

For ALL TERRITORY

**DEMAND-SIDE INVESTMENT MECHANISM RIDER
SCHEDULE DSIM
For MEEIA Cycle 1 2021-22 Plan**

APPLICABILITY

This rider is applicable to all non-lighting kilowatt-hours (kWh) of energy supplied to customers under the Company's retail rate schedules, excluding kWh of energy supplied to "opt-out" customers. The Demand Side Investment Mechanism (DSIM) Rider will be calculated and applied separately to the following rate classes: (1) Residential Service (RG) and (2) non-Residential Service, which includes: (a) Commercial Service (CB), (b) Small Heating Service (SH), (c) General Power Service (GP), (d) Total Electric Building Service (TEB), and (e) Large Power Service (LP).

Charges in this DSIM Rider reflect costs associated with implementation of the Missouri Energy Efficiency Investment Act (MEEIA) Cycle 1 Plan and any remaining unrecovered costs from prior MEEIA Cycle Plans or other approved energy efficiency plans. Those costs include:

- 1) Program Costs, Throughput Disincentive (TD), and Earnings Opportunity Award (EO) (if any) for the MEEIA Cycle 1 Plan, as well as Program Costs, TD and EO for commission approved business program projects completed for prior MEEIA Cycle Plans and any earned Earnings Opportunity earned (and ordered) attributable to prior MEEIA Cycle Plans.
- 2) Reconciliations, with interest, to true-up for differences between the revenues billed under this DSIM Rider and total actual monthly amounts for:
 - i. Program Costs incurred in Cycle 1 and/or remaining unrecovered amounts for prior MEEIA Cycle Plans or other approved energy efficiency plans.
 - ii. TD incurred in Cycle 1, and/or remaining unrecovered amounts for prior MEEIA Cycle Plans.
 - iii. Amortization of any Earnings Opportunity Award (EO) ordered by the Missouri Public Service Commission (Commission), and/or remaining true-ups or unrecovered amounts for prior MEEIA Cycle Plans.
- 3) Any Ordered Adjustments. Charges under this DSIM Rider shall continue after the anticipated 18-month plan period of MEEIA Cycle 1 until such time as the costs described in items 1) and 2) above have been billed.

Charges arising from the MEEIA Cycle 1 Plan that are the subject of this DSIM Rider shall be reflected in one "DSIM Charge" on customers' bills in combination with any charges arising from a rider that is applicable to post-MEEIA Cycle 1 Plan demand-side management programs approved under the MEEIA. This will include any unrecovered amounts for Program Costs, unrecovered TD from prior MEEIA Cycle Plans and any Earnings Opportunity, etc. earned / remaining from prior MEEIA Cycle Plans that is expected to begin recovery in July 2021.

DEFINITIONS

As used in this DSIM Rider, the following definitions shall apply:

"Cycle 1 Earnings Opportunity" (EO) means the annual incentive ordered by the Commission based on actual performance verified through EM&V against planned targets. The Company's EO will be \$369,289 if 100% achievement of the planned targets are met. EO is capped at \$ 480,076. Potential Earnings Opportunity adjustments are described on Sheet No. . The Earnings Opportunity Matrix outlining the payout rates, weightings, and caps can be found at Sheet No. .

THE EMPIRE DISTRICT ELECTRIC COMPANY d.b.a. LIBERTY

P.S.C. Mo. No. 6 Sec. 4 Original Sheet No. 21a

Canceling P.S.C. Mo. No. _____ Sec. _____ Original Sheet No. _____

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“Deemed Savings Table” means a list of Measures derived from the Company’s TRM that quantifies gross energy and demand savings associated with Company-specific Measure parameters where available, as outlined in Appendix B to the MEEIA 2021-22 Plan and updated as provided for herein based on EM&V ex-post gross adjustments.

“Effective Period” (EP) means the billing months for which the approved DSIM is to be effective, i.e., the 18 billing months beginning with the July billing month of 2021 and ending with the December billing month of 2022.

“Evaluation Measurement & Verification” (EM&V) means the performance of studies and activities intended to evaluate the process of the Company’s Program delivery and oversight and to estimate and/or verify the estimated actual energy and demand savings, cost effectiveness, and other effects from demand-side Programs.

