

RECEIVED ON: **MARCH 2, 2010**  
IURC 30-DAY FILING NO.: **2665**  
Indiana Utility Regulatory Commission

Indiana Michigan Power  
P.O. Box 60  
Fort Wayne, IN 46801  
IndianaMichiganPower.com



*A unit of American Electric Power*

Secretary of the Commission  
Indiana Utility Regulatory Commission  
National City Center  
101 West Washington Street, Suite 1500 East  
Indianapolis, Indiana 46204

February 25, 2010

Dear Secretary:

Pursuant to 170 IAC 1-6, I&M submits this thirty-day filing requesting approval of amendments to I&M's Tariff COGEN/SPP (Cogeneration and/or Small Power Production Service) which is being submitted pursuant to 170 Ind. Admin. Code 4-4-1-10. Additionally, I&M is proposing changes to the Tariff COGEN/SPP Back-up and Maintenance Service provision to address those cogeneration and/or small power production facilities that operate intermittently, such as wind or solar generation facilities, such that the customer's monthly billing demands under the demand-metered rate schedule will be based upon the customer's maximum monthly demand which will occur at a time when the cogeneration and/or small power production facility is not in operation. The contract forms and related data are comparable to the information provided in previous I&M filings. Related customer-generator interconnection standards are codified in 170 Ind. Admin. Code 4-4.3.

Enclosed for the Commission's review and approval, please find the following documents:

1. Original and three copies of Indiana Michigan Power Company's proposed 2010 Tariff COGEN/SPP (Cogeneration and/or Small Power Production Service).
2. Supporting workpapers, and
3. Verified Statement of Publication.

Upon completion of your review, please return to us one set of the stamped approved tariff sheets.

If you have any questions regarding I&M's report please contact me at (260) 425-2101 or [smkrawec@aep.com](mailto:smkrawec@aep.com).

Sincerely,

A handwritten signature in black ink, appearing to read "Scott M Krawec". The signature is fluid and cursive, with a long horizontal line extending to the right.

Scott M Krawec  
Director of Regulatory Services

Enclosures

cc: Brad Borum-IURC  
David Stippler-OUCC



**III. Calculation of Unadjusted Monthly Avoided Cost of Capacity**

$$C = \left(\frac{1}{12}\right) \times \left[ \frac{\left(D \times V \times \frac{S1}{S2} \times S3\right) + (S4 \times S5)}{S6} \right]$$

Where:

$$S1 = 1 - \frac{1 + IP}{1 + R}$$

$$S2 = 1 - \left(\frac{1 + IP}{1 + R}\right)^N$$

$$S3 = (1 + IP)^{(T-1)}$$

$$S4 = O \times \left(\frac{1 + IO}{1 + R}\right)$$

$$S5 = (1 + IO)^{(T-1)}$$

$$S6 = 1 - \frac{L}{2}$$

**Calculation for First Year**

T =	1		
S1 =	0.0723	S4 =	14.3327
S2 =	0.8948	S5 =	1.0000
S3 =	1.0000	S6 =	0.9585

$$C = \left(\frac{1}{12}\right) \times \left[ \frac{\left(1.4295 \times 850 \times \frac{0.0723}{0.8948} \times 1\right) + (14.3327 \times 1)}{0.9585} \right]$$

C = \$9.78



**Cost Calculations (Support Page 1, Assumptions A & D)**

**I. Fixed Operations & Maintenance Cost per kW (2010 Dollars)**

Fixed Operations & Maintenance Cost		8.79 mills/kWh
Hours per Year	x	8,760 hours
Unit Size	x	171,000 kW
Capacity Factor	x	10.00%
<hr/>		
Total Fixed O&M Cost		\$1,316,707 /year
Unit Size	/	171,000 kW
<hr/>		
Per Unit Fixed O&M Cost		\$7.70 /kW

