15.8 Rate Schedule 8 – Payments to RMR Generators

15.8.1 Payment to an RMR Generator Providing Service Pursuant to an RMR Agreement with an Availability and Performance Rate

The ISO shall make a payment each Billing Period to each RMR Generator providing

service pursuant to an RMR Agreement with an Availability and Performance Rate that has been

accepted for filing by the Commission, or the ISO may pay subject to refund pending

Commission action. The payment shall equal:

$$\sum_{d \in P} (RMRAvoidCost_{g,d} + VarCost_{g,d})$$

Where:

- d = the relevant market day;
- P = the relevant Billing Period;
- g = the relevant RMR Generator that is providing service under an Availability and Performance Rate established pursuant to the ISO Tariffs and an RMR Agreement between the ISO and the RMR Generator;
- $RMRAvoidCost_{g,d}$ = RMR Avoidable Cost amount for RMR Generator g for day d, calculated pursuant to Section [*] of Attachment H to the ISO Services Tariff,¹ shaped on a <u>capability Capability period Period</u> basis;

$$VarCost_{g,d} = Energy_{g,d} + AncServices_{g,d} + VSS_{g,d} + RS_{g,d}$$

Where:

 $Energy_{g,d}$ = the energy cost of RMR Generator g for day d. The cost of all energy MWhs that are scheduled and produced in real-time by RMR Generator g that do not exceed RMR Generator g's Day-Ahead schedule shall be equal to the lesser of RMR Generator g's Day-Ahead reference levels and RMR Generator g's Day-Ahead Bids. The cost of all energy MWhs that are scheduled and produced in real-time (including Compensable Overgeneration, if any) that exceed RMR Generator g's Day-Ahead schedule (if any) shall be equal to the lesser of RMR

¹ There are likely to be other Tariff sections addressing how RMRAvoidCost is calculated.

Generator g's real-time reference levels and RMR Generator g's real-time Bids;

- $AncServices_{g,d} = the cost of Operating Reserves and Regulation Service for$ RMR Generator g for day d. The cost of all MWhs ofOperating Reserves that are scheduled and of RegulationService that are scheduled and provided in real-time byRMR Generator g that do not exceed RMR Generator g'sDay-Ahead schedule shall be equal to the lesser of RMRGenerator g's Day-Ahead reference levels and RMRGenerator g's Day-Ahead Bids. The cost of all MWhs ofOperating Reserves and Regulation Service that arescheduled and provided in real-time by RMR Generator gthat exceed RMR Generator g's Day-Ahead schedule (if any)shall be equal to the lesser of RMR Generator g's real-timereference levels and RMR Generator g's real-time Bids;
 - $VSS_{g,d}$ = the Voltage Support Service payment for RMR Generator g for day d pursuant to Rate Schedule 2 of the ISO Services Tariff;
 - $RS_{g,d}$ = the Restoration Services payment for RMR Generator g for day d pursuant to Rate Schedule 5 of the ISO Services Tariff.

15.8.2 Payment to an RMR Generator Providing Service Pursuant to an RMR Agreement with a Rate Other Than an Availability and Performance Rate

The ISO shall make a payment each Billing Period to each RMR Generator providing

service pursuant to an RMR Agreement with a rate other than an Availability and Performance

Rate that has been accepted for filing by the Commission, or the ISO may pay subject to refund

pending Commission action. The payment shall equal:

$$\sum_{d \in P} (RMRCost_{g,d} + VarCost_{g,d})$$

Where:

- g = the relevant RMR Generator that is providing service under a rate other than an Availability and Performance Rate;
- $RMRCost_{g,d}$ = the costs RMR Generator g is authorized to recover for day d pursuant to a rate approved for RMR Generator g by the Commission, or is recovering subject to refund pending Commission action, shaped on a capability Capability period Period basis.

The definitions of the remaining variables in this equation are identical to the definitions for such variables set forth in Section 15.8.1 above.

15.8.3 Performance Incentive Payment

The ISO will pay on a monthly basis an RMR Generator that is providing service

pursuant to an RMR Agreement with an Availability and Performance Rate any Performance

Incentive payment owed to that RMR Generator for its performance in that month in accordance

with the following formulae.