“Incentive” means any consideration provided by the Company, including, but not limited to, buy downs, markdowns, rebates, bill credits, payments to third parties, direct installation, giveaways, and education, which encourages the adoption of Program Measures.

“Measure” means the Energy Efficiency measures described for each program in the Appendix C to the MEEIA 2021-22 Plan.

“MEEIA Cycle 1 Plan” consists of the demand-side programs and the DSIM described in the MEEIA Cycle 1 Filing, which became effective following Commission order and approval of the MEEIA Cycle 1 Plan under **EO-XXXX-XXXX**.

“Programs” means MEEIA Cycle 1 programs listed in **Tariff Sheet No. _____** and added in accordance with the Commission’s rule 20 CSR 4240-20.094(4).

“Program Costs” means any prudently incurred program expenditures, including such items as program planning, program design; administration; delivery; end-use measures and incentive payments; advertising expense; evaluation, measurement, and verification; market potential studies; and work on a statewide technical resource manual.

“Short-Term Borrowing Rate” means a rate equal to the weighted average interest paid on the Company’s short-term debt during the month.

“Throughput Disincentive” (TD) means the utility’s lost margins associated with the successful implementation of the MEEIA programs. The detailed methodology for calculating the TD is described beginning in **Tariff Sheet No. _____**.

“TRM” means the Technical Resource Manuals utilized to estimate the savings for the measures included in the DSM portfolio.

DETERMINATION OF DSIM RATES

The DSIM during the applicable EP is a dollar per kWh rate for each applicable Service Classification calculated as follows:

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$$DSIM = [NPC + NTD + NEO + NOA] / PE$$

Where:

NPC = Net Program Costs for the applicable EP as defined below,

$$NPC = PPC + PCR$$

PPC = Projected Program Costs is an amount equal to Program Costs projected by the Company to be incurred during the applicable EP.

PCR = Program Costs Reconciliation is equal to the cumulative difference, if any, between the NPC revenues billed resulting from the application of the DSIM through the end of the previous EP and the actual Program Costs incurred through the end of the previous EP (which will reflect projections through the end of the previous EP due to timing of adjustments). Such amounts shall include monthly interest on cumulative over- or under-balances at the Company's monthly Short-Term Borrowing Rate.

NTD = Net Throughput Disincentive for the applicable EP as defined below,

$$NTD = PTD + TDR$$

PTD = Projected Throughput Disincentive is the Company's TD projected by the Company to be incurred during the applicable EP. For the detailed method for calculating the TD, see Sheet _____.

TDR = Throughput Disincentive Reconciliation is equal to the cumulative difference, if any, between the NTD revenues billed during the previous EP resulting from the application of the DSIM and the Company's TD through the end of the previous EP calculated pursuant to the MEEIA Cycle 1 application, as applicable (which will reflect projections through the end of the previous EP due to timing of adjustments). Such amounts shall include monthly interest on cumulative over- or under-balances at the Company's monthly Short-Term Borrowing Rate.

NEO = Net Earnings Opportunity for the applicable EP as defined below,

$$NEO = EO + EOR$$

EO = Earnings Opportunity is equal to the Earnings Opportunity Award monthly amortization multiplied by the number of billing months in the applicable EP, plus the succeeding EP. MEEIA Cycle 1 monthly amortization shall be determined by dividing the Earnings Opportunity Award by the number of billing months from the billing month of the first DSIM after the determination of the annual Earnings Opportunity Award and 12 calendar months following that first billing month.

EOR = Earnings Opportunity Reconciliation is equal to the cumulative difference, if any, between the NEO revenues billed during the previous EP resulting from the application of the DSIM and the monthly amortization of the EO Award through the end of the previous EP (which will reflect projections through the end of the previous EP due to timing of adjustments). Such amounts shall include monthly interest on cumulative over- or under-balances at the Company's monthly Short-Term Borrowing Rate.

