



**WHOLESALE ELECTRICITY SPOT MARKET
RULES CHANGE COMMITTEE**

RESOLUTION NO. 2019-12

**Proposed Amendments to the (1) WESM Rules and (2) WESM Manual on
Billing and Settlement for Enhancements to the Determination of Initial
Prudential Requirements**

WHEREAS, the Independent Electricity Market Operator of the Philippines (IEMOP) re-submitted to the Rules Change Committee (RCC) its Proposed Amendments to the (1) WESM Rules and (2) WESM Manual on Billing and Settlement for Enhancements to the Determination of Initial Prudential Requirements as general amendments¹ on 10 June 2019;

WHEREAS, the proposal was submitted as urgent amendments on 12 February 2019 to the RCC and was approved as follows:

	Resolution	Date
RCC Approval	<ul style="list-style-type: none">• RCC Resolution No. 2019-01• RCC Resolution No. 2019-01B	<ul style="list-style-type: none">• 22 February 2019• 29 May 2019
PEM Board Approval	<ul style="list-style-type: none">• PEM Board Resolution No. 2019-10-07• PEM Board Resolution No. 2019-12-04	<ul style="list-style-type: none">• 27 March 2019• 29 May 2019

WHEREAS, the proposal aims to introduce an appropriate formula for the computation of the initial prudential requirements in line with the target commercial operation of WESM in Mindanao, as well as for new applications in the WESM;

WHEREAS, during the 153rd RCC Meeting held on 21 June 2019, IEMOP presented the proposed amendments to the RCC for approval for publication in the PEMC website;

¹ **Section 7.4 (b) WESM Manual on Procedures for Changes to the WESM and Retail Rules and Market Manuals.** Urgent amendments shall be effective for a period of not more than (6) months from publication its publication or until such time that a general amendment on the same matter has been approved and become effective, whichever comes first

WHEREAS, following the presentation and request, the RCC approved the publication of the proposed amendments in the PEMC website to solicit comments from WESM stakeholders, giving them until 06 August 2019 or thirty (30) working days from the date of publication (25 June 2019) to submit comments on the matter;

WHEREAS, Hedcor Inc. (HEDCOR) and Manila Electric Company (MERALCO) submitted comments to the proposal;

WHEREAS, during the 155th RCC Meeting held on 16 August 2019, the RCC deliberated on the proposal giving due consideration to the submitted comments and the corresponding responses of the proponent;

WHEREAS, clerical and minor revisions were introduced in the provisions for enhancements and clarity;

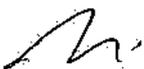
WHEREAS, there being no other matters left to be deliberated, the RCC approved the Proposed Amendments, as revised, to the (1) WESM Rules and (2) WESM Manual on Billing and Settlement for Enhancements to the Determination of Initial Prudential Requirements;

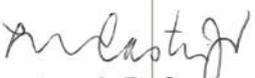
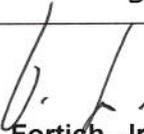
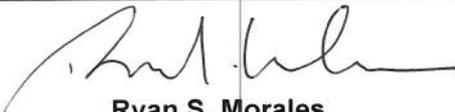
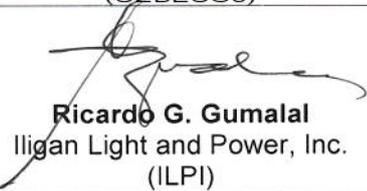
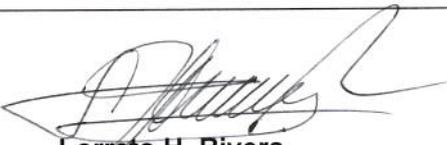
NOW THEREFORE, we, the undersigned in behalf of the sectors we represent, hereby resolve as follows:

RESOLVED, that the Rules Change Committee approves and adopts the Proposed Amendments to the (1) WESM Rules and (2) WESM Manual on Billing and Settlement for Enhancements to the Determination of Initial Prudential Requirements (Annex), thereby amending the WESM Rules and Issues 5.0 and 6.0 of the WESM Manual on Billing and Settlement;

RESOLVED FURTHER, that the Proposed Amendments to the (1) WESM Rules and (2) WESM Manual on Billing and Settlement for Enhancements to the Determination of Initial Prudential Requirements are hereby endorsed to the PEM Board for approval and subsequent transmittal to the DOE for promulgation;

Done this 16 August 2019, Pasig City.

