

Minnesota Energy Resources New Area Surcharge Analysis  
Pengilly

[TRADE SECRET DATA B

Net Plant  
Accumulated

ADIT

Traditional Revenue Requirements

Revenue

Time  
Period  
(1)

- 0
- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
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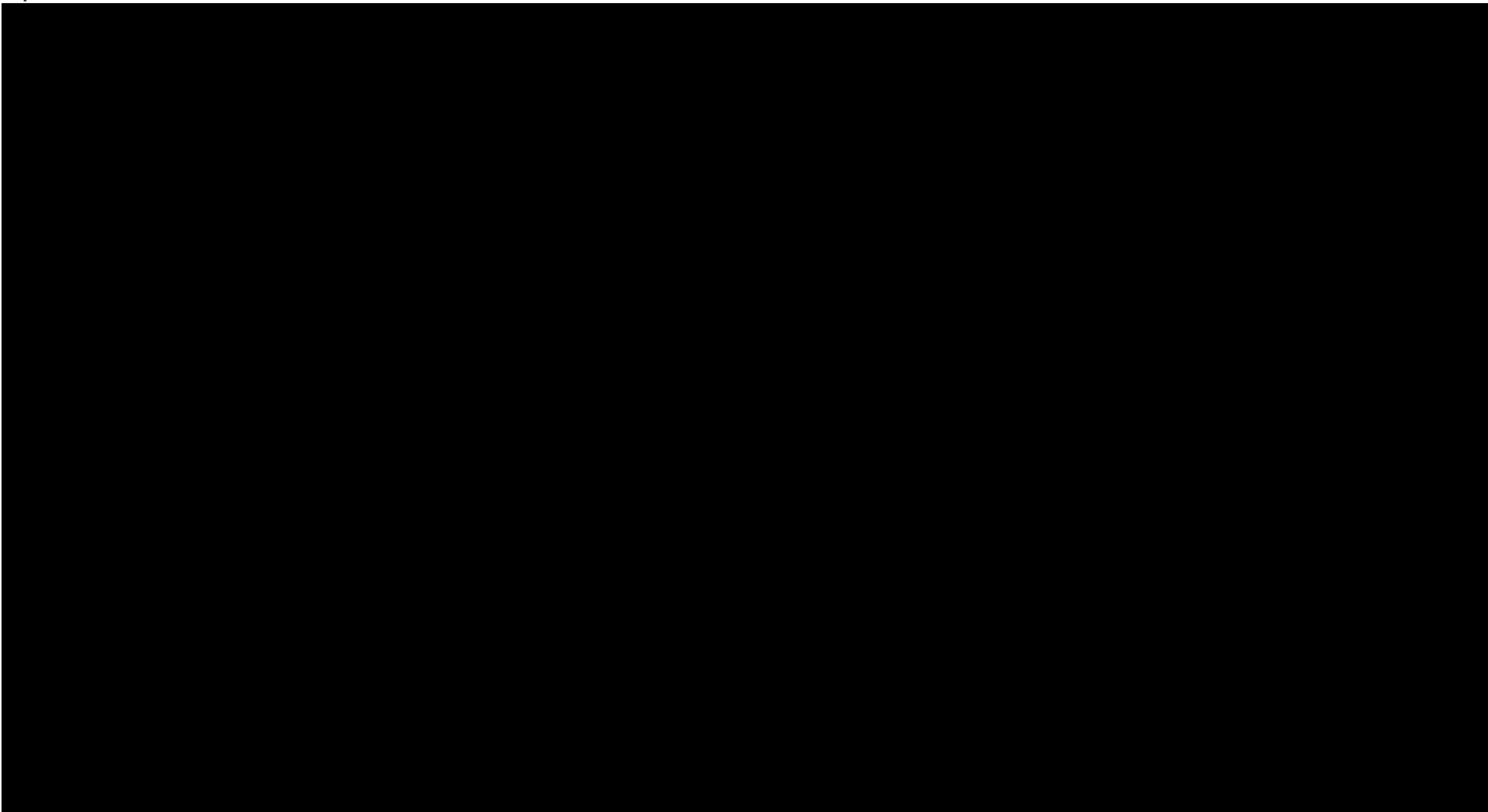
MERC New Area Surcharge Analysis

