



Received On: February 28, 2012  
IURC 30-Day Filing No: 2969  
Indiana Utility Regulatory Commission

Brad Beagle  
Lead Rate Analyst  
Duke Energy Indiana, Inc.  
1000 East Main Street  
Plainfield, IN 46168  
317-838-2824  
317-838-1841 fax  
brad.beagle@duke-energy.com

February 28, 2012

Secretary of the Commission  
Indiana Utility Regulatory Commission  
101 W. Washington St.  
Suite 1500 East  
Indianapolis, IN 46204-3407

Dear Secretary:

Duke Energy Indiana, Inc. hereby submits, in accordance with 170 IAC 1-4-4.1-10, for review and approval under the Commission's thirty-day filing procedure, Standard Contract Rider No. 50 – Parallel Operation for Qualifying Facility.

Standard Contract Rider 50 shows Duke Energy Indiana's standard offer energy and capacity rates for 2012 for a qualifying facility. As per the Commission, under 170 IAC 1-6-3, Section 3-6, this filing should be made under the thirty-day filing procedure.

Attached are the working papers that show the development of the standard offer energy and capacity rates for 2012. This filing reflects the capital structure and current cost rates as of December 31, 2011. It also reflects the cost of common equity rate approved by the Commission in Cause No. 42359. The energy rate was developed utilizing a Planning and Risk (PaR) model version 5.2 simulation run that treats the one MW decrement as a dispatchable non-firm, external purchase. Thus, the marginal energy cost savings is the replacement cost for the 1 MW purchase. This cost includes fuel, fuel handling, variable O&M, effluent values and fuel auxiliary costs. We have excluded changes in generator start-up costs, which should not be impacted by a 1 MW reduction in generation.

The increase in the marginal energy cost was primarily due to changes in our fundamental forecast which includes power prices and fuel cost.

A 185.0 MW combustion turbine is used as the 2012 standard offer capacity rate. We have compared this to our next deferrable capacity addition, a 325.0 MW combined cycle unit to be added in 2015.

We are filing Rider 50 and all associated work papers, including the Company's verified statement that we have provided notice to our customers as required under Section 6 of the thirty-day filing rules, electronically. We would appreciate the return of a file-stamped copy for our files.

Secretary of the Commission  
February 28, 2012  
Page 2

If there are any questions concerning this filing, please contact me at 317.838.2824.

Sincerely,



Bradley J. Beagle  
Attachments

cc: J. R. Bailey  
M. T. Birnbaum  
B. P. Davey  
D. L. Douglas  
K. K. Freeman  
S. May  
D. L. Jenner  
K. A. Karn  
M. L. McClaine  
R. A. Mc Murry  
M. E. Musick  
M. D. Price  
A. S. Ritch  
Office of Utility Consumer Counselor  
Dr. B. Borum (IURC)  
D. Thomas (IURC)

**STANDARD CONTRACT RIDER NO. 50  
PARALLEL OPERATION—  
FOR QUALIFYING FACILITY**

**Availability**

Available to any Customer contracting for parallel operation of a qualifying facility (cogeneration or small power production facility) in accordance with 170 IAC 4-4.1-1 et. seq. The qualifying facility must be located adjacent to an electric line of Company that is adequate for the service provided by such qualifying facility.

**Contract**

Customer shall enter into a contract in the applicable form (Exhibit A—Contract for the Purchase of Energy from Qualifying Facility or Exhibit B—Contract for the Purchase of Energy and Capacity from Qualifying Facility) before operating any generating equipment electrically connected with Company's electric system.

**Rate for Purchase of Energy**

Company will purchase energy from the qualifying facility of Customer in accordance with the conditions and limitations of this Rider and the applicable contract at the following rate:

For all kWh supplied per month.....\$0.033687 per kWh

Measured by suitable integrating instruments.

This rate will be adjusted by the current fuel cost charge in accordance with "Standard Contract Rider No. 60—Fuel Cost Charge."

**Rate for Purchase of Capacity**

Company will purchase capacity supplied from the qualifying facility of Customer in accordance with the conditions and limitations of this Rider and the applicable contract at the following rate:

Rate per kW per month of Contracted Capacity .....\$9.85 per kW

Customer shall receive from Company payment for such qualifying facility capacity in accordance with the following:

$$\$9.85 \text{ per kW} \times \text{Contracted Capacity in kW} \times \left( \frac{E}{K \times T} \right) \text{ per month}$$

- Where: E = kilowatt-hours supplied by qualifying facility during the Peak Period
- K = kilowatts of capacity the qualifying facility contracts to provide to Company
- T = number of hours in the Peak Period

Peak Period shall be defined as follows:

For the months of June through September, the Peak Period shall be Monday through Saturday 9:00 a.m. through 9:00 p.m. (Eastern Standard Time), excluding holidays defined below. For the months of October through May, the Peak Period shall be Monday through Saturday 7:00 a.m. through 9:00 p.m. (Eastern Standard Time), excluding holidays defined below.