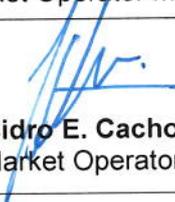


Approved by: THE RULES CHANGE COMMITTEE	
Independent Members:	
 Maila Lourdes G. de Castro Chairperson	 Francisco L.R. Castro, Jr.
 Allan C. Nerves	 Concepcion I. Tanglao
Generation Sector Members:	
 Dixie Anthony R. Banzon Masinloc Power Partners Co. Ltd. (MPPCL)	 Abner B. Tolentino Power Sector Assets and Liabilities Management Corporation (PSALM)
Jose Ildebrando B. Ambrosio NorthWind Power Development Corp. (NorthWind)	 Cherry A. Javier Aboitiz Power Corp. (APC)
Distribution Sector Members:	
 Virgilio C. Fortich, Jr. Cebu III Electric Cooperative, Inc. (CEBECO3)	 Ryan S. Morales Manila Electric Company (MERALCO)
 Ricardo G. Gumalal Iligan Light and Power, Inc. (ILPI)	 Jose P. Santos Ilocos Norte Electric Cooperative, Inc. (INEC)
Supply Sector Member:	
 Lorreto H. Rivera Team (Philippines) Energy Corporation (TPEC)	

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RCC-RESO-19-12

Proposed Amendments to the (1) WESM Rules and (2) WESM Manual on Billing and Settlement for Enhancements to the Determination of Initial Prudential Requirements

Market Operator Member:	
 Isidro E. Cacho, Jr. Independent Electricity Market Operator of the Philippines (IEMOP)	
System Operator Member:	
 Ambrocio R. Rosales National Grid Corporation of the Philippines (NGCP)	

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Proposed Amendments to the (1) WESM Rules and (2) WESM Manual on Billing and Settlement for Enhancements to the Determination of Initial Prudential Requirements

A. WESM Rules

Title	Clause	Provision	Proposed Amendment	Rationale
Amount of Security	3.15.4	Using available historical data, the <i>Market Operator</i> shall determine the initial <i>Prudential Requirements</i> of a new <i>WESM member</i> corresponding to the portion of its demand that is not covered by <i>bilateral contracts</i> , or ten percent (10%) of its total demand if fully covered by <i>bilateral contracts</i> , multiplied by the average actual market price of the previous twelve (12) billing periods.	Using available historical data, the <i>Market Operator</i> shall determine the initial <i>Prudential Requirements</i> of a new <i>WESM member</i> corresponding to the portion of its demand that is not covered by <i>bilateral contracts</i>, or ten percent (10%) of its total demand if fully covered by <i>bilateral contracts</i>, multiplied by the average actual market price of the previous twelve (12) billing periods. Using available historical data, <u>The <i>Market Operator</i> shall determine the initial <i>Prudential Requirements</i> of a new <i>WESM member</i> corresponding to the <i>projected maximum exposure of the new WESM member calculated as the average of the projected settlement amount for each complete billing period covered in the relevant Market Manual.</i></u>	To ensure the ability of new participants to meet their obligations, it is proposed that calculation of initial prudential requirements be calculated in more detail in order to increase the accuracy of projecting the maximum exposure of the <i>Market Operator</i> to the new participant. The <i>Projected Maximum Exposure</i> includes the projected load increase by the customer. The detailed calculation is proposed to be provided in the <i>Billing and Settlement Manual</i> .
Amount of Security	3.15.4.1	XXX If there is a change in the <i>bilateral contract</i> of a <i>WESM Member</i> , the <i>maximum exposure</i> shall be computed based on the <i>settlement amounts</i> estimated by the <i>Market Operator</i> using the average actual market price based on the <i>billing period</i> of	XXX If there is a change in the <i>bilateral contract</i> of a <i>WESM Member</i> , the <i>maximum exposure</i> shall be computed based on the <i>settlement amounts</i> estimated by the <i>Market Operator</i> using the average actual market price based on the <i>billing period</i> of	With the expiration in 2011 of the requirement under the EPIRA-IRR for distribution utilities to source at least 10% of their supply from the WESM, it is proposed that the minimum prudential

Proposed Amendments to the (1) WESM Rules and (2) WESM Manual on Billing and Settlement for Enhancements to the Determination of Initial Prudential Requirements