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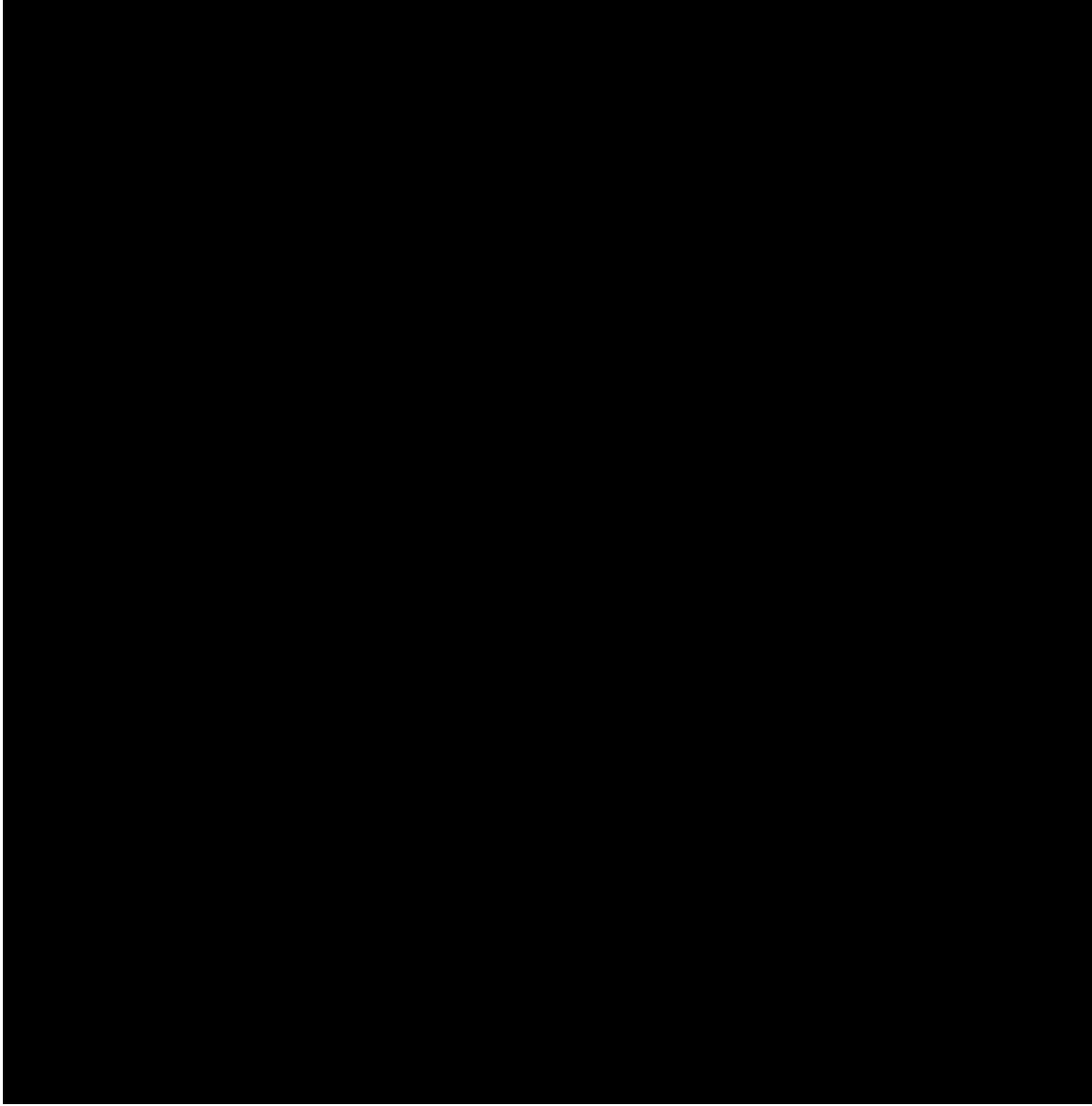
All Formulas



