2008 OCT 17 PM 4: 27

08-777-EL-ORD

PUCO.

August 29, 2008

Re: Duke Energy Ohio Request for Proposals for Peaking/Intermediate Power Supply

") appreciates the opportunity to provide this non-binding proposal for the purchase and sale of its 320-MW electric generating facility located in , Michigan (the 'Facility') to Duke Energy Ohio, Inc. ("Duke Energy").

s a wholly owned subsidiary of

Tnc⇒

which is headquartered in

a leading energy provider involved in the development and management of energy-related businesses and services nationwide. develops, acquires builds, owns, and operates energy projects in North America and its portfolio includes electric power generation facilities, as well as a wide array of energy projects for industrial, commercial and institutional customers. More information concerning"

The Facility consists of four General Electric 7EA simple-cycle combustion turbines that went into commercial operation and is a MISO Designated Network Resource

Assuming an October 1, 2010 acquisition date, is proposing a sale of the Facility for The sale would be subject to negotiation and execution of a mutually agreed upon purchase and sale agreement, which would include representations, covenants and indemnities customary for the purchase and sale of electric generating facilities. A term sheet of key informational and operational data has been included with this letter. Although is proposing an asset sale, it is willing to discuss other options for the owners up and operation of the Facility should it be useful to Duke Energy. This non-binding proposal will remain walld through December 31, 2008.

# CONFIDENTIAL

# Non-Binding, Indicative Term Sheet Purchase and Sale of by 8/29/08:18

Item Description	Indicative Terms
Parties	7
	Duke Energy Ohio ("Duke")
Resource	$\mathbf{f}_{\mathbf{r}}$
	A 320-MW (nominal) gas-fired peaking power generation plant
Fuel Source	Natural Gas via the Michigan Consolidated Gas Co. ("MichCon") pipeline
Fuel Pricing Point	MichCon Citygate
MISO Commercial	,
Pricing Node	
Seller	<b>.</b>
Purchaser	Duke Energy Ohio, Inc
Capacity Amount	320 MWs (nominal)
	336 MWs (winter) / 284 MWs (summer)
Purchase Price	) lump sum payment assuming a closing date
	of October 1, 2010
Guaranteed Heat Rates	See attached Performance Reports
Availability	See attached Operational Statistics
Minimum run time	2 hours
Start Time	<= 35 minutes, first 2 units 5
•	<= 60 minutes, second 2 units is
Ramp Rate	5.5 MW/minute (per unit)

# CONFIDENTIAL

# **Operational Statistics**

8/29/08

	UN	IT I		
4.		0.0		
Total Fired Time:	0	324.5	293.2	472.7
Total Availability:	99.7%	99.2%	99.9%	99.9%
On-Peak Availability:	99.6%	98.7%	99.9%	99.8%
Starting Reliability:	N/A	100%	100%	100%
Factored Starts:	0	42	30	54
Fired Starts Counter:	0	39	30	54
Bmergency Trips Counter:	0 .	1	2	1
Outage Hours:	23	69	4.5	8
On-Peak Hours:	4,112	4,112	4,144	4,208
On-Peak Outage Hours:	14	53	4.5	8
Period Hours:	8,760 €	8,760	8,760	8,760
	UN	IT 2		
min'i Till Ami'r	0	001.6	ÓÐE 1	1197
Total Fired Time:	0 00 000 5	331.6	293.1	476.4
Total Availability:	99.7% 🔻	99.7%	99.8%	99.6%
On-Peák Availability:	99:6% 🐔	99.8%	99.8%	99.3%
Starting Reliability:	N/A	100%	100%	100%
Factored Starts:	0	47.6	40.7	61.8
Fired Starts  Counter:	0	39	30	56
EmergenoyaTrips Counter:	0	2	2	3
Outage Hours:	23	22	16	34
On-Peak Hours:	4,112 2	4,112	4,144	4,208
On-Peak Gutage Hours	14	8	8	26
Period <b>Hours</b> ;	.8,760	8,760	8,760	8,760

# CONFIDENTIAL

# **Operational Statistics**

8/49/08

UNIT 3				
Total Fired Time:	0 >	353.2	280.6	473.6
Total Availability:	99.9%	99.6%	99.9%	99.7%
On-Peak Availability:	99.9%	99.2%	99.9%	99.6%
Starting Reliability:	N/A /	100%	100%	100%
Factored Starts:	0	39	35	58.6
Fired Starts : Counter:	0	39	30	56
Emergency Trips Counter:	0	1	1	2 3
Outage Hours:	3	46	2.5	20 0
On-Peak Hours:	4,112	4,112	4,144	4,208
On-Peak Outage Hours:	3	30	2.5	. 13 3
Period Hours:	8,7605	8,760	8,760	8,760
	UN	17.1		
Total Fired Time:	0	344.4	283.9	474.51
Total Availability:	99.9%	96.9%	99.8%	99.7%
On-Peak Availability:	99.9%	97.1%	99.7%	99.7%
Starting Reliability:	N/A 1	100%	100%	100%)
Factored Starts:	0	38	30.5	57 7
Fired Starts Counter:	. 0	40	33	57 7
Emergency Trips Counter:	0	1	1	2. :
Outage Hours:	3	270	12,5	18 3
On-Peak Hours:	4,112	4,112	4,144	4,2080
On-Peak Outage Hours:	3	118	12.5	12 2
Period Hours;	8,760 《	8,760	: 8,760	8,760 6