Title	Clause	Provision	Proposed Amendment	Rationale
		26 th March to 25 th September. In no case shall the maximum exposure be less than ten percent (10%) of the total demand. Average actual <i>market price</i> shall refer to the ratio of the total <i>spot market</i> payment of a <i>WESM Member</i> , which may include <i>spot market energy</i> and <i>reserve</i> transactions, to the total <i>metered quantities</i> net of <i>bilateral contract</i> quantities for each billing month. XXX	26 th March to 25 th September. In no case shall the maximum exposure be less than ten percent (10%) of the total demand. Average actual <i>market price</i> shall refer to the ratio of the total <i>spot market</i> payment of a <i>WESM Member</i> , which may include <i>spot market energy</i> and <i>reserve</i> transactions, to the total <i>metered quantities</i> net of <i>bilateral contract</i> quantities for each billing month. XXX	requirement be removed to reduce participation costs in the WESM for participants with exposure below 10% of their demand.

B. WESM Manual on Billing and Settlement Issue 5.0

Title	Section	Provision	Proposed Amendment	Rationale
Initial Assessment of Prudential Requirement	7.4.1	a. XXX b. XXX c. XXX d. XXX e. XXX f. XXX	a. XXX b. XXX c. XXX d. XXX e. XXX f. XXX	Re-number items c-f to j-m to insert proposed procedures for calculating the initial prudential requirement
Initial Assessment of Prudential Requirement	7.4.1 (a)	The intending WESM Member shall submit the information of its expected trading transactions in the WESM based on the total demand and bilateral contract.	The intending WESM Member shall submit the information of its expected trading transactions in the WESM based on the total demand and bilateral contract. <u>The initial prudential requirement of a WESM Member shall be calculated using projected data for trading intervals:</u> <u>i. if the WESM Member aims to begin trading in the WESM before August</u>	Consistent with current procedures for calculating actual prudential requirements, initial prudential requirements are proposed to be based on 26 March to 25 September transactions.





Proposed Amendments to the (1) WESM Rules and (2) WESM Manual on Billing and Settlement for Enhancements to the Determination of Initial Prudential Requirements

Title	Section	Provision	Proposed Amendment	Rationale
			<p><u>26, from complete <i>billing periods</i> within March 26 to September 25 of the same year; or</u></p> <p>ii. <u>if the <i>WESM Member</i> aims to begin trading in the <i>WESM</i> on or after August 26, from March 26 to September 25 of the succeeding year.</u></p>	<p>Provision on submission of information is transferred to items d-f.</p>
Initial Assessment of Prudential Requirement	7.4.1 (b)	Using available historical data, the Market Operator shall determine the initial Prudential Requirement of a new WESM Member corresponding to the portion of its demand that is not covered by its bilateral contracts, or ten percent (10%) of its total demand, whichever is higher, multiplied by the Average Actual Market Price of the previous twelve (12) billing periods.	<p>Using available historical data, the Market Operator shall determine the initial Prudential Requirement of a new WESM Member corresponding to the portion of its demand that is not covered by its bilateral contracts, or ten percent (10%) of its total demand, whichever is higher, multiplied by the Average Actual Market Price of the previous twelve (12) billing periods.</p> <p><u>The initial <i>prudential requirement</i> of a <i>WESM Member</i> shall be calculated as the average of the projected <i>settlement amount</i> for each complete <i>billing period</i> covered in the period defined in Section 7.4.1(a).</u></p>	Consistent with current procedures for calculating actual prudential requirements, initial prudential requirements are proposed to be based on average billing period settlement amounts.
Initial Assessment of Prudential Requirement	<u>7.4.1 (c)</u> (new)	N / A	<p><u>The projected <i>settlement amount</i> for each <i>billing period</i> of a <i>WESM Member</i> shall be calculated using the following formula:</u></p> $PSA = \frac{\sum_{i \in I} (PGEPEQ_i \times PEPEP_i)}{\sum_{i \in I} \sum_{c \in C} (PBCQ_{c,i} \times PEPEP_{c,i})}$	For better accuracy, it is proposed that initial prudential requirements be determined using the formula for calculating the settlement amount but with projected inputs.