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All Formulas



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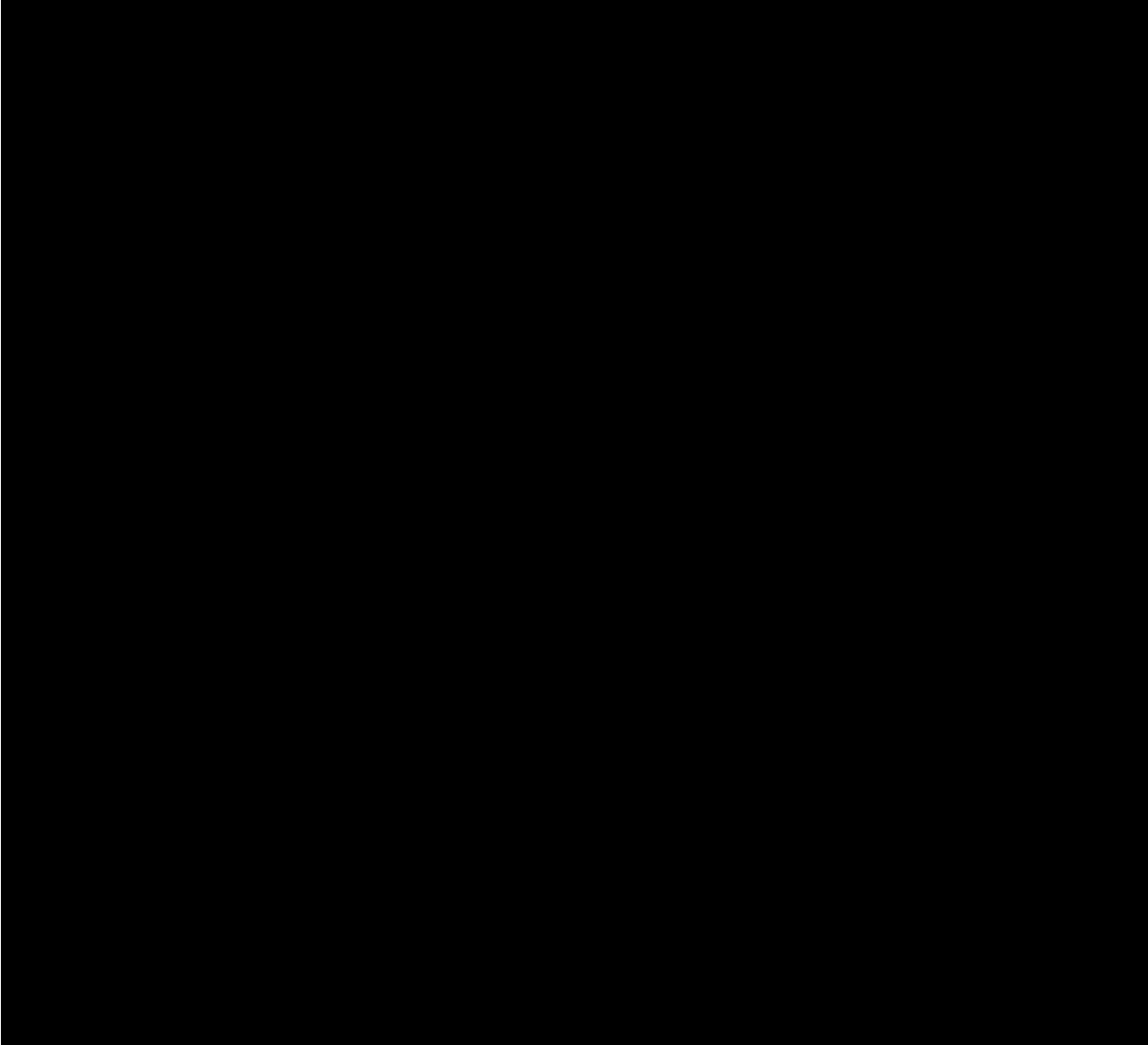
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All Formulas



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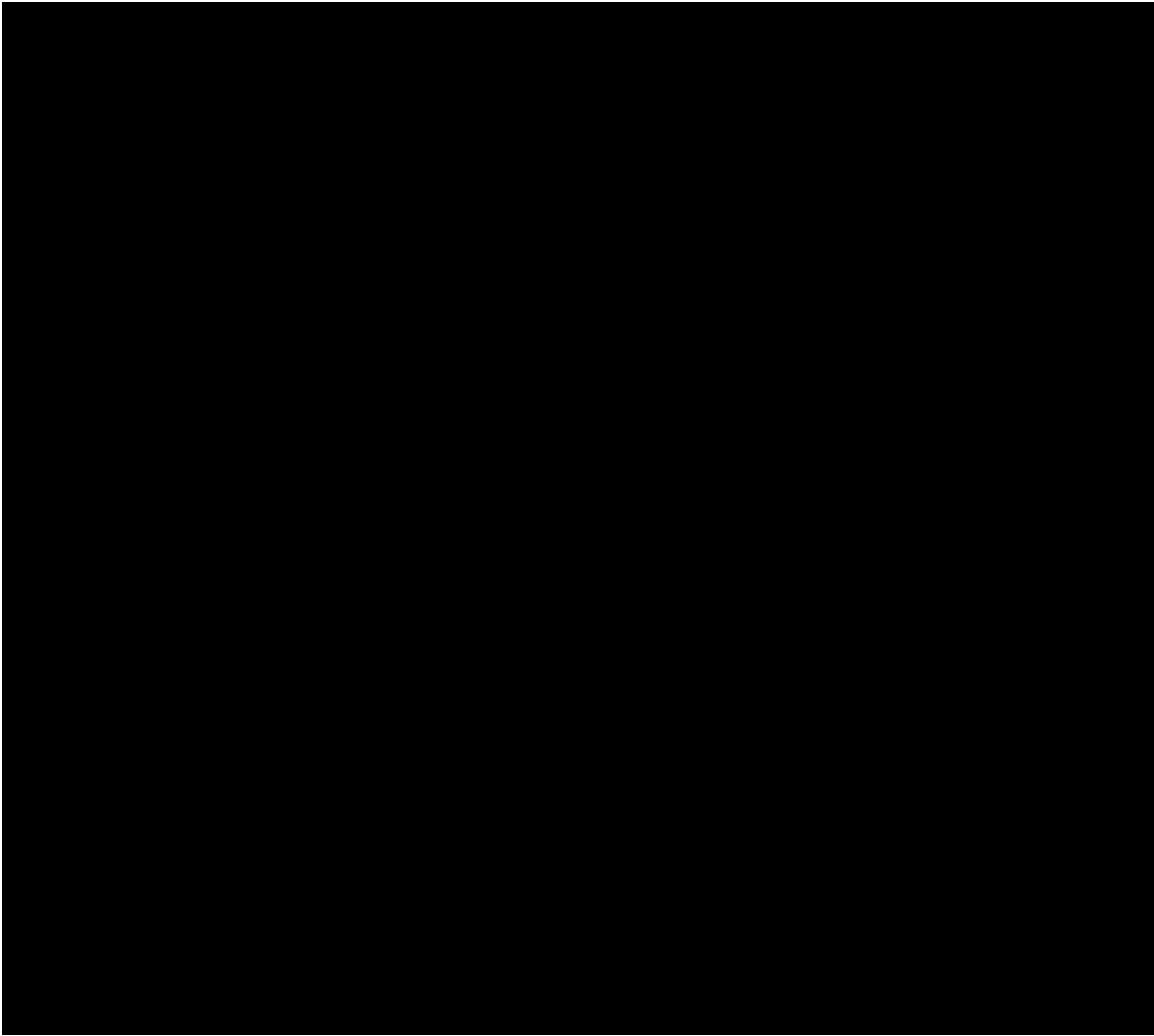
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All Formulas