**II. Variable Operations & Maintenance Cost per kW (2010 Dollars)**

Variable Operations & Maintenance Cost		8.85 mills/kWh
Hours per Year	x	8,760 hours
Unit Size	x	171,000 kW
Capacity Factor	x	10.00%
<hr/>		
Total Variable O&M Cost		\$1,325,695 /year
Unit Size	/	171,000 kW
<hr/>		
Per Unit Variable O&M Cost		\$7.75 /kW

**III. Total Operations & Maintenance Cost per kW (2010 Dollars)**

Fixed O&M Cost		\$7.70 /kW
Variable O&M Cost	+	7.75 /kW
<hr/>		
Total O&M Cost (Page 1, Assumption D)		\$15.45 /kW

**I. Calculation of Annual Carrying Charge Rate (Page 1, Assumption C)**

	<u>Variable</u>	<u>Value</u>
Weighted Cost of Capital	R	9.52%
Property Tax Rate:		
Account 4081005 - State of Indiana, 12/09		15,788,046
Electric Plant in Service - State of Indiana, 12/09	/	3,430,819,220
Property Tax Rate	a	0.46%
Insurance Rate:		
Account 9240000, 12/09		1,944,130
Electric Plant in Service - Total Company, 12/09	/	6,122,485,918
Insurance Rate	p	0.03%
Depreciation Rate	d	1.65%
Composite Tax Rate	ct	39.56%
Book Depreciation	bd	3.33%
Rate on Debt Capital	b	8.50%
Debt Ratio from last filed rate case (IURC Cause No. 43306)	dr	48.58%

$$CCR = R + a + p + d + \left[ \left( \frac{ct}{1-ct} \right) \times (R + d - bd) \times \left( \frac{R - (b \times dr)}{R} \right) \right]$$

CCR = **14.56%**

**I. Energy Payment Calculation \***

**On-Peak      Off-Peak      Non-TOD**

**A. Potential Loss Savings**

Primary Losses			5.60%
Divided by 2	/		2
Loss Adjustment (Potential Loss Savings)			2.80%

**B. Time-of-Day Energy Payments**

Avoided Energy Costs		2.75	2.37	¢/kWh
Divided by (1 - Loss Savings)	/	0.9720	0.9720	
Time-of-Day Energy Payments		<b>2.83</b>	<b>2.44</b>	¢/kWh

**C. Non-Time-of-Day Energy Payment**

Time-of-Day Energy Payments		2.83	2.44	¢/kWh
Hours per Year	x	3,654	5,106	hours
Weighted Average of Hourly TOD Payments		10,341	12,459	22,800
Hours Per Year				8,760
Non-Time-of-Day Energy Payment				<b>2.60</b> ¢/kWh

\* On-Peak Period is 7am - 9pm, Monday through Friday  
Off-Peak Period is all other hours

**II. Demand and Energy Loss Calculations \*\***

<u>System</u>	<u>Demand</u>	<u>Energy</u>
Transmission	4.504%	2.998%
Subtransmission	0.717%	0.698%
Primary		
Transformer	0.738%	0.611%
Line	2.126%	1.223%
Compound Loss Factor	<b>8.3%</b>	<b>5.6%</b>

\*\* Assuming COGEN/SPP Service at Primary

<b>I. <u>Annual Carrying Charge Rates</u></b>	<b><u>Variable</u></b>	<b><u>Value</u></b>
Fixed Costs		0.0%
O&M		1.9%
Carrying Costs	<b>CC</b>	<b>1.9%</b>

<b>II. <u>Charges</u></b>		
Contingencies		5%
Stores Expense		22%
Total Charges on Material	<b>MC</b>	<b>27%</b>
Labor		66%
Transportation Expense		28%
Total Charges on Labor	<b>LC</b>	<b>94%</b>

<b>III. <u>Overheads</u></b>		
Company Construction Overheads	<b>OC</b>	25%

**IV. Monthly Charge on Incremental Material**

IM = Incremental Material Cost  
 IL = Incremental Labor Cost (50% of Material) = 0.5 x IM

$$\text{Monthly Charge on IM} = (1 + OC) \times [(1 + MC) \times IM + (1 + LC) \times IL] \times \frac{CC}{12}$$