**Proposed Amendments to the (1) WESM Rules and (2) WESM Manual on Billing and Settlement for
Enhancements to the Determination of Initial Prudential Requirements**

Title	Section	Provision	Proposed Amendment	Rationale
			<p>Where:</p> <p>PSA <u>projected settlement amount in PhP</u></p> <p>PGEPESQ_i <u>projected gross ex-post energy settlement quantity, in MWh, for trading interval i</u></p> <p>PEPESP_i <u>projected ex-post energy settlement price, in PhP/MWh, for trading interval i</u></p> <p>PBCQ_{c,i} <u>projected bilateral contract quantity, in MWh, from counterparty c for trading interval i</u></p> <p>PEPESP_{c,i} <u>projected ex-post energy settlement price, in PhP/MWh, of the market trading node of the trading participant responsible for the payment of line rental trading amounts specified by the WESM member during the enrollment of its bilateral contract with counterparty c for trading interval i</u></p> <p>I <u>set of trading intervals within the billing period</u></p> <p>C <u>set of counterparties</u></p>	
Initial Assessment of	<u>7.4.1 (d)</u> (new)	N / A	<u>The WESM Member shall submit the following information to the Market</u>	It is proposed that the WESM Member provide the projections for





Proposed Amendments to the (1) WESM Rules and (2) WESM Manual on Billing and Settlement for Enhancements to the Determination of Initial Prudential Requirements

Title	Section	Provision	Proposed Amendment	Rationale
Prudential Requirement			<p><u>Operator for each trading interval in the period defined in Section 7.4.1(a):</u></p> <p>i. <u>Projected gross ex-post energy settlement quantities</u></p> <p>ii. <u>Projected bilateral contract quantities from each trading participant counterparty</u></p>	quantities since the would have a better understanding of their operations.
Initial Assessment of Prudential Requirement	7.4.1 (e) (new)	N / A	<p><u>The WESM Member shall submit to the Market Operator its assumptions for determining its projected gross ex-post energy settlement quantities. The Market Operator may require the WESM Member to submit supporting documents if necessary. The Market Operator shall assist the WESM Member in determining the projected gross ex-post energy settlement quantities.</u></p>	To ensure the accuracy of submitted projected gross energy settlement quantities, it is proposed that WESM Members submit the assumptions used in their projection. This would allow the Market Operator the ability to assess the accuracy of the submitted projections.
Initial Assessment of Prudential Requirement	7.4.1 (f) (new)	N / A	<p><u>To be considered in the determination of the initial prudential requirement, the bilateral contract quantities submitted under Section 7.4.1(d)(ii) should have a corresponding contract enrolled with the Market Operator.</u></p>	To ensure that the bilateral contract quantities submitted are valid and realistic, it is proposed that the contract should be confirmed by the counterparty of the new trading participant

Proposed Amendments to the (1) WESM Rules and (2) WESM Manual on Billing and Settlement for Enhancements to the Determination of Initial Prudential Requirements

Title	Section	Provision	Proposed Amendment	Rationale
				through the contract enrollment procedure under the WESM Registration Manual.
Initial Assessment of Prudential Requirement	7.4.1 (g) (new)	N / A	<u>The projected ex-post energy settlement price of a WESM Member for a trading interval shall be equal to the ex-post energy settlement price of the geographically nearest market trading node from the connection point of the WESM Member at the same trading interval and most recent same date.</u>	Estimating the prices of the new trading participant based on the historical prices of the geographically nearest node aims to increase the accuracy of the projected exposure.
Initial Assessment of Prudential Requirement	7.4.1 (h) (new)	N / A	<u>The projected ex-post energy settlement price associated with a bilateral contract quantity from a counterparty for a trading interval shall be equal to the ex-post energy settlement price of the market trading node of the counterparty identified during enrollment of the bilateral contract at the same trading interval and most recent same date.</u>	Estimating the prices associated with bilateral contract quantities based on the historical prices of the nearest node aims to increase the accuracy of the projected exposure.

C. WESM Manual on Billing and Settlement Issue 6.0 (As revised under DOE DC2018-06-0017)

Title	Section	Provision	Proposed Amendment	Rationale
Initial Assessment of Prudential Requirement	7.4.1	a. XXX b. XXX c. XXX d. XXX e. XXX	a. XXX b. XXX e-j. XXX d-k. XXX e-l. XXX	Re-number items c-f to j-m to insert proposed procedures for calculating the initial prudential requirement



Proposed Amendments to the (1) WESM Rules and (2) WESM Manual on Billing and Settlement for Enhancements to the Determination of Initial Prudential Requirements