Issued:

Effective:

**STANDARD CONTRACT RIDER NO. 50  
PARALLEL OPERATION—  
FOR QUALIFYING FACILITY**

The entire twenty-four (24) hours of the following holidays will be considered as off-peak hours:

New Year's Day	Labor Day
Memorial Day	Thanksgiving Day
Independence Day	Christmas Day

Whenever any of the above holidays occur on a Sunday and the following Monday is legally observed as a holiday, the entire twenty-four (24) hours of such Monday will be considered as off-peak hours.

Whenever any of the above holidays occur on a Saturday and the preceding Friday is legally observed as a holiday, the entire twenty-four (24) hours of such Friday will be considered as off-peak hours.

**Contracted Capacity** shall be the amount of capacity expressed in terms of kilowatts that Customer guarantees the qualifying facility will supply to Company as provided for in the contract for such service.

**Special Terms and Conditions**

1. It shall be Customer's responsibility to inform Company of any changes in its electric generation capability.
2. **Customer shall comply with all applicable requirements of Standard Contract Rider No. 80 – Interconnection Service.**
3. Customer may be required to enter into a "Substation Operation and Maintenance Agreement" for setting, resetting, and adjusting the Control Equipment.
4. Customer shall agree to pay Company, in accordance with "Standard Contract Rider No. 53—Excess Facilities," for all excess facilities required by Company to provide service to such parallel operation, as determined by Company, including any additional metering equipment required for Company to purchase electric energy from the qualifying facility.
5. Customer shall agree that Company shall not be liable for any damage to, or breakdown of Customer's equipment operated in parallel with Company's electric system.
6. Customer shall agree to release, indemnify, and hold harmless Company from any and all claims for injury to persons or damage to property due to or in any way connected with the operation of Customer's said generators.
7. Company may install necessary metering to monitor the electric output of Customer's generating facility. Customer shall agree that the watt-hour and reactive-ampere-hour meters installed by Company to measure electric energy may be equipped to prevent reverse registration.
8. Supplementary, Backup, Interruptible and/or Maintenance Power, as defined in 170 IAC 4-4.1-1, will be supplied by Company only in accordance with the applicable rate schedules, this Rider, the applicable contract and the applicable Service Schedules to be filed by Company with the Commission. Such rates shall be non-discriminatory and shall be based on the costs to provide such service to Customer.
9. To the extent required by law, Company will make available wheeling service to Customer in accordance with the provisions of 170 IAC 4-4.1-6.

Issued:

Effective:

2. Cogeneration and Alternate Energy Production Facilities

The following utility has submitted a proposed tariff for the purchase of power and energy from a qualifying facility as required in Appendix A, Rules and Regulations with Respect to Cogeneration and Alternate Energy Production Facilities, (170 I.A.C. 4-4.1), Cause No. 37494. Supporting documentation has been supplied.

<u>Utility</u>	<u>Rate Schedule</u>	<u>Energy (\$/kWH)</u>	<u>Demand (\$/kW/month)</u>
Duke Energy Indiana, Inc.	Rider No. 50	0.033687	9.85

The tariff sheet affected by this filing is Sheet No. 50.

**DUKE ENERGY INDIANA, INC.**  
2012 COGENERATION FILING  
CALCULATION OF PRESENT VALUE OF CARRYING CHARGES

CCR = 11.08%

$$\text{Cumulative Present Worth Factor} = \frac{(1 + r)^n - 1}{r * (1 + r)^n} = 11.75313$$

Where:

r = 7.55%

n = 30

D = CCR \* Cumulative Present Worth Factor

= 11.08% X 11.75313

= 1.30225

Source: Financial Capital Structure as of 12/31/2011 per company books and records.

Long term debt rate is for 30 year first mortgage bond new issue as of 1/10/2012.

Composite Income Tax rate does not include a Section 199 federal deduction as we do not anticipate being able to take this deduction in 2012 as a result of the Company's expected net operating loss tax position.