# 2. Performance Güarantees

## 2.1 Guaranteed Performance

Operating Point	Fuel	Gross Unit	Gross 4
	American gan gan a	Output (kW)	Unit Heat Rate (Btu/kWh, LHV)
Baseload (fogger OFF), 90°F	Customer Gas	73,490	10,800 👙

#### 2.1.1 Basis for Unit Performance

The performance guarantees listed above are based on the scope of equipment supply as defined herein and as stated for the following operating conditions and cycle parameters:

- A. The natural gas fuel is in compliance with Seller's Gas Fuel Specification GEI-41040F.
- B. Customer Gas Fuel Heating Value = 20,384 Btu/lb (LHV) @ 80°B
- C. Site Blevation = 600 ft
- D. Site Pressure = 14.39 bsia.
- B. Inlet Loss = 3.6 in Water
- F. Exhaust Loss = 5.5 in Water @ 180 conditions
- G. Fuel Gas Supply Temperature —Minimum 50°F of superheat required (@ GT Stop Valve)
- H. Fuel Gas Supply Pressure = 320 psig 375 psig (@ GT Stop Valve)
- I. Gas turbines are operating at steady state baseload.
- J. Tests to demonstrate guaranteed performance shall be conducted in accordance with the Suppliers proposal Test Philosophy attached in Tab 5.
- K. Generator power factor for baselead operation = .85 lagging.
- I. Performance is measured at the generator terminals and includes allowances for excitation power and the shaft-driven equipment normally supplied.
- M. The equipment is in new and clean condition (less than 150 fired hours of operation).

- N. Performance curves such as ambient effects curves and generator loss curves will be provided after contract award. These curves along with correction factors such as fuel property corrections are to be used during the site performance test to correct performance readings back to the site conditions at which the performance guarantees were provided.
- O. Natural gas performance is based on operation with a dry low NOx combustion system without gas turbine diluent injection for NOx control.
- P. Compressor air extraction for customer use from gas turbine = 0.
- Q. Guarantees are based on the following gas fuel analysis

#### Natural Gas Analysis % vol (Mol%)

#### Component

CH4 Methane	94.7255
C2H6 Ethane	2.3539
C3H8 Propane	0.2742
C4H10 N-Butane	0.0420
n-Pentane	0.0038
Ischutane	0.0297
Isopentane	0.0077
Hexanes	0.0092
Nitrogen :	1.7748
Catbon Diexide	0.7792
Hydrogren:	0.00
Hydrogen Sulfide	0.00
Oxygen	0.00
HZO	0.00
<b>CO</b>	0.00
SO2	0.00
Ath.	0.00
COS	0.00
Newpentane	0.00
Supply Pressure, psig	320 - 375 *

<sup>\*</sup> Pressure at the gas valve module

August 28, 2008

Jon Summerville Burns & McDonnell 9400 Ward Parkway Kansas City, MO 64114

Re: Duke Ohio Request For Proposals

Dear Mr Summerville

This letter is intended to express interest in supplying power generation facilities to Duke Ohio on a turn-key (EPC) basis either for the current RFP or future generation needs. We have below described a typical natural gas fired power plant.

- Very high efficiency at both full and part load, simple cycle efficiency down to 8700 BTU/kWh, I
   HHV guaranteed (even lower for dual fuel engines)
- Due to multiple engines the plant has a flat heat rate vs output range
- Minimal performance impact from ambient conditions (full performance up to 105 F or 6000 f.a.s.l
- Virtually no water consumption (closed loop cooling system)
- Low emissions (single digit NOx emissions with SCR technology)
- Quick reaction to load requirements
- Start/stop several times per day without any added cost
- Full output in less than 10 minutes from stand-by
- Low gas pressure required (min. 65 psig)
- Dual fuel capability with automatic, instantaneous switch over in case of gas pressure loss for specific engine types
- No output degradation during life cycle, minimal heat rate degradation
- No need for total plant outages for maintenance since this is performed for one engine at a time, we
   All maintenance done on site to minimize outage time.
- Modular design makes future capacity additions cost effective
- Built in increments of 8.4 or 16.6 MW to any size

Example of main characteristics of a

plant;

	50 MW Plant	165 MW Plant
Engine configuration	6x20V34SG	20x20V34SG
Plant not heat rate, btu/kWh, HHV	8,700	8,700
Fuel	Natural gas	Natural gas
Fuel pressure required, psig	75	75
Standby to full output, minutes	<10	<10
Min run time, minutes	0	0
Min down time, minutes	5 '	5
Emissions	5 ppm NOx	5 ppm NOx
Water usage	Virtually none	Virtually none
Max ambient with full performance, F	105	105
EPC capital cost, typical		
Equipment only cost, typical		
Maintenance cost, (parts/overhauls), \$/MWh		