Title	Section	Provision	Proposed Amendment	Rationale
		f. XXX	f.m. XXX	
Initial Assessment of Prudential Requirement	7.4.1 (a)	The intending WESM Member shall submit the information of its expected trading transactions in the WESM based on the total demand and bilateral contract.	<p>The intending WESM Member shall submit the information of its expected trading transactions in the WESM based on the total demand and bilateral contract.</p> <p><u>The initial prudential requirement of a WESM Member shall be calculated using projected data for dispatch intervals:</u></p> <p><u>iii. if the WESM Member aims to begin trading in the WESM before August 26, from complete billing periods within March 26 to September 25 of the same year; or</u></p> <p><u>iv. if the WESM Member aims to begin trading in the WESM after August 25, from March 26 to September 25 of the succeeding year.</u></p>	<p>Consistent with current procedures for calculating actual prudential requirements, initial prudential requirements are proposed to be based on 26 March to 25 September transactions.</p> <p>Provision on submission of information is transferred to items d-f.</p>
Initial Assessment of Prudential Requirement	7.4.1 (b)	Using available historical data, the Market Operator shall determine the initial Prudential Requirement of a new WESM Member corresponding to the portion of its demand that is not covered by its bilateral contracts, or ten percent (10%) of its total demand, whichever is higher, multiplied by the Average Actual Market Price of the previous twelve (12) billing periods.	<p>Using available historical data, the Market Operator shall determine the initial Prudential Requirement of a new WESM Member corresponding to the portion of its demand that is not covered by its bilateral contracts, or ten percent (10%) of its total demand, whichever is higher, multiplied by the Average Actual Market Price of the previous twelve (12) billing periods.</p> <p><u>The initial prudential requirement of a WESM Member shall be calculated as the average of the projected settlement amount for each complete billing period</u></p>	<p>Consistent with current procedures for calculating actual prudential requirements, initial prudential requirements are proposed to be based on average billing period settlement amounts.</p>

Proposed Amendments to the (1) WESM Rules and (2) WESM Manual on Billing and Settlement for Enhancements to the Determination of Initial Prudential Requirements

Title	Section	Provision	Proposed Amendment	Rationale
Initial Assessment of Prudential Requirement	7.4.1 (c) (new)	N / A	<p><u>covered in the period defined in Section 7.4.1(a).</u></p> <p><u>The projected settlement amount for each billing period of a WESM Member shall be calculated using the following formula:</u></p> $PSA = \sum_{i \in I} (PGESQ_i \times PFEDP_i) - \sum_{i \in I} \sum_{c \in C} (PBCQ_{c,i} \times PFEDP_{c,i})$ <p><u>Where:</u></p> <p><u>PSA</u> projected settlement amount in PhP</p> <p><u>PGESQ_i</u> projected gross energy settlement quantity, in MWh, for dispatch interval i</p> <p><u>PFEDP_i</u> projected final energy dispatch price, in PhP/MWh, for dispatch interval i</p> <p><u>PBCQ_{c,i}</u> projected bilateral contract quantity, in MWh, from counterparty c for dispatch interval i</p> <p><u>PFEDP_{c,i}</u> projected final energy dispatch price, in PhP/MWh, associated with the bilateral contract with counterparty c for dispatch interval i</p>	For better accuracy, it is proposed that initial prudential requirements be determined using the formula for calculating the settlement amount but with projected inputs.





Proposed Amendments to the (1) WESM Rules and (2) WESM Manual on Billing and Settlement for Enhancements to the Determination of Initial Prudential Requirements

Title	Section	Provision	Proposed Amendment	Rationale
			<p><u>I</u> set of <i>dispatch intervals</i> within the billing period</p> <p><u>C</u> set of counterparties</p>	
Initial Assessment of Prudential Requirement	<u>7.4.1 (d)</u> (new)	N / A	<p>The WESM Member shall submit the following information to the Market Operator for each <i>dispatch interval</i> in the period defined in Section 7.4.1(a):</p> <p>iii. <u>Projected gross energy settlement quantities</u></p> <p>iv. <u>Projected bilateral contract quantities from each trading participant counterparty</u></p>	It is proposed that the WESM Member provide the projections for quantities since the would have a better understanding of their operations.
Initial Assessment of Prudential Requirement	<u>7.4.1 (e)</u> (new)	N / A	<p>The WESM Member shall submit to the Market Operator its assumptions for determining its projected <i>gross energy settlement quantities</i>. The Market Operator may require the WESM Member to submit supporting documents if necessary. The Market Operator shall assist the WESM Member in determining the projected <i>gross energy settlement quantities</i>.</p>	To ensure the accuracy of submitted projected gross energy settlement quantities, it is proposed that WESM Members submit the assumptions used in their projection. This would allow the Market Operator the ability to assess the accuracy of the submitted projections.
Initial Assessment of Prudential Requirement	<u>7.4.1 (f)</u> (new)	N / A	<p>To be considered in the determination of the initial <i>prudential requirement</i>, the <i>bilateral contract quantities</i> submitted under Section 7.4.1(d)(i) should have a corresponding contract enrolled with the Market Operator.</p>	To ensure that the bilateral contract quantities submitted are valid and realistic, it is proposed that the contract should be confirmed by the counterparty of the new