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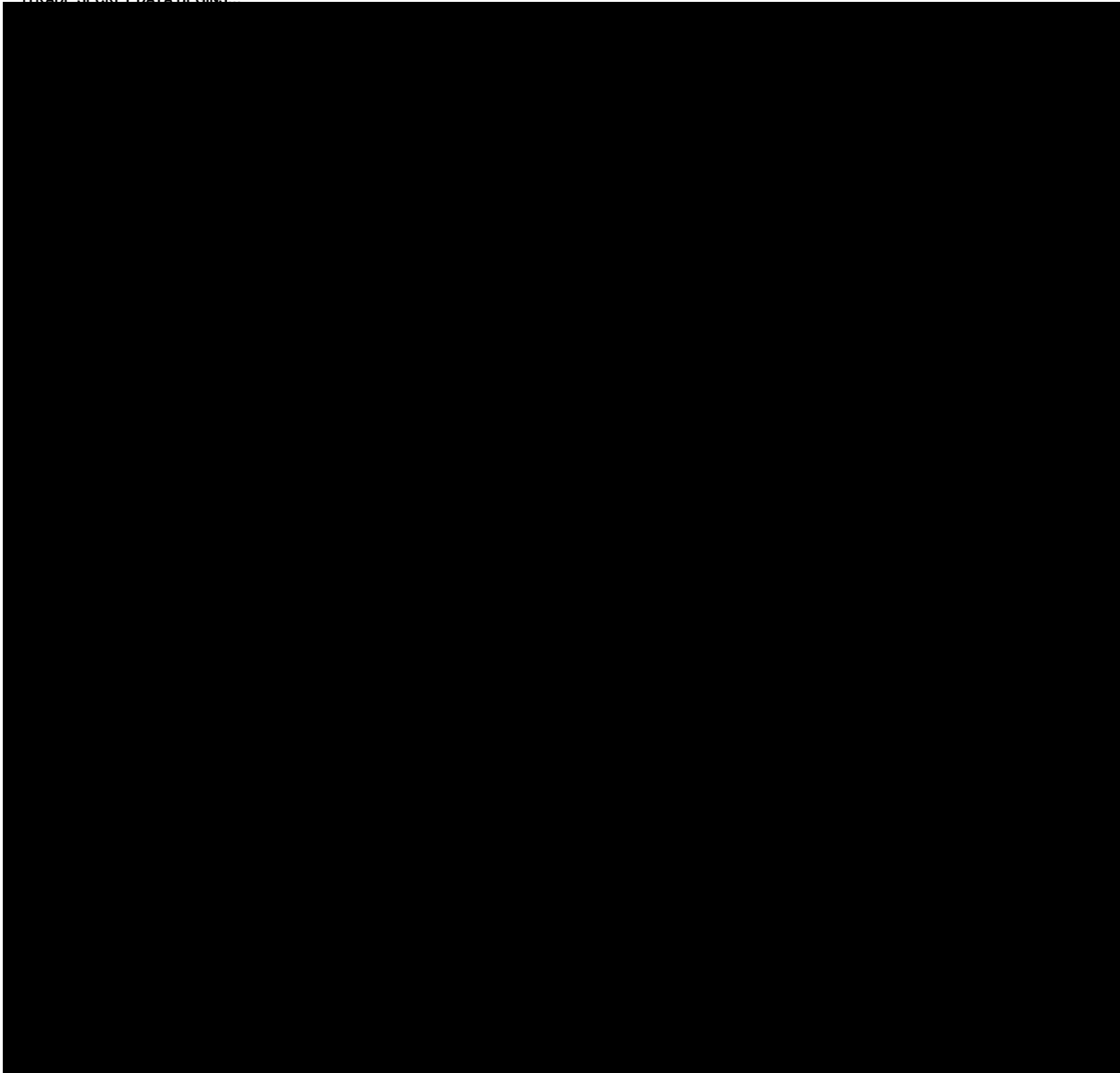
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All Formulas