Monthly Charge on IM = **0.44%** of Incremental Material Cost

**V. Monthly Meter Charges**

	<u>Incremental Material (IM)</u>	<u>Monthly Charge</u> 0.44%	<u>Average Charge</u>
<b>Standard Measurement</b>			
<u>Single Phase</u>			
Option 2-1 - Primary - Transformer Rated	387	\$1.70	
Option 2-3 - Secondary - Self-Contained	41	0.18	
Option 3-1 - Primary - Transformer Rated	387	1.7	
Option 3-3 - Secondary - Transformer Rated	387	1.7	
Option 3-5 - Secondary - Self Contained	41	0.18	
<b>Total</b>		\$ 5.46 / 5 =	\$1.09
		<b>Use:</b>	<b>\$1.10</b>
<u>Polyphase</u>			
Option 2-2 - Primary - Transformer Rated	387	\$1.70	
Option 2-4 - Secondary - Self-Contained	230	1.01	
Option 3-2 - Primary - Transformer Rated (or Sec. >200 Amps)	387	1.7	
Option 3-4 - Secondary - Transformer Rated (Below 200 Amps)	387	1.7	
Option 3-6 - Secondary - Self Contained (Below 200 Amps)	230	1.01	
<b>Total</b>		\$ 7.12 / 5 =	\$1.42
		<b>Use:</b>	<b>\$1.40</b>
<b>Time-of-Day Measurement</b>			
<u>Single Phase</u>			
Option 2-5 - Primary - Transformer Rated	396	\$1.74	
Option 2-7 - Secondary - Self-Contained	93	0.41	
Option 3-7 - Primary - Transformer Rated	396	1.74	
Option 3-9 - Secondary - Transformer Rated	396	1.74	
Option 3-11 - Secondary - Self Contained	41	0.18	
<b>Total</b>		\$ 5.81 / 5 =	\$1.16
		<b>Use:</b>	<b>\$1.15</b>
<u>Polyphase</u>			
Option 2-6 - Primary - Transformer Rated	396	\$1.74	
Option 2-8 - Secondary - Self-Contained	239	1.05	
Option 3-8 - Primary - Transformer Rated	396	1.74	
Option 3-10 - Secondary - Transformer Rated	396	1.74	
Option 3-12 - Secondary - Self Contained	239	1.05	
<b>Total</b>		\$ 7.32 / 5 =	\$1.46
		<b>Use:</b>	<b>\$1.45</b>

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Indiana Michigan Power Company  
Calculation of COGEN/SPP Charges/Credits  
Per Final Rule in IURC Cause No. 37494

**I. Diversity Ratio Development \***

Annual Total MGS-Secondary Billing Demand	9,283,016 kW
Divided by 12	12 months
Average Monthly Billing Demand	773,585 kW
Average Monthly Coincident Peak Demand	435,690 kW
Diversity Ratio	<b>1.776</b>

\* Data from Rate Design & Cost-of-Service in IURC Cause No. 43306 (WPH-13 & WPJ-74)

**II. Back-Up Service Rate Calculation**

Current MGS - Secondary Demand Charge	\$4.297 /kW
Diversity Ratio	1.776
Coincident Peak Demand Cost	\$7.631 /kW
Typical Unavailability Rate	15%
Back-Up Service Rate	<b>\$1.145 /kW</b>

Section 292.302(b) (1)

AEP SYSTEM EASTERN ZONE  
ESTIMATED "AVOIDED COSTS" OF ENERGY  
FOR ASSUMED LEVELS OF COGENERATION PURCHASES  
2010 - 2015  
(Cents Per Kilowatt-Hour)

	<u>ASSUMED COGENERATION PURCHASE LEVEL</u>			
	<u>First</u>		<u>Second</u>	
	<u>100-MW</u>		<u>100-MW</u>	
	<u>Block</u>	<u>Block</u>	<u>Block</u>	<u>Block</u>
	<u>Peak</u>	<u>Off-Peak</u>	<u>Peak</u>	<u>Off-Peak</u>
2010	2.75	2.37	2.74	2.37
2011	2.84	2.37	2.83	2.36
2012	2.62	2.25	2.61	2.24
2013	2.94	2.60	2.93	2.59
2014	4.54	4.01	4.53	3.98
2015	5.23	4.59	5.21	4.57

Notes: A. The peak costing period is 0700 to 2100 local time Monday through Friday. All other hours comprise the off-peak costing period.