**DUKE ENERGY INDIANA, INC.**  
2012 COGENERATION FILING  
CALCULATION OF STANDARD OFFER RATE  
FOR THE PURCHASE OF ENERGY

RATE FOR THE PURCHASE OF ENERGY

2012 ENERGY RATE = ( \$0.032787 PER KWH )

2012 ENERGY RATE ADJUSTED FOR LOSSES

= \$0.032787 PER KWH / ( 1 - ( 0.053440042 / 2))

= \$0.033687 PER KWH

---

---

WHERE : (A) The Planning and Risk (PaR) model version 5.2 cost program performed a single run that treats the one MW decrement as a dispatchable non-firm, external purchase. Thus, the marginal energy cost savings is the replacement cost for the 1 MW purchase. This cost includes fuel, fuel handling, variable O&M, effluent values and fuel auxiliary costs. We have excluded changes in generator start-up costs, which should not be impacted by a 1 MW reduction in generation.

(B) The loss factor is 5.3440042% .

Source: Primary Metered Sales Retail Loss Factor from latest retail rate case (Cause No. 42359)

**DUKE ENERGY INDIANA, INC.**  
2012 COGENERATION FILING  
CALCULATION OF STANDARD OFFER RATE  
FOR THE PURCHASE OF CAPACITY

**FOR GENERIC COMBUSTION TURBINE**

RATE FOR THE PURCHASE OF CAPACITY

$$C = 1/12 * [ (D * V * F * ((1+lp)^{(t-1)})) + (O * ((1 + lo)/(1+r)) * ((1 + lo)^{(t-1)})) ] / (1 - L/2)$$
$$= \$6.60 \text{ PER KW PER MONTH}$$

$$Ca = C * (((1 + lp)/(1 + r))^{(Yi-Yc)})$$
$$= \$6.60 \text{ PER KW PER MONTH}$$

---

WHERE : D = 1.30225  
V = \$805 PER KW (2012 \$)  
F = 0.061481 (Based on formula contained in 170 IAC 4-4.1-9)  
lp = 2.50%  
lo = 2.50%  
O = \$13.30 PER KW (2012 \$)  
r = 7.55%  
n = 30  
L = 5.3440042%  
t = 1  
Yi = 2012 (In service year of CT)  
Yc = 2012 (Current year)

NOTE : (a) Investment cost based on a 185.0 MW hypothetical combustion turbine with a 2012 in service date.  
(b) Escalation rates based on 2012 - 2031 data series study.

**DUKE ENERGY INDIANA, INC.**  
2012 COGENERATION FILING  
CALCULATION OF STANDARD OFFER RATE  
FOR THE PURCHASE OF CAPACITY

**FOR 2015 325.0 MW Comined Cycle Unit**

RATE FOR THE PURCHASE OF CAPACITY

$$C = 1/12 * [ (D * V * F * ((1+lp)^{(t-1)})) + (O * ((1 + lo)/(1+r)) * ((1 + lo)^{(t-1)})) ] / (1 - L/2)$$
$$= \$11.37 \text{ PER KW PER MONTH}$$

$$Ca = C * (((1 + lp)/(1 + r))^{(Yi-Yc)})$$
$$= \$9.85 \text{ PER KW PER MONTH}$$

---

WHERE : D = 1.30225

V = \$1,211 PER KW (2012 \$)

F = 0.061481 (Based on formula contained in 170 IAC 4-4.1-9)

lp = 2.50%

lo = 2.50%

O = \$30.94 PER KW (2012 \$)

r = 7.55%

n = 30

L = 5.3440042%

t = 3

Yi = 2015 (In service year of CT)

Yc = 2012 (Current year)

NOTE : (a) Investment cost based on a 325.0 MW combined cycle unit with a 2015 in service date.  
(b) Escalation rates based on 2012 - 2031 data series study.

**DUKE ENERGY INDIANA, INC.**

**Calculation Of Carrying Charge  
 Rate For Cogeneration Facilities  
 With A 30 Year Life For The 2012 Filing  
Based On Calendar Year 2011 Information**

$$CCR = (1/(1-t)) * ((r+d) + ((T/(1-T)) * (r+d-D) * ((r-(bL+lp))/r)))$$

r:	Rate of Return	7.55%
d:	Sinking fund depreciation rate	0.96%
T:	Federal and State composite income tax rate	40.525%
D:	Book depreciation rate	3.33%
b:	Interest rate on debt capital	4.30%
L:	Debt ratio	47.50%
l:	Interest rate on preferred stock	0.00%
p:	Preferred stock ratio	0.00%
n:	Service life	30
t:	Other taxes & expense from revenues	0.000%