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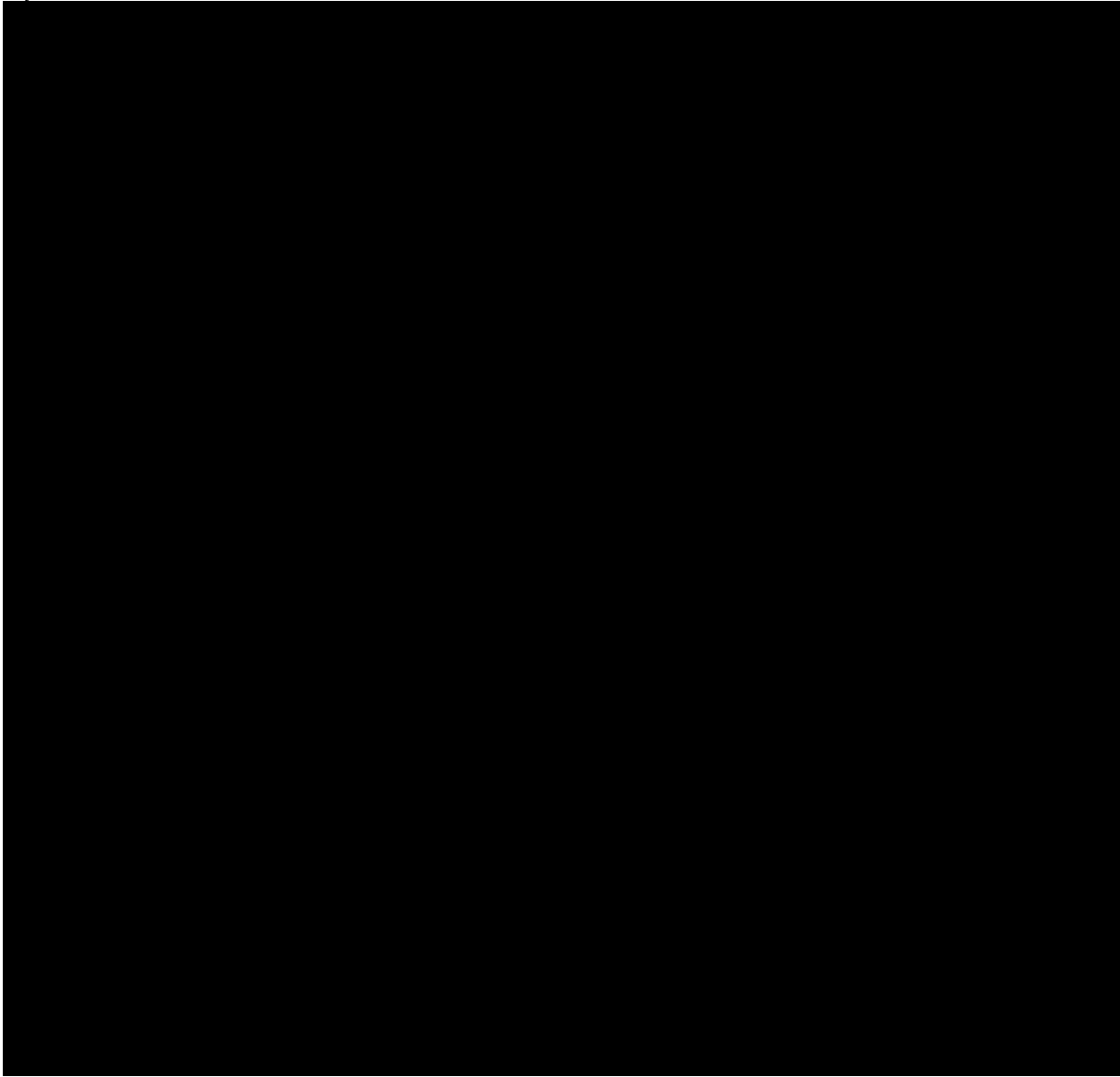
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All Formulas