DUKE ENERGY OHIO Request for Proposals for Power Supply

# Exhibit D-Ownership Offer -Life of Unit Sample Term Sheet

Note to Bidder: Provide a separate	term sheet for each	different asset option of	ffered
Resource	<del></del> :		
Primary Fuel Source	Natural Gas	<del>,</del>	
Primary Fuel Pricing Point	Tennessee Ga	s Pipeline 500 Leg	
Secondary Fuel Source	None		
Secondary Fuel Pricing Point	NA	•	•
MISO Commercial Pricing Node	Cin Hub	···	
Seller			
Purchaser	DUKE ENERGY OH	IO, INC.	
Capacity Amount	960_ (Minimum of 50 M)/	M₩	
	minimum to Capac	HIO will evaluate any an ity Amount in increment oles that only the Capac	s of 50MW
Energy	As Scheduled		
Scheduling		performed to the maxim nd in accordance with the	
Danibara Dia /Danida mumbara		. N.G <sub>g</sub> . Invelog formata)	•
Purchase Price (Provide purchase p			(OHE)AL.
a. Fixed Purchase Price Ov	Aet Tile Of Waser		(\$/MW-year)
<ul> <li>b. Lump Sum Payment</li> <li>Lump Sum Payment Year</li> </ul>	r\$\$	2008	<b>(\$</b> )
Fixed O&M	NA	(\$/MW-month)	• • •
Fixed O&M Escalation	NA	(% per year)	
Year of Fixed O&M Cost Quote	NA		•
Variable O&M	,NA	(\$/MVVh)	
Variable O&M Escalation	NA	(% per year)	•

Year of Variable O&M Cost Quote	NA	-
Capital Spending Schedule	Provide schedule of any up	ogrades or life extension efforts
Maintenance Spending Schedule	Provide schedule of annual	maintenance expenses
Guaranteed Heat Rate MW  Availability	load) Btu per kWh (HH Btu per kWh (HH Btu per kWh (HH Btu per kWh (HH	V) 70% load V) 90% load V) 100% load (define MW load) nce outages planned for next raient forced outage
	See Attachment	
Minimum run time	See Attachment	(hours)
Start time to Synchronization	See Attachment	(hours)
Start up Cost	See Attachment	(\$/start)
Start up Cost Escalation	See Attachment	(% per year)
Year of Start up Cost Quote	_NA	
Ramp Rate	See Attachment	(MW//hour)

#### 1. OFFER SUMMARY

dedicated power generation resource and associated services from existing 960-MW natural gas-fired combined-cycle generating facility located in the 1 VA region in northwest Mississippi near (the "Facility"). At this location owns three identical 320-MW (nominal) units that comprise the Facility. Each unit is designed with approximately 253 MW of base-block combined-cycle capacity (7,100 Btu/kWh net heat rate) and 67 MW of duct-firing capacity.

proposes to serve Duke pursuant to this RFP using each of three units. |Under this proposal, Duke has the option of contracting for the use of one, two or all three of units.

The contracted units will be fully dispatchable by Duke. The normal procedure will be for Duke to provide a day-ahead dispatch schedule via email directly to the plant, and Duke will also have intra-day dispatch rights and will work to meet such intra-day schedule changes on a best efforts basis. The Faculty is equipped with automatic generator control such that Duke can control output in real time from its dispatch center.

The Facility is directly interconnected to the 500-kV SERC/TVA transmission system at the 500-kV substation, substation to the pornwest and the 500

This proposal) is contingent upon obtaining transmission service from to the MISO/CIN GGE load zone, and has received written confirmation from MISO and TVA that such disassission service is technically feasible and available.

rore that all information provided acrem is considered proprietary and confidential and not to be illitributed outside of the bid evaluation parties without the prior written consent of

#### 2. STATEMENTS

#### 2.1 Proposal Time Period

This proposal is valid until December 31, 2008, or longer if the parties are engaged in good-faith negotiations toward the completion of a power purchase agreement (the "Proposal Period"). Upon the expiration of the Proposal Period, shall be entitled to update its pricing and terms proposed herein.

#### 2.2. Authorized Representative

is authorized to offer this proposal to Duke Energy Ohio.

Contact Information:

#### 2.3 Facility Description

#### 2.3.1 Technical Information

Plant is an existing 960-MW natural gas-fired combined-cycle The generating facility located in the TVA region in northwest Mississippi near three 320-MW units is highly reliable, efficient and has an excellent track record of availability, safety and environmental compliance. Each unit utilizes a GE 7FA combustion turbine exhausting into a Foster Wheeler HRSG, which in turn generates steam that is routed to a dedicated Alstom steam turbine (i.e., 121x1 configuration). The Facility, which was designed and built by and commissioned is equipped with automatic generator control ("AGC") and can be cycled on and off on a daily basis. Each unit is designed with approximately 253 MW of base-block combined-cycle capacity (7.100 Btu/kWh net heat rate) and 67 MW of duct-firing capacity (8,800 Btn/kWh incremental net heat rate). Duke will be entitled to dispatch each unithindependently. Each unit is capable of generating over an output range from the unit's minimum load—150 MW (varies slightly with ambient temperature)—up to the unit's full load of about 330 MW (at 15 F). is a natural pas-only facility with commentions to two high-pressure Tennessee ties pipelines. The Facility is operated on a contract basis. Historical operating statistics are provided in Table 1 and output and heat rate performance data are provided in Table 2.