B. Energy costs are expressed in current-year dollars.

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**TARIFF COGEN/SPP**  
**(Cogeneration and/or Small Power Production Service)**

(Cont'd from Sheet No. 26.2)

requirements of the customer's total load. When metering voltage for COGEN/SPP facilities is different from the Company's delivery voltage, metering requirements and charges shall be determined specifically for each case.

(2) Local Facilities Charge

Additional charges to cover the cost of special metering facilities, safety equipment, and other local facilities installed by the Company shall be determined by the Company for each case and collected from the customer. The customer shall make a one-time payment for such charges upon completion of the required additional facilities or, at the customer's option, 12 consecutive equal monthly payments reflecting an annual interest charge equal to the maximum rate permitted by law not to exceed the prime rate in effect at the first billing for such installments.

Monthly Credits or Payments for Energy and Capacity Deliveries.

(1) Energy Credit

The following credits or payments from the Company to the customer shall apply for the electrical energy delivered to the Company:

Standard Meter			
All kWh	2.60¢		I
TOD Meter			
On-peak kWh	2.83¢		I
Off-peak kWh	2.44¢		I

(2) Capacity Credit

If the customer contracts to deliver a specified average capacity during the on-peak monthly billing period (on-peak contract capacity), then the first-year monthly capacity credit or payment from the Company to the customer shall be \$9.78/kW times the lowest of:

- (a) monthly on-peak contract capacity, or
- (b) current month on-peak metered average capacity, i.e., on-peak kWh delivered to the Company divided by 305, or

(Cont'd on Sheet No. 26.4)

ISSUED BY  
 HELEN J. MURRAY  
 PRESIDENT  
 FORT WAYNE, INDIANA

EFFECTIVE FOR ELECTRIC SERVICE RENDERED  
 ON AND AFTER

ISSUED UNDER AUTHORITY OF THE  
 INDIANA UTILITY REGULATORY COMMISSION  
 DATED  
 IN CAUSE NO. 43306

RECEIVED ON: **MARCH 2, 2010**  
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**TARIFF COGEN/SPP**  
**(Cogeneration and/or Small Power Production Service)**  
(Cont'd from Sheet No. 26)

Monthly Charges for Delivery From the Company to the Customer.

(1) Supplemental Service

Available to the customer to supplement its COGEN/SPP source of power supply which will enable either or both sources of supply to be utilized for all or any part of the customer's total requirements.

Charges for energy, and demand where applicable, to serve the customer's net or total load shall be determined according to the rate schedule appropriate for the customer. Option 1 and Option 2 customers with COGEN/SPP facilities having a total design capacity of more than 10 kW shall be served under demand-metered rate schedules.

(2) Back-up and Maintenance Service

Option 1 and Option 2 customers with COGEN/SPP facilities having a total design capacity of more than 10 kW shall be required to purchase backup service to replace energy from COGEN/SPP facilities during maintenance and unscheduled outages of its COGEN/SPP facilities. Contracts for such service shall be executed on a special contract form for a minimum term of one year.

Option 3 customers purchasing their total energy requirements from the Company will not be considered as taking backup service. Customers having cogeneration and/or small power production facilities that operate intermittently during all months (i.e. wind or solar) such that the customer's monthly billing demands under the demand-metered rate schedule will be based upon the customer's maximum monthly demand which will occur at a time when the cogeneration and/or small power production facility is not in operation will also not be considered as taking backup service.

N  
N  
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N

The backup capacity in kilowatts shall be initially established by mutual agreement for electrical capacity sufficient to meet the maximum backup requirements which the Company is expected to supply. Whenever the backup capacity so established is exceeded by the creation of a greater actual maximum demand, excluding firm load regularly supplied by the Company, then such greater demand becomes the new backup capacity.

