

Received On: March 3, 2014
IURC 30-DAY Filing No.: 3224
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
PNC Center
101 West Washington Street, Suite 1500 East
Indianapolis, Indiana 46204

March 3, 2014

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.

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

1. Indiana Michigan Power Company's proposed updates to Tariff COGEN/SPP (Cogeneration and/or Small Power Production Service) in clean and redline format.
2. Supporting workpapers, and
3. Verified Statement of Publication.

If you have any questions regarding I&M's request please contact me at (260) 408-3503 or wwhix@aep.com.

Sincerely,

A handwritten signature in blue ink that reads 'William W. Hix'.

William W. Hix
Principal Regulatory Consultant

Enclosures

cc: Brad Borum-IURC
David Stippler-OUCC

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

Received On: March 3, 2014
IURC 30-DAY Filing No.: 3224
Indiana Utility Regulatory Commission

(Cont'd from Sheet No. 27.1)

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	\$0.80	\$1.05	RR
TOD Measurement	\$0.85	\$1.05	RR

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. 27.3)

ISSUED BY
PAUL CHODAK III
PRESIDENT
FORT WAYNE, INDIANA

EFFECTIVE FOR ELECTRIC SERVICE RENDERED
ON AND AFTER _____

ISSUED UNDER AUTHORITY OF THE
INDIANA UTILITY REGULATORY COMMISSION
DATED _____
30-DAY FILING _____

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

Received On: March 3, 2014
IURC 30-DAY Filing No.: 3224
Indiana Utility Regulatory Commission

(Cont'd from Sheet No. 27.2)

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 installations.

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	3.45¢		
TOD Meter			
On-peak kWh	4.10¢		
Off-peak kWh	2.99¢		

(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 \$9.08/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. 27.4)

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PAUL CHODAK III
PRESIDENT
FORT WAYNE, INDIANA

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

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(Cont'd from Sheet No. 27.1)

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	<u>Single Phase</u>	<u>Polyphase</u>	
Standard Measurement	\$0-850.80	\$1-101.05	<u>RR</u>
TOD Measurement	\$0-900.85	\$1-101.05	<u>-RR</u>

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

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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	2.28¢	<u>3.45¢</u>	RI
TOD Meter			
On-peak kWh	2.34¢	<u>4.10¢</u>	RI
Off-peak kWh	2.23¢	<u>2.99¢</u>	RI

(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 \$~~8.569.08~~/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. 27.4)

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 PAUL CHODAK III
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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 =	0.0606	S4 =	18.8346
S2 =	0.8468	S5 =	1.0000
S3 =	1.0000	S6 =	0.9690

$$C = \left(\frac{1}{12} \right) \times \left[\frac{\left(1.4634 \times 828 \times \frac{0.0606}{0.8468} \times 1 \right) + (18.8346 \times 1)}{0.9690} \right]$$

C = \$9.08

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

I. Fixed Operations & Maintenance Cost per kW (2014 Dollars)

Fixed Operations & Maintenance Cost		13.89 mills/kWh
Hours per Year	x	8,760 hours
Unit Size	x	171,000 kW
Capacity Factor	x	10.00%
Total Fixed O&M Cost		\$2,080,666 /year
Unit Size	/	171,000 kW
Per Unit Fixed O&M Cost		\$12.17 /kW

II. Variable Operations & Maintenance Cost per kW (2014 Dollars)

Variable Operations & Maintenance Cost		9.00 mills/kWh
Hours per Year	x	8,760 hours
Unit Size	x	171,000 kW
Capacity Factor	x	10.00%
Total Variable O&M Cost		\$1,348,164 /year
Unit Size	/	171,000 kW
Per Unit Variable O&M Cost		\$7.88 /kW

III. Total Operations & Maintenance Cost per kW (2014 Dollars)

Fixed O&M Cost		\$12.17 /kW
Variable O&M Cost	+	7.88 /kW
Total O&M Cost (Page 1, Assumption D)		\$20.05 /kW