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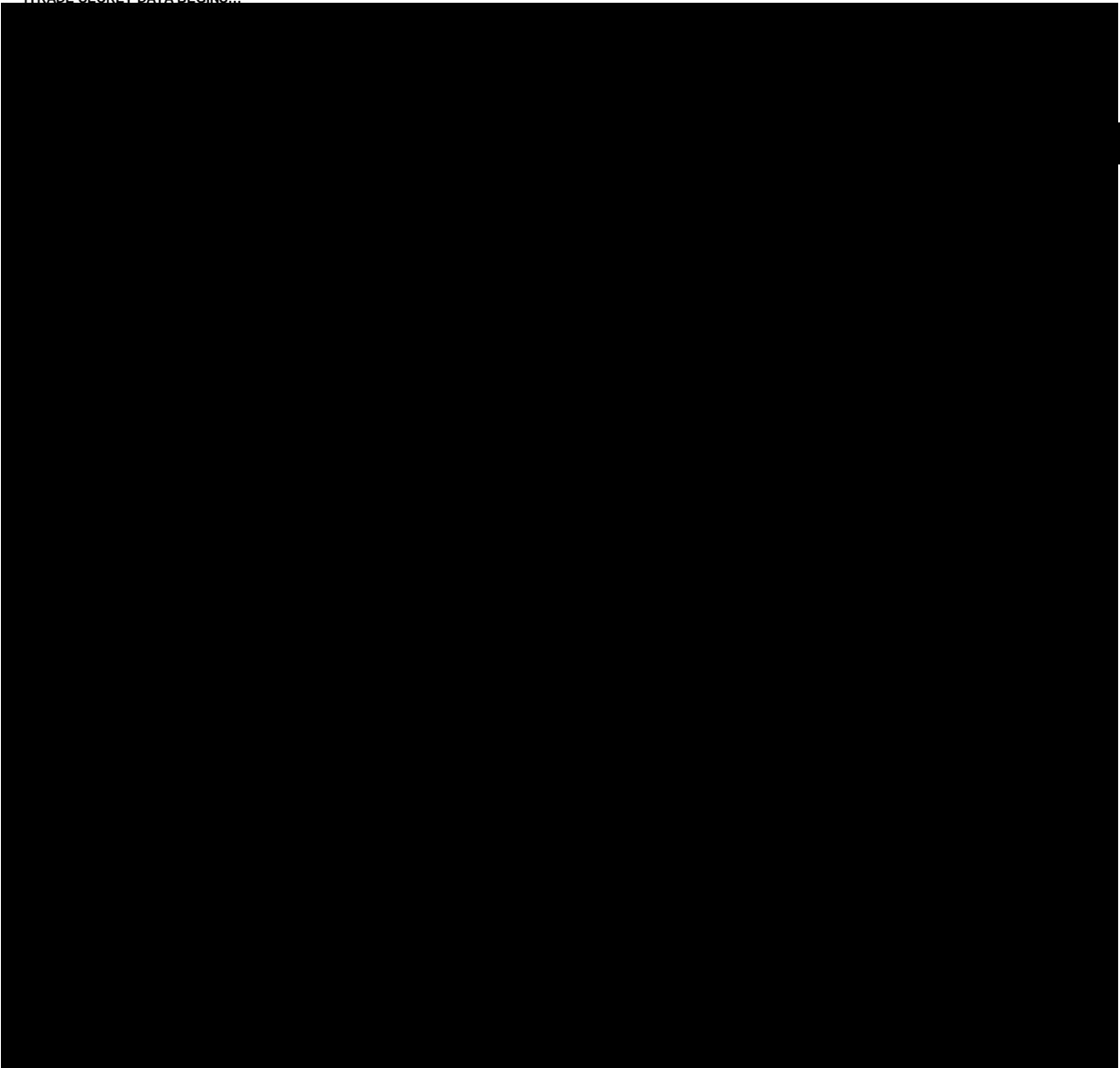
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[TRADE SECRET DATA BEGINS...

All Formulas



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Retail Sales and Surcharge



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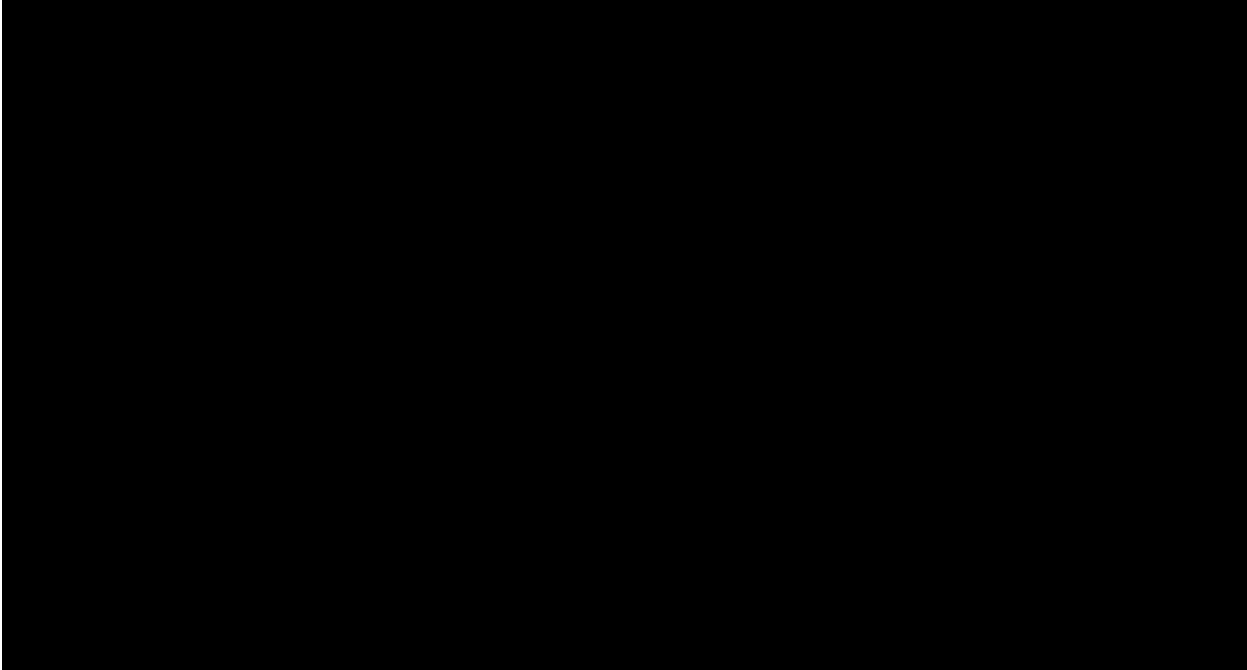
MERC New Area Surcharge Analysis