T

A monthly service charge of \$1.145 per kilowatt of backup capacity shall be paid by customers served under demand-metered rate schedules. Whenever backup and maintenance capacity is used and the customer notifies the Company in writing prior to the meter reading date, the backup contract capacity shall be subtracted from the total metered demand during the period specified by the customer for billing demand purposes. After 1,900 hours of use during the contract year, the total metered demand shall be used as the billing demand each month until a new contract year is established. In lieu of the above monthly charge, customers may instead elect to have the monthly billing demand under the demand-metered rate schedules determined each month as the highest of the monthly billing demand for the current and previous two billing periods.

R  
  
N  
N  
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N

(Cont'd on Sheet No. 26.2)

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PRESIDENT  
FORT WAYNE, INDIANA

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**TARIFF COGEN/SPP**  
**(Cogeneration and/or Small Power Production Service)**

(Cont'd from Sheet No. 26.1)

Additional Charges.

There shall be additional charges to cover the cost of special metering, safety equipment, and other local facilities installed by the Company due to COGEN/SPP facilities, as follows:

(1) Metering Charges

The additional charge for special metering facilities shall be as follows:

(a) Option 1

Where the customer does not sell electricity to the Company, a detent shall be used on the energy meter to prevent reverse rotation. The cost of such meter alteration shall be paid by the customer as part of the Local Facilities Charge.

(b) Options 2 & 3

Where energy meters are required to measure the excess energy and average on-peak capacity purchased by the Company or the total energy and average on-peak capacity produced by the customer's COGEN/SPP facilities, the cost of the additional metering facilities shall be paid by the customer as part of the Local Facilities Charge. In addition, a monthly metering charge shall be as follows to cover the cost of operation and maintenance of such additional facilities:

	<u>Single Phase</u>	<u>Polyphase</u>	
Standard Measurement	\$1.10	\$1.40	I
TOD Measurement	\$1.15	\$1.45	I

Under Option 3, when metering voltage for COGEN/SPP facilities is the same as the Company's delivery voltage, the customer shall, at his option, either route the COGEN/SPP totalized output leads through the metering point or make available at the metering point for the use of the Company and as specified by the Company metering current leads which will enable the Company to measure adequately the total electrical energy and average on-peak capacity produced by the qualifying COGEN/SPP facilities, as well as to measure the electrical energy consumption and capacity

(Cont'd on Sheet No. 26.3)

ISSUED BY  
HELEN J. MURRAY  
PRESIDENT  
FORT WAYNE, INDIANA

EFFECTIVE FOR ELECTRIC SERVICE RENDERED  
ON AND AFTER

ISSUED UNDER AUTHORITY OF THE  
INDIANA UTILITY REGULATORY COMMISSION  
DATED  
IN CAUSE NO. 43306

STATE OF INDIANA  
INDIANA UTILITY REGULATORY COMMISSION

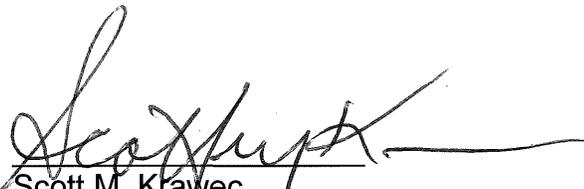
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Indiana Utility Regulatory Commission

VERIFIED STATEMENT OF PUBLICATION

Scott M. Krawec, being duly sworn upon oath, deposes and says that:

1. I am Director of Regulatory Services for Indiana Michigan Power Company (I&M).
2. Pursuant to 170 IAC 1-6-5(a), I affirm that affected customers have been notified of I&M's thirty-day filing of updated Tariff COGEN/SPP as required under 170 IAC 1-6-6.
3. Notification of the thirty-day filing of updated Tariff COGEN/SPP was made by publication of a Legal Notice in a newspaper of general circulation that has a circulation encompassing the highest number of I&M's customers, and posting the notice on I&M's website.
4. A true and correct copy of I&M's Legal Notice is attached hereto as Exhibit "A".