Table 1. Historical Operating Statistics (Entire Facility)

Parameter	2004	2005	2006	2007
MWh Generated (millions)	0.47	1.53	. 1,27	2.29
Average Net Capacity (MW)	924	921	917	918
Equiv. Availability (%)	95.9	96.2	90,0*	96.6
Forced Outage Factor (%)	0.5	0.0	6.9 *	0.5

experienced a steam turbine failure in Apı caused by too-cold steam admitted into the intermediate-pressure section. The Unit 3 repair outage lasted approximately two months. The fully-repaired returned to service on June

Table 2. Expected Unit Output and Heat Rate

Summer (95F)	Output	Heat Rate
Min load	150 MW	7,800 Btu/kWh
Baseload	230 MW	7,150 Btu/kWh
Full load peaking only	65 MW	8,800 Btu/kWh
Full load total	295 MW	7,500 Btu/kWh

Average (60F)	Output	Heat Rate
Min load	150 MW	7,850 Btu/kWh
Baseload	253 MW	7,100 Btu/kWh
Full load peaking only	67 MW	8,800 Btu/kWh
Full load total	320 MW	7,525 Btu/kWh

The estimated fuel requirements and electrical generation per unit start/stop cycle are provided in Table 3.

Table 3. Estimated Start/Stop Parameters (per Unit)

Start Type	Start/Stop Fuel (MMB(u)	Start/Stop Gen (MWh)	Start Duration (hours)
Cold	2,700	240	3.5
Warm	1,900	160	2.5
Hot	1,300	120	1.5

#### 2.3.2 Environmental Performance

operates in full compliance with its environmental and regulatory permits, has received no notices of environmental noncompliance since it began commercial operations in 2003. The Facility is equipped with selective catalytic reduction ("SCR") on each unit to control NOx emissions to levels below.

3.5 ppm permit limit. Historical CO2 and NOx emission rates are provided in Table 4. Note that SO2 emissions are solely a function of the sulfur content of natural gas and typically total 5-6 tons per year for the full Facility.

The Mississippi Department of Environmental: Quality ("MDEQ") has confirmed that two of three units meet MDEQ's criteria for receiving full NOx allowance allocations under its CAIR implementation process. Thus two of three units are scheduled to receive allowance allocations for their full annual "potential to emit" levels. The third unit (which did not reach first-fire until early 2003) will be eligible for potential allowance allocations from the state's set-aside pool. Based on historical dispatch levels typical of an intermediate-type generating resource, believes the allocations for the two units will fully cover the entire Facility operations up to a roughly 60% annual capacity factor.

Table Historical Emission Rates (Facility)

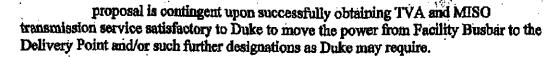
Parameter .	2005	2006	2007	Avg
CO2 (tons)	760,507	571,210	1,041,434	
CO2 (ton/MWh)	0.50	0.45	0.45	0.47
NOx (tons)	75	76	114	
NOx (ton/MWh)	0,00005 5	0.00006	0.00005	0.00005

#### 2.3.3 Scheduled Maintenance

Scheduled maintenance is typically performed in the spring (Mar-Apr) and fall (Oct-Nov) during periods of low expected utilization. Each unit is made unavailable for approximately one week during the spring and fall to perform scheduled maintenance. Major maintenance on the CTs and steam turbines and associated generators is provided by GE pursuant to Long-Term Service Agreements. GE's maintenance recommendations are to perform a hot gas path inspection every 900 factored starts for starts-governed units is in this category currently) or every 24,000 factored fired hours for hours-governed units:

[CTs are equipped with GE "long-life" combustor components so the normal combustion inspection that is typically performed every 450 starts or 8,000012,000 hours is not requiped at:

[Chargotty each of



#### 3. CONTRACT TERMS

#### 3.1.2 Transmission Cost

Total back to the total total

Subject to Duke's option as described in Section 2.4.2, if Duke elects to have procure and pay for transmission service, then Duke shall reimburse for its actual costs of providing such service. Currently TVA's tariff provides for firm point-to-point transmission service applicable from the Facility Busbar to the TVA-MISO interface at the service applicable from the energy transmitted. The MISO portion of the transmission path is currently priced at the service charges.

#### 3.1.3 Conversion Price

# Transmission Service System Impact Stu CIN/CGE 870 MW OASIS#!

**Гіпа**і з

#### Conclusion

In order to receive the full 870 MW of requested long-term firm point-to-point transmission service, the identified network upgrade would have to be completed before April 2009. The network upgrade can not be completed by this time. Therefore, the following options are available for the customer:

- 1.345 MW of transmission service is available from 01/01/09 to 01/01/11.
- 2. 595 MW of transmission service is available from of 01/01/09 to 06/01/10.
- 3. If the customer agrees to complete the required network upgrade by 06/01/10, 595 MW of transmission service is available from 01/01/09 to 6/01/10 and 870 MW of transmission service is available from 06/01/10 to 01/01/11.

