### Indiana Michigan Power Company - Indiana Rate Design for Primary Backup Service Based on GS, LGS and IP Class Cost-of-Service

GAO 2017-3: 1-04 ATTACHMENT A

## **Backup Demand Charge Rate Design - Primary Voltage**

| <u>Line #</u><br>(1) | <u>F</u> :   | unction<br>(2)                  | Revenue Requirement (3) (\$) | Primary Billing Determinants (4) (kW or kVA) | Functional<br>Rates<br><u>@ Primary</u><br>(5)=(3)/(4)<br>(\$ / kW or kVA) | Forced<br>Outage<br><u>Rate</u><br>(6) | Backup<br>Reservation<br><u>Charge</u><br>(7)=(5)x(6)<br>(\$ / kW or kVA) |
|----------------------|--------------|---------------------------------|------------------------------|--|--|--|---|
| 1<br>2               | Production   | Demand<br>Energy                | \$411,333,999<br>123,932,067 | 14,757,215                                   | \$27.87  | 5.0%                                   | \$1.39  |
| 3<br>4               | Transmission | Power Supply<br>Subtransmission | 0<br>0                       | 14,757,215<br>7,682,100                      | 0.00<br>0.00   | 5.0%                                   | 0.00<br>0.00  |
| 5<br>6               | Distribution | Primary<br>Secondary            | 57,896,306<br>28,718,279     | 12,742,907                                   | 4.54   |  | 4.54  |
| 7                    | Customer     |                                 | 11,881,500                   |  |  |  |   |
| 8                    | Total        |                                 | \$633,762,151                |  |  |  | \$5.93  |

At a Forced Outage Rate of 5.0% the Customer may utilize 438 hours of backup service per year.

Data is from I&M-Indiana's 2017 base case, Cause No. 44967 (pending IURC approval), final settlement workpapers.

## Indiana Michigan Power Company - Indiana Rate Design for Primary Backup Service Based on GS, LGS and IP Class Cost-of-Service

### GAO 2017-3: 1-04, ATTACHMENT B

### Maintenance Energy Charge Rate Design - Primary Voltage

### Line #

| 1<br>2      | Distribution Cost Use Full Distribution Cost   | \$4.54<br>100.00%          | /kW                  |
|-------------|--|----------------------------|----------------------|
| 3           | Distribution Charge:   | \$4.54                     | /kW                  |
| 4<br>5      | Generation/Transmission Cost<br>Forced Outage Rate   | \$27.87<br>15.00%          | /kW                  |
| 6           | Generation/Transmission Charge:  | \$4.18                     | /kW                  |
| 7<br>8<br>9 | Maintenance Demand Component<br>Hours @ 85% Utilization Factor<br>Maintenance Demand Component | \$8.72<br>621<br>\$0.01404 | /kW<br>hours<br>/kWh |
| 10          | Maintenance Energy Component   | \$0.01415                  | /kWh                 |
| 11          | Maintenance Energy Charge:   | \$0.02819                  | /kWh                 |

Data is from I&M-Indiana's 2017 base case, Cause No. 44967 (pending IURC approval), final settlement workpapers. Maintenance energy component is proposed IP-Primary tail-block rate.

# Indiana Michigan Power Company - Indiana Rate Design for Cogen Tariff Backup Charge

### GAO 2017 3: 1-04, ATTACHMENT C

## **Cogen Tariff Backup Charge:**

## **Diversity Ratio Development \***

| Diversity Ratio                          | 1.929     |        |
|--|-----------|--------|
| Average Monthly Coincident Peak Demand   | 390,036   | kW     |
| Average Monthly Billing Demand           | 752,496   | kW     |
| Divided by 12                            | 12        | months |
| Annual Total GS-Secondary Billing Demand | 9,029,951 | kW     |

<sup>\*</sup> Data from Rate Design & Cost-of-Service in IURC Cause No. 44075 (WP-DMR-17)

### **Back-Up Service Rate Calculation**

| Current GS - Secondary Demand Charge | \$4.695 /kW        |  |  |
|--------------------------------------|--------------------|--|--|
| Diversity Ratio                      | 1.929              |  |  |
| Coincident Peak Demand Cost          | \$9.057 /kW        |  |  |
| Typical Unavailability Rate          | 15%                |  |  |
| Back-Up Service Rate                 | <b>\$1.359</b> /kW |  |  |

Data is from I&M-Indiana's 2018 annual cogen filing, 30 Day Filing No.50125 (pending IURC approval).