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NOA = Net Ordered Adjustment for the applicable EP as defined below,

$$NOA = OA + OAR$$

OA = Ordered Adjustment is the amount of any adjustment to the DSIM ordered by the Commission as a result of prudence reviews and/or corrections under this Rider DSIM. Such amounts shall include monthly interest at the Company's monthly short-term borrowing rate.

OAR = Ordered Adjustment Reconciliation is equal to the cumulative difference, if any, between the NOA revenues billed during the previous EP resulting from the application of the DSIM and the actual OA ordered by the Commission through the end of the previous EP (which will reflect projections through the end of the previous EP due to timing of adjustments). Such amounts shall include monthly interest on cumulative over- or under-balances at the Company's monthly Short-Term Borrowing Rate.

PE = Projected Energy, in kWh, forecasted to be delivered to the customers to which the Rider DSIM applies during the applicable EP.

The DSIM components and total DSIM applicable to the individual Service Classifications shall be rounded to the nearest \$0.00001.

Allocation of MEEIA Cycle 1 Program Costs, TD and EO for each rate schedule for the MEEIA Cycle 1 Plan will be allocated as outlined in EO-XXXX-XXXX.

This Rider DSIM shall not be applicable to customers that have satisfied the opt-out provisions contained in Section 393.1075.7, RSMo or the Low-income exemption provisions described herein.

CALCULATION OF TD:

Monthly Throughput Disincentive = the sum of the Throughput Disincentive Calculation for all programs applicable to (1) Residential Service (RG); (2) Commercial Service (CB), (3) Small Heating Service (SH), (4) General Power Service (GP), (5) Total Electric Building Service (TEB); and (6) Large Power Service (LP).

The TD for each Service Classification shall be determined by the following formula:

$$TD = [MS \times TBR \times NTGF] + ATD$$

Where:

TD = Throughput Disincentive, in dollars, to be collected for a given month, for a given Service Classification.

MS = Monthly Savings, is the sum of all Programs' monthly savings, in kWh, for a given month, for a given Service Classification.

TBR = Tail Block Rate. Applicable monthly Tail Block Rate for each applicable Service Classification.

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NTGF = Net-To-Gross Factor. For the EP, all TD calculations will assume a NTGF of 0.85 until such time as a NTGF is determined through EM&V for that EP. Thereafter, for each given EP, the NTGF determined through EM&V will be used prospectively starting with the month in which the Earnings Opportunity Award is determined.

MS = The sum of all Programs' Monthly Savings in kWh, for a given month, for a given class. The Monthly Savings in kWh for each Program shall be determined by the formula:

$$MS = (MAS_{CM} + CAS_{PM} - RB) \times LS + HER$$

RB = Rebasing Adjustment. The Rebasing Adjustment shall equal the CAS applicable as of the date used for the MEEIA normalization in any general rate case resulting in new rates becoming effective during the accrual and collection of TD\$ pursuant to MEEIA Cycle 1. In the event more than one general rate case resulting in new rates becoming effective during the accrual and collection of TD\$ pursuant to MEEIA Cycle 1, the Rebasing Adjustment shall include each and every prior Rebasing Adjustment calculation.

LS = Load Shape. The Load Shape is the monthly load shape percent for each program.

MC = Measure Count. Measure Count, for a given month, for a given class, for each measure is the number of each measure installed in the current calendar month.

ME = Measure Energy. Measure Energy will be determined as follows, for each Measure:

- i. Prior to finalization of EM&V for Cycle 1 programs, for Measures not listed under those programs listed in (c) below, the ME is the annual total of normalized savings for each measure at customer meter per measure defined in the TRM.
- ii. After finalization of EM&V for Cycle 1 programs, for Measures not listed under those programs listed in (c) below, the ME is the annual total of normalized savings for each measure at customer meter per measure defined in the updated TRM (which will be updated based on EM&V ex-post gross adjustments determined for Year 1 no later than 24 months after the commencement of Cycle 1).
- iii. For Measures in MEEIA Cycle 1 programs, the ME will be the annual value attributable to the installations reported monthly by the program implementer.

MAS = The sum of MC multiplied by ME for all measures in a program in the current calendar month.

CAS = Cumulative sum of MAS for each program for MEEIA Cycle 1.