# Midwest ISO Project

## 7 Conclusion

Results obtained from this study indicate that the MISO OASIS TSR would not cause /aggravate any flow gate, thermal or voltage violations.

Therefore, it is concluded that the TSR with 870 MW request from TVA to CIN for firm PTP transmission service can be granted at this time.

#### 1. OFFER SUMMARY

is pleased to offer to Duke Energy Ohio ("Duke") a dedicated power generation resource and associated services from existing 960-MW natural gas-fired combined-cycle generating facility located in the TVA region in northwest Mississippi near. (the "Facility"). At this location owns three identical 320-MW (nominal) units that comprise the Facility. Each unit is designed with approximately 253 MW of base-block combined-cycle capacity (7,100 Btn/kWh net heat rate) and 67/MW of duct-firing capacity.

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The Facility is directly interconnected to the 500-kV SERC/TVA transmission system at the 500-kV ——substation, substation to the mornwest and the 500

This proposal is contingent upon obtaining transmission service from to the MISO/CIN.GGE load zone, and has received written confirmation from MISO and TVA that such transmission service is technically feasible and available.

offer to Duke is a firm unit-contingent product under a tolling-type transaction structure consistent with the EEI Master Power Purchase and Sales Agreement whereby guarantees output, heat rate and availability of the Facility. The proposed pricing structure is a fixed monthly capacity component, a transmission pass-through component and certain variable components and as described further herein: offers a potential contract term of 30 years is prepared to discuss with Duke alternative contract structures, timing and other variations to this offer that might better serve Duke's needs.

Note that all information provided herein is considered proprietary and confidential and not to be distributed outside of the hid evaluation parties without the prior written consent of

#### 2. STATEMENTS

#### 2.1 Proposal Time Period

This proposal is valid until December 31, 2008, or longer if the parties are engaged in good-faith negotiations toward the completion of a power purchase agreement (the "Proposal Period"). Upon the expiration of the Proposal Period, shall be entitled to update its pricing and terms proposed herein.

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Table 1. Historical Operating Statistics (Entire Facility)

Parameter	2004	2005	2006	2007
			<u>, , , , , , , , , , , , , , , , , , , </u>	
MWh Generated (millions)	0.47	1.53	1.27	2.29
Average Net Capacity (MW)	924	921	917	918
Equiv. Availability (%)	95.9	96.2	· 90,0*	96.6
Forced Outage Factor (%)	0.5	0.0	6.9 *	0.5

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Table 2. Expected Unit Output and Heat Rate

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Baseload .	230 MW	7,150 Btn/kWh
Full load peaking only	65 MW	8,800 Btu/kWh
Full load total	295 MW	7,500 Btu/kWh

Average (60F)	Output	Heat Rate
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Hot:	1,300	120	1.5 .

#### 2.3.2 Environmental Performance

operates in full compliance with its environmental and regulatory permits.

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commercial operations in 2003. The Facility is equipped with selective catalytic
reduction ("SCR") on each unit to control NOx emissions to levels below.

3.5
ppm permit limit. Historical CO2 and NOx emission rates are provided in Table 4. Note
that SO2 emissions are solely a function of the sulfur content of natural gas and typically
total 5-6 tons per year for the full Facility.

The Mississiphi Department of Environmental Quality ("MDEQ") has confirmed that two of three units meet MDHQ's criteria for receiving full NOx allowance allocations under its CAIR implementation process. Thus two of three units are scheduled to receive allowance allocations for their full annual "potential to emit" levels. The third unit (which did not reach first-fire until early 2003) will be eligible for potential allowance allocations from the state's set-aside pool. Based on historical dispatch levels typical of an intermediate-type generating resource, believes the allocations for the two units will fully cover the entire Facility operations up to a roughly 60% annual capacity factor.

Table		Historical Emission Rates	(Facility)
•	•		

Parameter	2005	2006	2007	$\Lambda_{ m Vg}$
A Millietti.	art V V ar	24491713	any c	Aug
CO2 (tons)	760,507	571,210	1,041,434	
CO2 (ton/MWh)	0.50	0.45	0.45	0.47
NOx (tons)	75	76·	114	
NOx (ton/MWh)	0.00005	·0.00006	0.00005	0.00005

#### 2.3.3 Scheduled Maintenance

Scheduled maintenance is typically performed in the spring (Mar-Apr) and fall (Oct-Nov) during periods of low expected utilization. Each unit is made unavailable for approximately one week during the spring and fall to perform scheduled maintenance. Major maintenance on the CTs and steam turbines and associated generators is provided by GB pursuant to Long-Term Service Agreements. GR's maintenance recommendations are to perform a hot gas path inspection every 900 factored starts for starts-governed units is in this category currently) or every 24.000 factored fired hours for hours-governed units:

| CTs are equipped with GB "long-life" combustor components so the normal combustion inspection that is typically performed every 450 starts or 8,000-12,000 hours is not required at Currently each of

CTs have 500-600 factored starts and less than 10,000 factored hours. The scheduling of the next (and first) HGP inspection for a dependent on dispatch but expected to be in the 2010-2011 time frame, with subsequent HGP inspections roughly every four years thereafter.