CCR = 11.08%

Memo:

$$\begin{aligned}
 CCR &= \left( \frac{1}{1 - 0.40525} \right) * \left( 7.55 + 0.96 + \left( \frac{40.525}{1 - 40.525} \right) * \left( 7.55 - (4.3 * 0.475 + 0) \right) \right) \\
 &= 1.00000 * ( 8.51 + (( 0.6814 )*( 5.178 )*( 7.55 - 2.0425 )) / 7.55 ) \\
 &= 1.00000 * ( 8.51 + 2.57371 ) \\
 &= 11.08
 \end{aligned}$$

Carrying Costs Calculation Check 11.08%

Difference 0.00%

## 2012 Cogeneration-Compliance Filing

A.	Marginal Energy Cost	
	1. Annual Run for 2012 with one MW decrement (mills/kWh).	32.787
B.	For Next Deferrable Capacity Addition	
	1. In-Service Date	01/01/15
	2. Type of Unit	Combined Cycle
	3. Size of Unit (MW - summer)	325.0
	4. Investment Cost per kW-summer	1210.820
	5. A. Fixed O&M Expense in the first year of service (\$/kW-yr, summer)	25.625
	Variable O&M Expense in the first year of service (\$/kW-yr,	
	B. summer)	5.316
	Total Fixed & Variable O&M Expense in the first	
	year of service (\$/kW-yr, summer)	30.941
	6. Expected Life (years)	30
	7. Escalation Rates (%):	
	2012-2031 Investment	2.50
	O&M	2.50
C.	For Generic Combustion Turbine	
	1. In-Service Date	01/01/12
	2. Type of Unit	Combustion Turbine
	3. Size of Unit (MW - summer)	185.0
	4. Investment Cost per kW-summer	804.625
	5. A. Fixed O&M Expense in the first year of service (\$/kW-yr, summer)	9.243
	Variable O&M Expense in the first year of service (\$/kW-yr,	
	B. summer)	4.052
	Total Fixed & Variable O&M Expense in the first	
	year of service (\$/kW-yr, summer)	13.295
	6. Expected Life (years)	30
	7. Escalation Rates (%):	
	2012-2031 Investment	2.50
	O&M	2.50

Note: All costs expressed in January 2012 dollars.

**STANDARD CONTRACT RIDER NO. 50  
PARALLEL OPERATION—  
FOR QUALIFYING FACILITY**

**Availability**

Available to any Customer contracting for parallel operation of a qualifying facility (cogeneration or small power production facility) in accordance with 170 IAC 4-4.1-1 et. seq. The qualifying facility must be located adjacent to an electric line of Company that is adequate for the service provided by such qualifying facility.

**Contract**

Customer shall enter into a contract in the applicable form (Exhibit A—Contract for the Purchase of Energy from Qualifying Facility or Exhibit B—Contract for the Purchase of Energy and Capacity from Qualifying Facility) before operating any generating equipment electrically connected with Company's electric system.

**Rate for Purchase of Energy**

Company will purchase energy from the qualifying facility of Customer in accordance with the conditions and limitations of this Rider and the applicable contract at the following rate:

For all kWh supplied per month.....\$0.03~~3687~~<sup>4683</sup> per kWh

Measured by suitable integrating instruments.

This rate will be adjusted by the current fuel cost charge in accordance with "Standard Contract Rider No. 60—Fuel Cost Charge."

**Rate for Purchase of Capacity**

Company will purchase capacity supplied from the qualifying facility of Customer in accordance with the conditions and limitations of this Rider and the applicable contract at the following rate:

Rate per kW per month of Contracted Capacity .....\$~~9.855~~<sup>70</sup> per kW

Customer shall receive from Company payment for such qualifying facility capacity in accordance with the following:

\$~~9.855~~<sup>70</sup> per kW x Contracted Capacity in kW x  $\left(\frac{E}{K \times T}\right)$  per month

Where: E = kilowatt-hours supplied by qualifying facility during the Peak Period  
K = kilowatts of capacity the qualifying facility contracts to provide to Company  
T = number of hours in the Peak Period

Peak Period shall be defined as follows:

For the months of June through September, the Peak Period shall be Monday through Saturday 9:00 a.m. through 9:00 p.m. (Eastern Standard Time), excluding holidays defined below. For the months of October through May, the Peak Period shall be Monday through Saturday 7:00 a.m. through 9:00 p.m. (Eastern Standard Time), excluding holidays defined below.