 PI_m = the amount of the Performance Incentive payment, calculated for each month m, and is a dollar value calculated as:

$PI_m = \frac{1}{12} PI_{max} *$,50%	for $LB \leq PF_m < UB$
	80%,	for $UB \leq PF_m < TL$
	(100%,	for $TL \leq PF_m$

Where:

 PI_{max} = the maximum annual Performance Incentive payment, calculated as 5% of the <u>RMR Generator's Non-CapEx Avoidable Costs</u>,

Non-CapEx Avoidable Costs = the RMR Avoidable Costs the RMR Generator is authorized to recover pursuant to an Availability and Performance Rate that has been accepted for filing by the Commission, or that the RMR Generator is recovering subject to refund pending Commission action, less the Capital Expenditures included in such RMR Avoidable Costs,

LB = the Bandwidth Lower Bound, a percentage defined as:

$$LB = \begin{cases} 0.9 * BL, & \text{if } BL < 50\% \\ BL - 5\%, & \text{if } BL \ge 50\% \end{cases}$$

<u>UB</u> = the Bandwidth Upper Bound, a percentage defined as:

$$UB = BL + min\left\{\frac{1}{3}(100\% - BL), \max\left\{5\%, \frac{1}{10}(100\% - BL)\right\}\right\}$$

<u>*TL*</u> = the Target Limit, a percentage defined as:

$$TL = BL + min\left\{\frac{2}{3}(100\% - BL), max\left\{10\%, \frac{1}{5}(100\% - BL)\right\}\right\}$$

<u>Where:</u>

<u>BL</u> = the Baseline percentage determined for the RMR Generator's performance, as set forth in the RMR Generator's RMR Agreement.

 PF_{m} = the RMR Performance Factor for month m, a percentage defined as:

$$PF_{m} = 100\% - \frac{\sum_{t=t_{0}}^{T} (max\{PLU_{t} - Pr_{t}, 0\})}{\sum_{t=t_{0}}^{T} PLU_{t}}$$

Where:

 t_0 = the first RTD interval of month m,

<u>T = the last RTD interval of month m</u>,

 Pr_t = the Real-Time output of the RMR Generator over RTD interval *t*, in <u>MW</u>, and

 PLU_t = the Penalty Limit for Under-Generation of the RMR Generator over RTD interval *t*, expressed in MW and calculated as:

$$PLU_{t} = max \left\{ min\left([AGC_{t} - CET_{t}], \left[\frac{900 * PLU_{(t-1)} + s_{t} * (AGC_{t} - CET_{t})}{(900 + s_{t})} \right] \right), 0 \right\}$$

<u>Where:</u>

 s_t = the length of RTD interval *t*, expressed in seconds, AGC_t = the average desired generation level (*i.e.* AGC basepoint) issued to the RMR Generator over RTD interval *t*, expressed in terms of <u>MW</u>, CET_t = 3% of the Upper Operating Limit of the RMR Generator for RTD

$$CET_t = 3\%$$
 of the Upper Operating Limit of the RMR Generator for RTD
interval t, expressed in terms of MW, and

 PLU_{t-1} = the Penalty Limit for Under-Generation for the RMR Generator for RTD interval (*t-1*), or 0 if the RMR Generator has not been running in the last 4 hours.

15.8.4 Availability Incentive Payment

The ISO will pay on a Capability Period basis an RMR Generator that is providing service pursuant to an RMR Agreement with an Availability and Performance Rate for any Availability Incentive payment owed to that RMR Generator. The ISO will make the Availability Incentive payment in the Billing Period following the first month of the Capability Period for a payment earned for the previous Capability Period <u>in accordance with the following</u> formulae.

