was submitted to the RCC by the PEMC IMD;

WHEREAS, during the 36th RCC Meeting on 21 July 2010, the proposed amendments were presented to the RCC, for discussion and approval;

WHEREAS, during the 37th RCC Meeting on 04 August 2010, the RCC reached consensus to approve the proposed amendments, incorporating RCC's comments and recommendations;

NOW THEREFORE, we, the undersigned and in behalf of the sector we represent, hereby resolve as follows:

RESOLVED, that the proposed amendments to the WESM Rules (attached as Annex "A") and PEM Audit Manual (attached as Annex "B"), as revised by the RCC, are adopted and approved in full;



RESOLVED FURTHER, that the effectivity of the proposed amendments to the PEM Audit Manual shall take effect upon the approval and publication of the proposed changes to the WESM Rules; and

RESOLVED FINALLY, that the proposed amendments to the WESM Rules and PEM Audit Manual be endorsed to the PEM Board for approval.

Done this 04 August 2010, Pasig City.

<p>Approved by:</p> <p>RULES CHANGE COMMITTEE</p> <p> Epictetus E. Patalinghug Acting Chairperson Independent University of the Philippines (UP)</p>	
<p>Members:</p>	
<p> Cherry Aquino-Javier Generation Sector AES Philippines (AES)</p>	<p> Ralph T. Crisologo Generation Sector SN Aboitiz Power (SNAP)</p>
<p> Liberty Z. Dumlao Generation Sector Power Sector Assets and Liabilities Management Corporation (PSALM)</p>	<p> Alfredo L. Licudine, Jr. Generation Sector National Power Corporation (NAPOCOR)</p>
<p>Raul Joseph G. Seludo Transmission Sector National Grid Corporation of the Philippines (NGCP)</p>	<p> Robinson P. Descanzo Market Operator Philippine Electricity Market Corporation (PEMC)</p>
<p> Vicente C. Sioson Distribution Sector (PDU) Manila Electric Company (MERALCO)</p>	<p> Augusto D. Sarmiento Distribution Sector (PDU) Dagupan Electric Corporation (DECORP)</p>
<p> Jose P. Santos Distribution Sector (EC) Ilocos Norte Electric Cooperative (INEC)</p>	<p> Conrado D. Pecjo Supply Sector Angeles Power, Inc.</p>
<p> Gloria P. Gerilla-Teknomo Independent CPI-Energy Phils., Inc.</p>	
	<p>Certified True and Correct:</p> <p> Elaine D. Gonzales RCC Secretary PEMC</p>

**Proposed Changes to the WESM Rules concerning Software Changes
RCC/WESM-WR-10/05**

Original Provision	PEMC IMD Proposed Amendment	Rationale	RCC-Approved Proposed Amendment	Remarks
	<i>On 18 June 2010</i>	Rationale		
<p>5.2.6.2 Market Audit</p> <p>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:</p> <p>(a) Valid audit certificates for the current versions of all numeric software;</p> <p>(b) The calculations and allocations performed by the metering and settlements systems;</p> <p>(c) Billing and information systems;</p> <p>(d) The scheduling and dispatch processes;</p> <p>(e) The processes for software management; and</p> <p>(f) The Market Operator's compliance with the WESM Rules.</p>	<p>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:</p> <p>(a) Valid audit certificates for the current versions of all numeric software;</p> <p>(b) <u>All new software or modifications to the existing software implemented through a formal IT change management process, provided these are subject to post audit within one year from deployment;</u></p> <p>(c) (b) The calculations and allocations performed by the metering and settlements systems;</p> <p>(d) (c) Billing and information systems;</p> <p>(e) (d) The scheduling and dispatch processes;</p> <p>(f) (e) The processes for software management <u>IT Change Management Process;</u> and</p> <p>(g) (f) The Market Operator's</p>	<p>The proposed amendments to the WESM Rules, particularly item (b), enable the Market Operator to implement software changes through a formal change management process which ensures proper review, approvals, monitoring and audit without undue delays in software implementation or disruptions in the market operations.</p> <p>The proposed post audit requirement within one year provides assurance that:</p> <p>(1) there are no material errors/mistakes in the software</p> <p>(2) appropriate review and proper approvals were obtained prior to implementation of the software change</p> <p>All other proposed amendments are clerical.</p>	<p>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:</p> <p>(a) Valid audit certificates for the current versions of all numeric software;</p> <p>(b) <u>All new software or modifications to the existing software implemented through an formal Information and Communications Technology (ICT) change management process, provided these are subject to post audit within one year from deployment (The ICT Change Management process is instituted by the Market Operator to ensure proper and timely review, approval, and monitoring of all activities on all stages of the change management process);</u></p> <p>(c) (b) The calculations and</p>	<p>-Approved, as amended-</p> <p>The PEMC IMD's proposed amendments mention an IT Change Management Process; however the process was not clearly defined. The WESM Rules should also provide a brief and general definition of the ICT change management process.</p>

RCC Resolution 2010-09_ Proposed Changes to the WESM Rules and PEM Audit Market Manual Concerning Software Changes

Original Provision	PEMC IMD Proposed Amendment		RCC-Approved Proposed Amendment	
	compliance with the WESM Rules.		allocations performed by the metering and settlements systems; (d) (e) Billing and information systems; (e) (d) The scheduling and dispatch processes; (f) (e) The processes for software management including the ICT Cchange Mmanagement Pprocess ; and (g) (f) The Market Operator's compliance with the WESM Rules.	