**STANDARD CONTRACT RIDER NO. 50  
PARALLEL OPERATION—  
FOR QUALIFYING FACILITY**

The entire twenty-four (24) hours of the following holidays will be considered as off-peak hours:

New Year's Day	Labor Day
Memorial Day	Thanksgiving Day
Independence Day	Christmas Day

Whenever any of the above holidays occur on a Sunday and the following Monday is legally observed as a holiday, the entire twenty-four (24) hours of such Monday will be considered as off-peak hours.

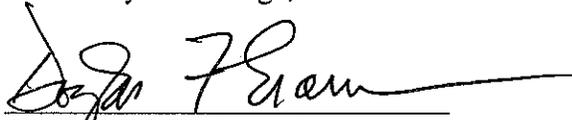
Whenever any of the above holidays occur on a Saturday and the preceding Friday is legally observed as a holiday, the entire twenty-four (24) hours of such Friday will be considered as off-peak hours.

**Contracted Capacity** shall be the amount of capacity expressed in terms of kilowatts that Customer guarantees the qualifying facility will supply to Company as provided for in the contract for such service.

**Special Terms and Conditions**

1. It shall be Customer's responsibility to inform Company of any changes in its electric generation capability.
2. **Customer shall comply with all applicable requirements of Standard Contract Rider No. 80 – Interconnection Service.**
3. Customer may be required to enter into a "Substation Operation and Maintenance Agreement" for setting, resetting, and adjusting the Control Equipment.
4. Customer shall agree to pay Company, in accordance with "Standard Contract Rider No. 53—Excess Facilities," for all excess facilities required by Company to provide service to such parallel operation, as determined by Company, including any additional metering equipment required for Company to purchase electric energy from the qualifying facility.
5. Customer shall agree that Company shall not be liable for any damage to, or breakdown of Customer's equipment operated in parallel with Company's electric system.
6. Customer shall agree to release, indemnify, and hold harmless Company from any and all claims for injury to persons or damage to property due to or in any way connected with the operation of Customer's said generators.
7. Company may install necessary metering to monitor the electric output of Customer's generating facility. Customer shall agree that the watt-hour and reactive-ampere-hour meters installed by Company to measure electric energy may be equipped to prevent reverse registration.
8. Supplementary, Backup, Interruptible and/or Maintenance Power, as defined in 170 IAC 4-4.1-1, will be supplied by Company only in accordance with the applicable rate schedules, this Rider, the applicable contract and the applicable Service Schedules to be filed by Company with the Commission. Such rates shall be non-discriminatory and shall be based on the costs to provide such service to Customer.
9. To the extent required by law, Company will make available wheeling service to Customer in accordance with the provisions of 170 IAC 4-4.1-6.

In accordance with 170 IAC 1-6 *et seq.*, I hereby verify under the penalties of perjury that all affected customers have been notified as required under section 6 of the above-referenced rule by posting the attached legal notice on Duke Energy Indiana's website as well as publishing the legal notice in the newspaper(s) of general circulation encompassing the highest number of the utility's customers affected by the filing to the best of my knowledge, information and belief.

  
\_\_\_\_\_  
Duke Energy Indiana, Inc.  
Douglas F Esamann, President

Dated: February 28, 2012

**LEGAL NOTICE OF  
DUKE ENERGY INDIANA, INC.'S  
STANDARD CONTRACT RIDER NO. 50  
PARALLEL OPERATION –  
FOR QUALIFYING FACILITY**

DUKE ENERGY INDIANA, INC. (“Duke Energy Indiana”) hereby provides notice that on February 28, 2012, Duke Energy Indiana, in accordance with 170 IAC 4-4.1-10, will submit its Standard Contract Rider No. 50, Parallel Operation-For Qualifying Facility (“Standard Contract Rider 50”) to the Indiana Utility Regulatory Commission (“Commission”) for approval under the Commission’s thirty-day administrative filing procedures and guidelines. Standard Contract Rider 50 provides the calculation for the standard offer for the purchase of energy and capacity.

Standard Contract Rider 50 is available to all qualifying Duke Energy Indiana customers and will be deemed approved thirty-days from the date of filing, February 28, 2012, unless an objection is made. Any objections may be made by contacting the Secretary of the Commission, or Tyler Bolinger or Randy Helmen at the following addresses or phone numbers:

Indiana Utility Regulatory Commission  
101 W. Washington St.  
Suite 1500 East  
Indianapolis, IN 46204-3407  
317-232-2703

Indiana Office of Utility Consumer Counselor  
PNC Center  
115 W. Washington St.  
Suite 1500 South  
Indianapolis, IN 46204  
317-232-2494.

**Duke Energy Indiana, Inc.**  
By: Douglas F Esamann, President