CM = Current Calendar month

PM = Prior calendar month

HER = Monthly kWh savings for the Home Energy Reports and Income-Eligible Home Energy Reports programs measured and reported monthly by the program implementer.

ATD = Additional Throughput Disincentive to be calculated based on monthly savings from measures installed for certain commercial and industrial customers.

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EARNINGS OPPORTUNITY AWARD DETERMINATION

The MEEIA Cycle 1 EO Award shall be calculated using the matrix in tariff Sheet No. _____. The cumulative EO will not go below \$0. The EO target at 100% is \$ \$369,289 . Before adjustments reflecting TD EM&V including NTG, the EO cannot go above \$ \$480,076 . The cap is based on current program levels. If Commission-approved new programs are added during the EP and any program plan extensions through 2022, the Company may seek Commission approval to have the targets for the cap of the EO scale proportionately to the increase in savings targets

The Earnings Opportunity Award shall be adjusted for the difference between the TD\$ billed and what the TD\$ billed would have been if:

- (1) The ME used in the calculation were the normalized savings for each measure at customer meter per measure determined through EM&V ex-post gross analysis for each program year, and,
- (2) The NTGFs used in the calculation was the net-to-gross values determined through EM&V, except that if the NTG value determined through EM&V is less than 0.80, the recalculation shall use 0.80 and if the NTG value determined through EM&V is greater than 1.0, the recalculation shall use 1.0.
- (3) If the above adjustments are negative in an amount greater than the otherwise applicable EO, these adjustments shall be limited to the value of the otherwise applicable EO.

FILING

After the initial DSIM Rider rate adjustment filing, the Company shall make a DSIM Rider rate adjustment filing to take effect each January 1 and July 1 under the Term of this MEEIA Rider. DSIM Rider rate adjustment filings shall be made at least sixty (60) days prior to their effective dates.

PRUDENCE REVIEWS

A prudence review shall be conducted no less frequently than at twenty-four (24) month intervals in accordance with 20 CSR 4240-20.093(11). Any costs, which are determined by the Commission to have been imprudently incurred or incurred in violation of the terms of this DSIM Rider, shall be returned to customers through an adjustment in the next DSIM Rider rate adjustment filing and reflected in factor OA above.

DISCONTINUING THE DSIM

The Company reserves the right to discontinue the entire MEEIA Cycle 1 portfolio, if the Company determines that implementation of such programs is no longer reasonable due to changed factors or circumstances that have materially and negatively impacted the economic viability of such programs as determined by the Company, upon no less than thirty days' notice to the Commission. As a result of these changes, the Company may file to discontinue this DSIM. Similar to Program discontinuance, the Company would file a notice indicating that it is discontinuing the DSIM Rider. This notice would include a methodology for recovery of any unrecovered Program Costs and TD.

THE EMPIRE DISTRICT ELECTRIC COMPANY d.b.a. LIBERTY

P.S.C. Mo. No. 6 Sec. 4 Original Sheet No. 21f

Canceling P.S.C. Mo. No. _____ Sec. _____ Original Sheet No. _____

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DEMAND SIDE INVESTMENT MECHANISM CHARGE

As approved in Commission Case No. EO-XXXX-XXXX MEEIA Cycle 1 Filing.

MEEIA 2021-22 DSIM Components
(MEEIA Cycle 1 2021-22 Plan)

Service Class	NPC/PE (\$/kWh)	NTD/PE (\$/kWh)	NEO/PE (\$/kWh)	NOA/PE (\$/kWh)	Total DSIM (\$/kWh)
RG – Residential Service	\$0.00080	\$0.00007	n/a	n/a	\$0.00087
CB – Commercial Service	\$0.00115	\$0.00015	n/a	n/a	\$0.00130
SH – Small Heating Service	\$0.00115	\$0.00015	n/a	n/a	\$0.00130
GP – General Power Service	\$0.00115	\$0.00015	n/a	n/a	\$0.00130
TEB – Total Electric Building Service	\$0.00115	\$0.00015	n/a	n/a	\$0.00130
LP – Large Power Service	\$0.00115	\$0.00015	n/a	n/a	\$0.00130