I. <u>Calculation of Annual Carrying Charge Rate (Page 1, Assumption C)</u>	<u>Variable</u>	<u>Value</u>
Weighted Cost of Capital	R	8.05%
Property Tax Rate:		
Account 4081005 - State of Indiana, 12/13		18,756,558
Electric Plant in Service - State of Indiana, 12/13	/	3,934,506,944
Property Tax Rate	a	0.48%
Insurance Rate:		
Account 9240000, 12/13		4,470,216
Electric Plant in Service - Total Company, 12/13	/	7,188,153,045
Insurance Rate	p	0.06%
Depreciation Rate	d	1.68%
Composite Tax Rate	ct	39.69%
Book Depreciation	bd	3.33%
Rate on Debt Capital	b	5.72%
Debt Ratio from last filed rate case (IURC Cause No. 43306)	dr	47.47%

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

CCR = **13.06%**

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		3.99	2.91	¢/kWh
Divided by (1 - Loss Savings)	/	0.9720	0.9720	
Time-of-Day Energy Payments		4.10	2.99	¢/kWh

C. Non-Time-of-Day Energy Payment

Time-of-Day Energy Payments		4.10	2.99	¢/kWh
Hours per Year	x	3,654	5,106	hours
Weighted Average of Hourly TOD Payments		14,981	15,267	30,248
Hours Per Year				8,760
Non-Time-of-Day Energy Payment				3.45 ¢/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	3.399%	2.794%
Subtransmission	0.478%	0.729%
Primary		
Transformer	0.622%	0.639%
Line	1.586%	1.302%
Compound Loss Factor	6.2%	5.6%

** Assuming COGEN/SPP Service at Primary

I. <u>Annual Carrying Charge Rates</u>	<u>Variable</u>	<u>Value</u>
Fixed Costs		0.0%
O&M		1.5%
Carrying Costs	CC	1.5%

II. <u>Charges</u>		
Contingencies		5%
Stores Expense		23%
Total Charges on Material	MC	28%
Labor		51%
Transportation Expense		23%
Total Charges on Labor	LC	74%

III. <u>Overheads</u>		
Company Construction Overheads	OC	20%

IV. Monthly Charge on Incremental Material

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

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

Monthly Charge on IM = **0.32%** of Incremental Material Cost

V. Monthly Meter Charges

	Incremental Material (IM)	Monthly Charge 0.32%	Average Charge
Standard Measurement			
<u>Single Phase</u>			
Option 2-1 - Primary - Transformer Rated	391	\$1.25	
Option 2-3 - Secondary - Self-Contained	38	0.12	
Option 3-1 - Primary - Transformer Rated	391	1.25	
Option 3-3 - Secondary - Transformer Rated	391	1.25	
Option 3-5 - Secondary - Self Contained	38	0.12	
Total		\$ 3.99 / 5 =	\$0.80
		Use:	\$0.80
<u>Polyphase</u>			
Option 2-2 - Primary - Transformer Rated	391	\$1.25	
Option 2-4 - Secondary - Self-Contained	230	0.74	
Option 3-2 - Primary - Transformer Rated (or Sec. >200 Amps)	391	1.25	
Option 3-4 - Secondary - Transformer Rated (Below 200 Amps)	391	1.25	
Option 3-6 - Secondary - Self Contained (Below 200 Amps)	230	0.74	
Total		\$ 5.23 / 5 =	\$1.05
		Use:	\$1.05
Time-of-Day Measurement			
<u>Single Phase</u>			
Option 2-5 - Primary - Transformer Rated	400	\$1.28	
Option 2-7 - Secondary - Self-Contained	96	0.31	
Option 3-7 - Primary - Transformer Rated	400	1.28	
Option 3-9 - Secondary - Transformer Rated	400	1.28	
Option 3-11 - Secondary - Self Contained	38	0.12	
Total		\$ 4.27 / 5 =	\$0.85
		Use:	\$0.85
<u>Polyphase</u>			
Option 2-6 - Primary - Transformer Rated	400	\$1.28	
Option 2-8 - Secondary - Self-Contained	239	0.76	
Option 3-8 - Primary - Transformer Rated	400	1.28	
Option 3-10 - Secondary - Transformer Rated	400	1.28	
Option 3-12 - Secondary - Self Contained	239	0.76	
Total		\$ 5.36 / 5 =	\$1.07
		Use:	\$1.05