Proposed Amendments to the (1) WESM Rules and (2) WESM Manual on Billing and Settlement for Enhancements to the Determination of Initial Prudential Requirements

Title	Section	Provision	Proposed Amendment	Rationale
				trading participant through the contract enrollment procedure under the WESM Registration Manual.
Initial Assessment of Prudential Requirement	<u>7.4.1 (g)</u> (new)	N / A	<u>The projected final energy dispatch price of a WESM Member for a dispatch interval shall be equal to the final energy dispatch price of the geographically nearest market trading node from the connection point of the WESM Member at the same dispatch interval and most recent same date.</u>	Estimating the prices of the new trading participant based on the historical prices of the geographically nearest node aims to increase the accuracy of the projected exposure.
Initial Assessment of Prudential Requirement	<u>7.4.1 (h)</u> (new)	N / A	<u>The projected final energy dispatch price associated with a bilateral contract quantity from a counterparty for a dispatch interval shall be equal to the final energy dispatch price of the market trading node of the counterparty identified during enrollment of the bilateral contract at the same dispatch interval and most recent same date.</u>	Estimating the prices associated with bilateral contract quantities based on the historical prices of the nearest node aims to increase the accuracy of the projected exposure.
Initial Assessment of Prudential Requirement	<u>7.4.1 (i)</u> (new)	N / A	<u>For new regions integrated to the WESM, the Market Operator shall simulate and publish projected final energy dispatch prices for reference nodes in the new region. The Market Operator shall publish the assumptions used in determining the projected final energy dispatch prices, subject to approval of the PEM Board.</u>	Since historical prices may not be available when new regions (e.g., Mindanao, Mindoro) are integrated to the WESM, it is proposed that simulated prices be used in estimating the initial prudential requirements.





Proposed Amendments to the (1) WESM Rules and (2) WESM Manual on Billing and Settlement for Enhancements to the Determination of Initial Prudential Requirements

Title	Section	Provision	Proposed Amendment	Rationale
			<p><u>The reference prices shall be applied to trading participants that are registered prior to the commercial operations of the WESM in that region; for new trading participants in the new region applying for registration one (1) year after the commercial operations of the WESM in that region, Section 7.4.1(g) and Section 7.4.1(h) shall apply.</u></p>	<p>The simulated prices are only proposed to be applied for the start of commercial operations in the region; afterwards, historical prices would be used.</p>
Initial Assessment of Prudential Requirement	7.4.1(n)	(new)	<p><u>For a period of one year from the start of commercial operations of the enhancements to WESM design and operations under DC2015-01-0015, the initial prudential requirements of a WESM Member shall be calculated in consideration of the following:</u></p> <ul style="list-style-type: none"> <u>i. projections shall be performed per trading interval instead of per dispatch interval;</u> <u>ii. gross ex-post energy settlement quantities shall be projected instead of gross energy settlement quantities;</u> <u>iii. ex-post energy settlement prices shall be projected instead of final energy dispatch prices; and</u> <u>iv. the market trading node associated with bilateral contract quantities shall be a market trading node of the trading participant responsible for the payment of line rental trading amounts</u> 	<p>Provide transitory provisions for the calculation of initial prudential requirements prior to the implementation of the New Market Management System (NMMS) using equivalent variables</p>

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Proposed Amendments to the (1) WESM Rules and (2) WESM Manual on Billing and Settlement for Enhancements to the Determination of Initial Prudential Requirements

Title	Section	Provision	Proposed Amendment	Rationale
			<u>specified by the <i>WESM member</i> during the enrollment of its <i>bilateral contract</i>.</u>	