Proposed Changes to the PEM Audit Manual concerning Software Changes
RCC/WESM-WM-10/06

Original Provision	PEMC IMD Proposed Amendment		RCC-Approved Proposed Amendment	
	On 18 June 2010	Rationale		Remarks
<p>10.1.1 Software of the Market Operator The Market Operator shall not implement a new software or associated system, or modify an existing software or its associated system for generation scheduling, dispatch or settlement or price calculation relevant to the WESM without prior –</p> <p>(a) Notice to all WESM Members and the PEM Board; and</p> <p>(b) Auditing the software and/or system as established in this Manual, to obtain a certification that the software and its associated system are adequate and in full compliance with the Market Rules.</p>	<p>The Market Operator shall not implement a new software or associated system, or modify an existing software or its associated system for generation scheduling, dispatch or settlement or price calculation relevant to the WESM without prior –</p> <p>(a) <u>Prior Notice</u> to all WESM Members and the PEM Board; and</p> <p>(b) <u>Auditing the software and/or system as established in this Manual, to obtain a certification that the software and its associated system are adequate and in full compliance with the Market Rules Undergoing the PEMC ICT Change Management Process.</u></p> <p><u>All new software or modifications to existing software implemented through the PEMC ICT Change Management Process shall be subject to post audit and/or</u></p>	<p>The present PEM Audit Market Manual (the “Manual”) requires all software changes to undergo audit prior to implementation.</p> <p>Considering the time that it takes to complete the required audit tests (about 6 months) and the rapid rate at which technologies change, software sought to be implemented may no longer be responsive to market needs by the time it is approved by the PEM Auditor.</p> <p>In addition, the reports, meetings and test-runs required under the Manual take up much of the market’s resources, especially since the PEM Auditor is likely to contract highly-paid external experts to test and certify new or modified software.</p> <p>The following proposed revisions address the time and resource constraints imposed upon the Market Operator by the present software audit process. The objective is to enable the</p>	<p>The Market Operator shall not implement a new software or associated system, or modify an existing software or its associated system for generation scheduling, dispatch or settlement or price calculation relevant to the WESM without prior –</p> <p>(a) <u>Prior Notice</u> to all WESM Members and the PEM Board; and</p> <p>(b) <u>Auditing the software and/or system as established in this Manual, to obtain a certification that the software and its associated system are adequate and in full compliance with the Market Rules Undergoing the ICT Change Management Process.</u></p> <p><u>All new software or modifications to existing software implemented through the ICT Change Management Process shall be subject to post</u></p>	<p>-Approved, as amended-</p>

Original Provision	PEMC IMD Proposed Amendment		RCC-Approved Proposed Amendment	
	<i>On 18 June 2010</i>	Rationale		Remarks
	<u>certification within one year from deployment.</u>	<p>Market Operator to implement software changes through the PEMC IT Change Management Process which ensures proper review, approval, monitoring and audit without undue delays or disruptions in the market operations.</p> <p>The proposal also requires a post audit on all new software or changes thereof to ensure proper verification of new or modified software.</p>	<u>audit and/or certification within one year from deployment. The ICT Change Management process is instituted by the Market Operator to ensure proper and timely review, approval, and monitoring of all activities on all stages of the change management process.</u>	<p>The PEMC IMD's proposed amendments mention an ICT Change Management Process; however, the process was not clearly defined.</p> <p>The PEM Audit Manual should also provide a brief and general definition of the ICT Change Management Process.</p>
<p>1.2.1 Scope This Manual covers all related activities and procedures in relation to the PEM Auditor, audits of the spot market and the Market Operator and special audits of WESM Members. This includes the following:</p> <p>xxx</p> <p>(g) Procedures and criteria for the PEM Auditor to assess the efficiency, validity and justification of proposed new software or modifications to existing software of the Market Operator;</p> <p>xxx</p>	<p>This Manual covers all related activities and procedures in relation to the PEM Auditor, audits of the spot market and the Market Operator and special audits of WESM Members. This includes the following:</p> <p>xxx</p> <p>(g) Procedures and criteria for the PEM Auditor to assess the efficiency, validity and justification of proposed new software or modifications to existing software of the Market Operator;</p> <p>xxx</p>	<p>For consistency with the changes in section 10.1.1 since post audit is required.</p>	<p>This Manual covers all related activities and procedures in relation to the PEM Auditor, audits of the spot market and the Market Operator and special audits of WESM Members. This includes the following:</p> <p>xxx</p> <p>(g) Procedures and criteria for the PEM Auditor to assess the efficiency, validity and justification of proposed new software or modifications to existing software of the Market Operator;</p> <p>xxx</p>	<p>-Approved, as proposed-</p>

Original Provision	PEMC IMD Proposed Amendment		RCC-Approved Proposed Amendment	
	<i>On 18 June 2010</i>	Rationale		Remarks
<p>3.2.1 Scope of Work and Functions The PEM Auditor has the following scope of work and specific functions:</p> <p>xxx</p> <p>(b) Review the adequacy and test any new, upgraded or modified software of the Market Operator for the WESM or to be provided to WESM Members for their own use;</p> <p>xxx</p>	<p>The PEM Auditor has the following scope of work and specific functions:</p> <p>xxx</p> <p>(b) Review the adequacy and test any new, upgraded or modified software of the Market Operator for the WESM or to be provided to WESM Members for their own use;</p> <p>xxx</p>	<p>For consistency with the changes in section 10.1.1 since post audit is required.</p>	<p>The PEM Auditor has the following scope of work and specific functions:</p> <p>xxx</p> <p>(b) Review the adequacy and test any new, upgraded or modified software of the Market Operator for the WESM or to be provided to WESM Members for their own use;</p> <p>xxx</p>	<p>-Approved, as proposed-</p>