I. Diversity Ratio Development *

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

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

II. Back-Up Service Rate Calculation

Current MGS - 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	\$1.359 /kW

Section 292.302(b)(1)

INDIANA MICHIGAN POWER COMPANY
ESTIMATED "AVOIDED COSTS" OF ENERGY
FOR ASSUMED LEVELS OF COGENERATION PURCHASES
2014 - 2019
(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>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>
2014	3.99	2.91	3.99	2.91
2015	4.90	2.99	4.90	2.99
2016	5.67	3.55	5.67	3.55
2017	5.91	3.87	5.91	3.87
2018	5.98	3.97	5.98	3.97
2019	6.05	4.06	6.05	4.06

Note: The peak costing period is 0700 to 2100 local time Monday through Friday. All other hours comprise the off-peak costing period. Energy costs are expressed in current-year dollars.

STATE OF INDIANA
INDIANA UTILITY REGULATORY COMMISSION

VERIFIED STATEMENT OF PUBLICATION

William W. Hix, being duly sworn upon oath, deposes and says that:

1. I am a Principal Regulatory Consultant 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: 2-28-14


William W. Hix
Principal Regulatory Consultant
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 27th day of February 2014.


Regina M. Sistevaris, Notary Public

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

The Journal Gazette

Account # 1065923 - 1109916
Indiana Michigan Power Co

Allen County, Indiana

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	_____
Total number of lines in notice	58

COMPUTATION OF CHARGES

58 lines, 1 column(s) wide equals	
58 equivalent lines at \$ 2.610 cents per line	\$ 151.38
Additional charges for notices containing rule or tabular work (50 per cent of above amount)	-
Charge for extra proofs of publication (\$2.00 for each proof in excess of two)	-
TOTAL AMOUNT OF CLAIM	\$ 151.38

DATA FOR COMPUTING COST

Width of single column in picas 9.8 Size of type 7point.
Number of Insertions 1

Pursuant to the provisions and penalties of IC 5-11-10-1, I hereby certify that the foregoing account is just and correct, that the amount claimed is legally due, after allowing all just credits, and that no part of the same has been paid.

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

The dates of publication being as follows:

<u>2/22/2014</u>	-	-	-
-	-	-	-
-	-	-	-

Additionally, Newspaper has a Web site and this public notice was posted on the same day as it was published in The Journal Gazette.

T. Brown-Smith

T. Brown-Smith
Legal Clerk

Date: February 22, 2014

ATTACH COPY OF ADVERTISEMENT HERE

The News-Sentinel

Exhibit "A"
Page 2 of 3

Allen County, Indiana

Account # 1065923 - 1109916
Indiana Michigan Power Co

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<u>58</u> equivalent lines at \$ <u>2.610</u> cents per line	\$ 151.38

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(50 per cent of above amount) -

Charge for extra proofs of publication
(\$2.00 for each proof in excess of two) -

TOTAL AMOUNT OF CLAIM \$ 151.38

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I also certify that the printed matter attached hereto is a true copy, of the same column width and type size, which was duly published in said paper 3 times.

The dates of publication being as follows:

<u>2/22/2014</u>	-	-	-
-	-	-	-
-	-	-	-

Additionally, Newspaper has a Web site and this public notice was posted on the same day as it was published in The News-Sentinel.

T. Brown-Smith
Legal Clerk

Date: February 22, 2014

ATTACH COPY OF ADVERTISEMENT HERE

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

Indiana Michigan Power Company, an Indiana corporation, gives notice that on or about February 28, 2014, 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 2014 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 2014 Tariff COGEN/SPP filing is expected from the Indiana Utility Regulatory Commission on or before May 1, 2014.

Please direct inquiries to:

Indiana Michigan Power Company
Attn: VP Regulatory & External Affairs
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
PNC Center
101 West Washington Street
Suite 1500 East
Indianapolis, Indiana 46204

Indiana Office of Utility Consumer
Counselor
PNC Center
115 W. Washington Street
Suite 1500 South
Indianapolis, Indiana 46204
2--22 1109916 hspaxlp