 AI_{cp} = the amount of the Availability Incentive, calculated for each Capability Period <u>cp</u>, and is a dollar value calculated as:

$$AI_{cp} = \frac{1}{2}AI_{max} * \begin{cases} 50\%, & \text{for } LB \leq EAF_m < UB\\ 80\%, & \text{for } UB \leq EAF_m < TL\\ 100\%, & \text{for } TL \leq EAF_m \end{cases}$$

Where:

<u>Where:</u>

 $EAF_{cp} \equiv$ the RMR Generator's Equivalent Availability Factor for Capability Period *cp*, <u>a percentage defined as:</u>

$$EAF_{cp} = 100\% * \left(\frac{\left(AH - \left(DH_{EU} + DH_{EP} + DH_{ESE}\right)\right)}{PH}\right)$$

Where:

AH=the RMR Generator's Available Hours, calculated as the sum of all Service
Hours, Reserve Shutdown hours, Pumping Hours, and Synchronous
Condensing Hours reported in the GADS Data submitted for Capability

Period *cp*, or as modified by the ISO following its review of the submitted GADS Data,

- PH=the RMR Generator's Period Hours, calculated as the number of hours
reported in the GADS Data submitted for Capability Period *cp* that the RMR
Generator was in the active state, or as modified by the ISO following its
review of the submitted GADS Data,
- DH_{EU} = the RMR Generator's Unplanned Derated Hours, calculated as the product of Unplanned Derated Hours and Size of Reduction, divided by Net Maximum Capacity, as reported in the GADS Data submitted for Capability Period *cp*, or as modified by the ISO following its review of the submitted GADS Data,
- DH_{EP} = the RMR Generator's Planned Derated Hours, calculated as the product of Planned Derated Hours and Size of Reduction, divided by Net Maximum Capacity, as reported in the GADS Data submitted for Capability Period *cp*, or as modified by the ISO following its review of the submitted GADS Data,
- DH_{ESE} = the RMR Generator's Net Maximum Capacity less Net Dependable Capacity, multiplied by Available Hours and divided by Net Maximum Capacity, as reported in the GADS Data submitted for Capability Period *cp*, or as modified by the ISO following its review of the submitted GADS Data,

Size of Reduction is determined by subtracting the Net Available Capacity from the Net Dependable Capacity. In cases of multiple deratings, the Size of Reduction of each derating will be determined by the difference in the Net Available Capacity of the RMR Generator prior to the derating and the reported Net Available Capacity as a result of the derating.

The definitions of the remaining terms and variables in these equations are identical to the definitions for such terms and variables set forth in Section 15.8.3 above.

GADS Data used to calculate Availability Incentive payments, as it may be modified by the ISO, shall be subject to review, challenge, and correction in accordance with Section 7.4 of the Services Tariff.If the ISO modifies one or more of the GADS Data submittals used to calculate the Availability Incentive payment, then the RMR Generator shall be provided the opportunity to justify its original submittals after the fact. The ISO shall true up the Availability Incentive payment consistent with its review of the justification that the RMR Generator provides. A true up can result in an increase or decrease to the Availability Incentive payment. True-ups will be made on open bills in accordance with the normal billing cycle. Any true-ups identified after a the appropriate billing period has reached final bill close out will credited or charged on the next available initial monthly invoice.

15.8.5 Limitation on Total Penalties, Sanctions and Deficiency Charges Assessed to RMR Generators Providing Service Pursuant to an RMR Agreement with an Availability and Performance Rate

An RMR Generator that is providing service pursuant to an RMR Agreement with an Availability and Performance Rate is subject to all of the penalties, sanctions, deficiency charges and any similar charges, except for under-generation penalties (collectively, for purposes of this paragraph, "penalties"), that may apply to Generators under the ISO Tariffs. *Provided, however*, that the total amount of penalties that can be assessed to an RMR Generator that is providing service pursuant to an RMR Agreement with an Availability and Performance Rate shall be capped at the total, cumulative amount of Performance Incentive payments and Availability Incentive payments computed by the ISO to be due to that RMR Generator through the end of the month in which the penalty or penalties are charged. The ISO shall charge any penalties to the RMR Generator and remit the revenues from each penalty, or any reduced amount, in accordance with the applicable provisions of the ISO Services Tariff.

15.8.6 Recovery of Capital Expenditures from RMR Generators

[Insert requirement for RMR Generators to repay Capital Expenditures before they are permitted to participate in the ISO Administered Markets following the conclusion of an RMR Agreement.]