Date: 2/22/2010

  
Scott M. Krawec  
Director of Regulatory Services  
Indiana Michigan Power Company

STATE OF INDIANA            )  
  ) ss:  
COUNTY OF ALLEN         )

Subscribed and sworn to before me, a Notary Public, in and for said County and State this 22 day of February, 2010.

  
Regina M. Sistevaris, Notary Public

I am a resident of Allen County, Indiana.  
My commission expires: March 6, 2015



# The Journal Gazette

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Indiana Utility Regulatory Commission  
Allen County, Indiana

Account # 1065923 - 795739  
**Indiana Michigan Power Co**

ATTACH COPY OF ADVERTISEMENT HERE

## PUBLISHER'S CLAIM

### LINE COUNT

Display Master (Must not exceed two actual lines, neither of which shall total more than four solid lines of the type in which the body of the advertisement is set) -- number of equivalent lines	_____
Head -- number of lines	_____
Body -- number of lines	_____
Tail -- number of lines	_____
<b>Total number of lines in notice</b>	<b>58</b>

### COMPUTATION OF CHARGES

<u>58</u> lines, <u>1</u> column(s) wide equals	
<u>58</u> equivalent lines at \$ <u>2.350</u> cents per line	\$ 136.30

Additional charges for notices containing rule or tabular work (per cent of above amount)	-
extra proofs of publication (00 for each proof in excess of two)	-
<b>TOTAL AMOUNT OF CLAIM</b>	<b>\$ 136.30</b>

### SETTING COST

single column in picas . . . . 9.8    Size of type . . . . 7point.  
insertions . . . . 1

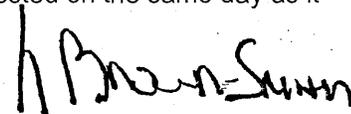
I, the undersigned, being duly sworn, depose and say that the provisions and penalties of IC 5-11-10-1, I hereby certify that the foregoing is correct, that the amount claimed is legally due, after allowing all just credits, and that the same has been paid.

that the printed matter attached hereto is a true copy, of the same column width and that the same was duly published in said paper 1 times.

My deposition being as follows:

0	-	-
-	-	-

My deponent has a Web site and this public notice was posted on the same day as it appeared in the Journal Gazette.



T. Brown-Smith  
Legal Clerk

### LEGAL NOTICE STATE OF INDIANA INDIANA UTILITY REGULATORY COMMISSION

Indiana Michigan Power Company, an Indiana corporation, gives notice that on or before February 28, 2010, it will submit for approval under the Indiana Utility Regulatory Commission's thirty-day filing process an updated Tariff COGEN/SPP and a standard form contract for purchase of energy and capacity at rates derived from the application of regulations. The referenced filing will consist of Indiana Michigan Power Company's proposed 2010 Tariff COGEN/SPP (Cogeneration and/or Small Power Production Service) and standard contract forms. Customers potentially affected by this filing include alternate energy production facilities, cogeneration facilities, or small hydrofacilities located in the Indiana Michigan Power Company service territory. Those customers may be affected by changes in metering charges related to special metering facilities, and by monthly credits or payments for energy and capacity deliveries. A decision on the 2010 Tariff COGEN/SPP filing should be received from the Indiana Utility Regulatory Commission on or before June 1, 2010.

Please direct inquiries to:  
Indiana Michigan Power Company  
Attn: Director of Regulatory Services  
P.O. Box 60  
Fort Wayne, IN 46801

Objections to this filing can be made to the following:

Indiana Utility Regulatory Commission  
Attn: Commission Secretary  
National City Center  
101 West Washington Street  
Suite 1500 East  
Indianapolis, Indiana 46204

Indiana Office of Utility  
Consumer Counselor  
National City Center  
115 W. Washington Street  
Suite 1500 South  
Indianapolis, Indiana 46204  
2--13 795739

Date: February 13, 2010