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**[TRADE SECRET  
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**All Formulas**



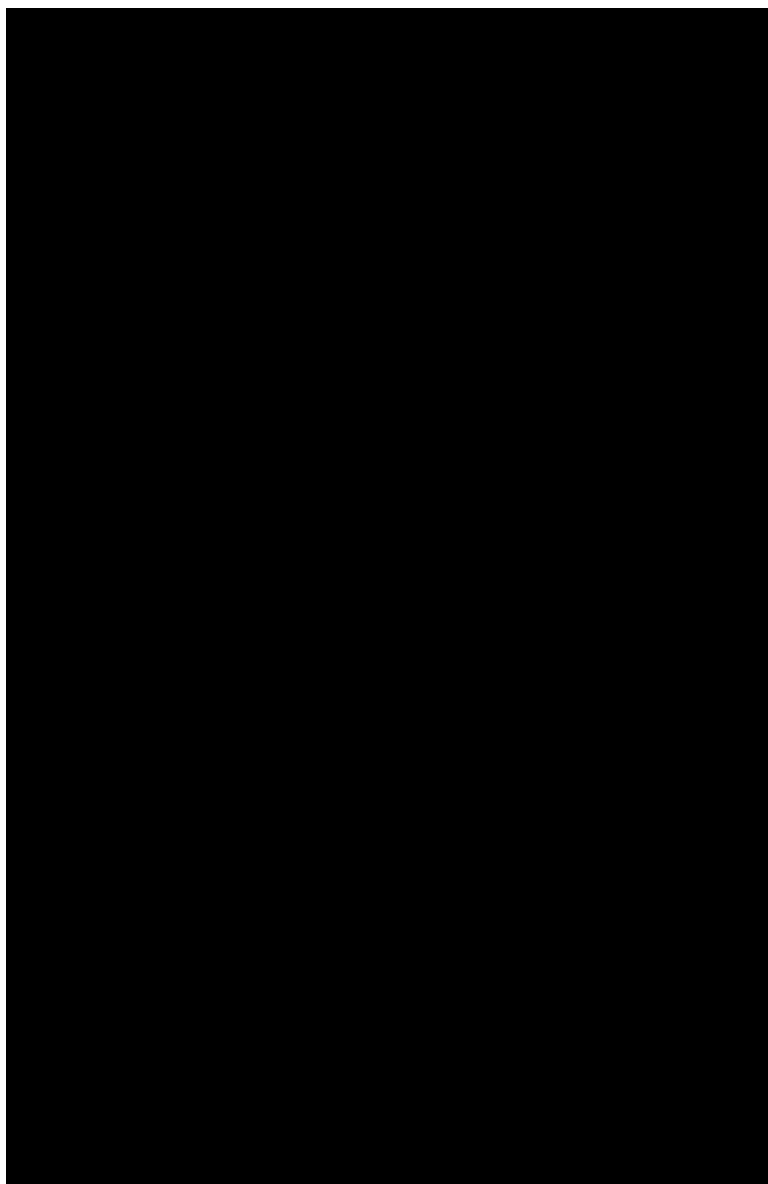
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MERC New Area Surcharge Analysis

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**[TRADE SECRET DATA BEGINS...**

**All Formulas**



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[TRADE SECRET DATA BEGINS



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**Tap Cost Amortization Schedule**