#### 2.4 Deliverability

#### 2.4.1 Availability

is prepared to guarantee a monthly availability for the Contract Quantity of 95%.

2.4.2 Transmission and Delivery Point

Upon selection of its bid by Duke, would make application to TVA for year-round Firm Point to Point Service (or such other level of service at Duke's option) for the Contract Quantity from the Facility to the TVA-MISO interface as well as the MISO portion of transmission sinking to the CIN.CGE Load Zone. Duke shall have the option of paying for and managing such transmission service asset for its own benefit, or alternatively will pay for and manage such transmission service asset and treat the least as a pass-through under the proposed transaction.

On) behalf, TVA Transmission has completed a System Impact Study for Pinn Point to Point Transmission Service from the bushar to the TVA-MISO Inflatface. This request has now progressed to the Facilities Study step and is expected to be kempleted this fall. The results of the System Impact Study (see Attachment 2) showed that 345 MW (more than one full unit) is currently deliverable to the TVA-MISO interface. The balance of the plant's output can be delivered if a minor line upgrade is performed.

In addition to the TVA studies, MISO has completed a System Impact Study performed to analyze transmission service from the TVA-MISO burder to the CIN.CGH Load Zone. Theresults are included as Attachment 3. MISO concluded that there are no system constraints that would prevent the service from being granted.

The Delivery Point for this transaction shall be the requested TVA-MISO/CIN CGR lead zone if Owns the transmission service asset or the Facility Busbur if Duke owns the financial service asset.

proposal is contingent upon successfully obtaining TVA and MISO transmission service satisfactory to Duke to move the power from Facility Busbar to the Delivery Point and/or such further designations as Duke may require.

#### 3. CONTRACT TERMS

offer to Duke is a firm unit-contingent product under a tolling-type transaction structure consistent with the EEI Master Power Purchase and Sales Agreement whereby guarantees heat rate and availability of the Facility. The proposed pricing structure is a fixed monthly capacity price, a conversion charge, natural gas charge and a transmission charge and as described further herein. offers a potential contract term of 30 years. is prepared to discuss with Duke—alternative contract structures, timing and other variations to this offer that might better serve Duke's needs. The important details of proposed transaction are set forth in the attached Term Sheet. is prepared to negotiate expeditiously and in good faith with Duke to complete an agreement that is acceptable to both parties.

Previously has successfully completed two tolling agreements with TVA, based on the EEI form, and proposal team has substantial experience structuring a multitude of power sales transactions with various counterparties.

#### 3.1 Price Proposal

During the Delivery Period, Buyer shall pay Seller the Monthly Capacity Payment, Transmission Cost, Conversion Price and Natural Gas Payment as set forth herein and described further in the Term Sheet.

## 3.1.1 Monthly Capacity Payment

Duke shall pay Seller the Monthly Demand Payment for the Contract Capacity as described in the Term Sheet.

#### 3.1.2 Transmission Cost

Subject to Duke's option as described in Section 2.4.2, if Duke elects to have procure and pay for transmission service, then Duke shall reimburse for its actual costs of providing such service. Currently TVA's tariff provides for firm point-to-point transmission service applicable from the Facility Busbar to the TVA-MISO interface at the following month plus 3% losses on the energy transmitted. The MISO portion of the transmission path is currently priced at the following applicable ancillary service charges.

#### 3.1.3 | Conversion Price

Buyer shall pay Seller the Conversion Price including the following three components as set forth in detail in the Term Sheet:

- (i) VO&M Charge of per MWh of energy, escalating annually with a CPI-based escalator, plus
- (ii) Start Charge, escalating annually with a CPI-based escalator
- (iii) Emissions Charge equal to the cost of applicable emissionsrelated allowances, offsets, taxes or fees established by a
  regulatory authority with jurisdiction over
  air emission profile is provided herein).

#### 3.1.4 Natural Gas Payment

Duke shall reimburse or pay directly for) for all natural gas costs incurred for the purposes of fulfilling Duke's dispatch requirements under this transaction. These natural gas costs, described more fully in the attached Term Sheet, include gas converted into electricity, startup/shutdown gas, and gas transportation charges. Under the typical tolling structure proposed by

Ouke would be responsible for these natural gas costs and receive ramp energy.

#### 4. PROPOSAL LIMITATIONS

proposal is contingent on securing TVA and MISO transmission service Exercise to Duke, unless Duke elects to purchase at the Busbar, in which case there is no transmission contingency.

reserves the right to operate the Facility in its sole judgment in accordance with (i) prudent utility practices; (ii) limitations and operating guidelines set forth by its equipment manufacturers; (iii) applicable law; and (iv) applicable permits and regulations. Please see further limitations on operations described in the attached Term Sheet.

Note that this is only a business proposal. This is not a legal binding offer and does not obligate either Party to enter into an agreement regarding the subject herein. This proposal is subject to and conditioned upon market conditions, receiving authorized management approval and signing a definitive written agreement containing terms and conditions mutually agreeable to both parties. This proposal, attachments and any

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## Transmission Service System Impact Stu CIN/CGE 870 MW OASIS#

Final

#### Conclusion

In order to receive the full 870 MW of requested long-term firm point-to-point transmission service, the identified network upgrade would have to be completed before April 2009. The network upgrade can not be completed by this time. Therefore, the following options are available for the oustomer:

- 1. 345 MW of transmission service is available from 01/01/09 to 01/01/11.
- 2. 595 MW of transmission service is available from of 01/01/09 to 06/01/10.
- 3. If the customer agrees to complete the required network upgrade by 06/01/10, 595 MW of transmission service is available from 01/01/09 to 6/01/10 and 870 MW of transmission service is available from 06/01/10 to 01/01/11.

## Midwest ISO Project

# **7 Conclusion**

Results obtained from this study indicate that the MISO OASIS TSR would not cause /aggravate any flow gate, thermal or voltage violations.

Therefore, it is concluded that the TSR with 870 MW request from TVA to CIN for firm PTP transmission service can be granted at this time.

# PROPOSAL

## Affachment 1

# 08/29/08

# Term Sheet

m 11			
Seller:	1		
Buyer:	Duke Energy Ohio		
Pacility:			
Location:	Pacility is located in Mississipp	i,	
Plant Configuration	3 Units, each in 1 CT X 1 HRSG X 1 STG cor	nfiguration (a "Unit")	
Base Capacity per Unit	295 MW (Summer Rating)		
	330 MW (Winter Rating)		
Control Area	TVA/SERC		
Term & Contract Quantity:	Bid Term; Up to 30 years  Contract Capacite (at Summer Rating, 95°F) *		
	Base CCCT Capacity Product	690 MW	
	Peaking Capacity Product	195 MW **	
	Total Available Contract Capacity	885 MW	
•	* Buyer will be entitled to dispatch the Co technical limit (i.e. Winter Rating) for the ** Peaking Product is contingent upon Bu	applicable ambient conditions.)	
Product:	The product shall be Unit Contingent Firm Quantity is intended to be exclusively available other Firm Energy sides from the Facility. In derating, all non-firm sales from the Facility wountailment of Firm Energy sales.	le to Buyer, equal in priority with the event of a Facility outage or	
Delivery Point:	Delivery Point shall be the CIN.COE Load Zone Facility Busbar at Buyer's option.	o, TVA-MISO Interface or	

Firm Transmission Service:	TVA Transmission has completed a System Impact Study for Firm Point to Point Transmission Service from the Facility busbar to the TVA-MISO Interface. This request has now progressed to the Facilities Study step and is expected to be completed this fall. The results of the System Impact Study (see Attachment 2) showed that 345 MW (more than one full unit) is currently deliverable to the IVA-MISO interface. The balance of the plant's output can be delivered if a minor line upgrade is made. MISO has completed a System Impact Study performed to analyze transmission service from the TVA-MISO border to the CIN.CGB Load Zone. The results are included as Attachment 3. MISO concluded that there are no system constraints that would prevent the service from being granted.  This Offer shall be contingent upon securing the necessary transmission service to move the power from Facility Busbar to the desired Delivery Point.			
	Alternatively, at its option Buyer can secure the transmission and take delivery of the Product at the Facility busbar. Buyer would be free to optimize such transmission asset for its own account.			
Resupply Rights:	Seller shall have the right to resupply the Product so long as it is delivered to the Buyer's transmission system in accordance with Buyer's schedule. Resupply is defined as scheduling energy and transmission service sourced from a generating resource other than the Facility to satisfy Seller's obligations.			
Price:	During the Delivery Period, Buyer shall pay Seller the Monthly Capacity Payment, Transmission Cost, and Monthly Energy Payment as set forth herein.			
Monthly Capacity Payment:	Buyer shall pay Seller the following Monthly Demand Payment for the Contract Capacity during all months of the Contract Term.			
	Base CCCT 690 MW Peak — 195 MW Escalation  2009			
	Notes  (a) Buyer to select Start Date of Jan 1, of 2009, 2010, 2011 or 2012.  (b) Escalation applies beginning Jan 1, 2013 and on each anniversary thereafter based on CPI.			
Transmission Cost:	Buyer shall pay Seller's actual cost of the applicable TVA and MISO transmission service, losses, and ancillary services charges, currently priced at:			
	(a) TVA, EW-mo, plus 3% losses			
-	(b) MISO, awaren aww.mo			

ar.