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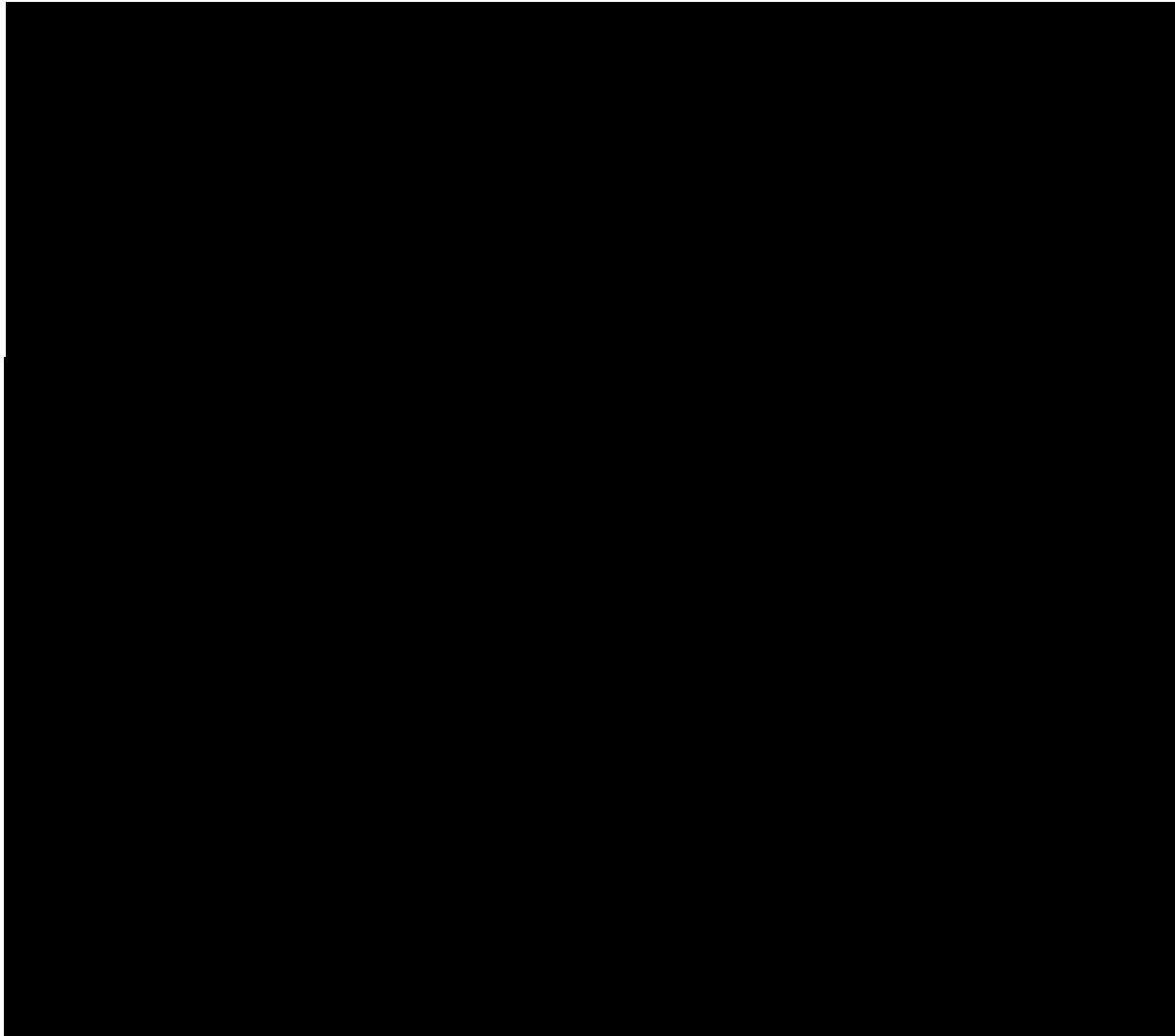


Annual Carry cost is 2.0370% per current rate case

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**Minnesota Energy Resources Corporation  
Pengilly Project New Area Surcharge  
Exhibit C-Workpapers**



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Step 1: Determine the percentage of total project costs (MERC construction costs and incremental O&M costs related to NNG upgrades) (up to 33 percent) to be recovered via an NGEF rider in order to make the NAS reasonably affordable. [TRADE SECRET DATA BEGINS... [REDACTED]

[REDACTED] ...TRADE  
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Step 2: Run the total project costs (MERC construction costs and incremental O&M costs related to NNG upgrades) less costs proposed for recovery through the NGEF rider through MERC's approved NAS model to determine the contribution in aid of construction (i.e., the portion of remaining project costs which projected revenues from customers anticipated to receive natural gas service as a result of the Project will not cover).

Step 3: Calculate the per-therm NGEF rider surcharge to be assessed to all MERC customers by calculating the net present value of proposed NGEF Rider Costs by the Minnesota jurisdictional sales forecast approved in Docket No. G011/GR-15-736. The result of this methodology is to reduce the overall amount collected by the Company over a single year to reflect the time value of money, reducing the impact to customers and recognizing the value of collecting the costs for ratepayers in a single year rather than over the useful life of the project. The reason the Company has not proposed to establish an NGEF rider surcharge that is calculated to collect costs spread over the useful life of the project is because the per-therm charge would be so small that it would be lost in rounding. Such an approach would not be administrable given the amount of costs being proposed for socialization through the NGEF Rider mechanism.

Step 4: The NAS model calculates the monthly new area surcharge amounts, by customer class, based on customer charge allocation in order to recover the calculated contribution in aid of construction, offset by the NGEF surcharge revenue collected in 2020, over the proposed term of the NAS.