Energy Payment:	Buyer shall pay Seller the sum of the following:			
	(i) VO&M Charge of per MWh of energy, escalating annually with a CPI-based escalator, plus			
	(ii) Start Charge of per Unit Start, escalating annually with a CPI-based escalator; plus			
	(iii) Emissions Cost equal to the actual cost of applicable emissions- related allowances; offsets, taxes or fees established by a regulatory authority with jurisdiction over (Facility's air emission profile is provided in the proposal)			
Natural Gas Requirements and Fuel	Buyer shall pay Seller for the actual Fuel Cost associated with the Contract Capacity, including gas quantities and transportation services procured to support			
Cost:	Buyer's scheduled dispatch (including startup and shutdown).			
	At Buyer's option, Buyer or Seller can procure and manage the natural gas supply and transportation.  The expected natural gas quantities required for normal operations at load can be determined using the Heat Rate information provided herein.			
	Startup and Shutdown natural gas quantities per cycle are estimated as follows:			
	• Cold Start = 2,700 MMBtu per Unit			
	Warm Start = 1,900 MMBtu per Unit Hot Start = 1,300 MMBtu per Unit			
	For purposes of estimating the expected Fuel Cost, Buyer can refer to the gas price published in Platts Gas Daily in its "Daily Price Survey" under the column heading "Midpoint" for Gas to flow at "Henry Hub" for the applicable Day, expressed in \$/MMBtu, plus a basis differential reflecting transportation cost from Henry Hub to IGP 500 Leg (typically MAMBtu). Note that this price generally assumes normal day-ahead gas nominations consistent with a Dispatch Notice issued on or before 9:00 a.m. CPT.			

Performance:	The expected Unit output and heat rates for the Contract Capacity are:			
	Summer (95°F)	Output	Heat Rate	
	Min Load	150 MW	7,800 Btu/kWh	
	CCCT Base Load	230 MW	7,150 Btu/kWh	
	Peak Product	65 MW	8.800 Btu/kWh	
	Full Load Total Unit	295 MW	7,500 Btu/kWh	
	Average (60°F)	Output	Heat Rate	
	Min Load	150 MW	7,850 Btu/kWh	
	CCCT Base Load	253 MW	7,100 Btu/kWh	
	Peak Product	67 MW	8,800 Btu/kWh	
	Full Load Total Unit	320 MW	7,525 Btu/kWh	
	Season points provided a heat rate degradation shal 1, 2013 and thereafter at t after the degradation star	bove. For purpo I apply to the Ba he rate of 0.1% for It date (the "Deg ero following ca	heat rate curve based on the Summer ses of evaluating the Heat Rate Cap, se CCCT Capacity beginning January or every 1,000 fired hours of operation gradation Factor"). The Degradation ch hot gas path overhaul of the unit	
Dispatch Constraints :	The minimum dispatch and	d contract requirer	ments are as follows:	
-	- No more than one (1) so	heduled start per d	lay for any individual Unit;	
	<ul> <li>The minimum scheduled run time (excluding time required for startup, shutdown and ramp) shall be eight (8) consecutive hours;</li> <li>Minimum downtime of 4 hours between Unit shutdown and subsequent start</li> </ul>			
<u> </u>	- Maximum of 250 starts	per year per Unit	. ,*	
	- Minimum one-hour stag	ger between starts	of different Units	
Start Times and Startup/Shutdown	For indicative purposes shutdown and ramp energ		tart times and quantities of startup, s follows:	
Energy	Cold Start (out of mins (240 MWh ramp en	•	nore than 48 hours) = 3 hours & 30	
			more than 8 hours but less than or a (160 MWh ramp energy per Unit);	
	Hot Start (out or 35 mins (120 MWh ramp		ss than or equal to 8 hours) = 1 hour	
	Buyer shall take delive shutdown.	ory of the ramp	energy associated with startup and	

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# Availability and Scheduling:

Buyer may schedule the Contract Capacity on a day-ahead basis between the minimum operating level and the maximum operating level for the Unit as set forth on the Availability Notice. Seller will work with the Buyer to accommodate Buyer's request for intra-day schedule changes to the extent such changes: (1) are within the equipments technical capabilities; (2) do not create commercial penalties for Seller; and (3) priced based on intra-day gas prices.

#### Seller Requirements:

Seller shall provide to Buyer a notice (the "Availability Notice") setting forth for each hour of the Scheduling Period (defined below) the expected availability of the Contract Capacity by facsimile no later than 0700 hrs Central Prevailing Time ("CPT") on the Business Day prior to the date(s) to which the Availability Notice relates. Depending on the ambient conditions, the capacity made available to Buyer on such Availability Notice can exceed the Contract Capacity, and Buyer is entitled to schedule and take delivery of such additional capacity.

Seller shall also provide Buyer a revised Availability Notice promptly after the occurrence of any outages, deratings or other events that would reduce or interrupt any schedule and dispatch of the Product to Buyer or cause the controlling Availability Notice to be inaccurate in any material respect and a description of the circumstances thereof.

The Scheduling Period shall be each 24 hour day for Tuesday through Friday and a single scheduling period for Saturday through Monday. Availability Notices submitted on Friday will indicate the expected availability of the Contract Capacity for Saturday, Sunday and Monday (and the Business Day prior to any NERC holiday).

#### Buyer Requirements:

Buyer may schedule delivery of Contract Quantity during each consecutive hour on a day-shead (or weekend) basis by delivering (by facsimile) to Seller the "Day-shead Scheduling and Dispatch Request" no later than 0830 CPT on the Business Day prior to the date that delivery is scheduled to commence.

#### Guaranteed Availability:

Guaranteed Availability (i.e., Long/Term Unit Performance) shall be 95%.

#### Scheduled Maintenance

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Seller anticipates its planned maintenance schedule as follows:

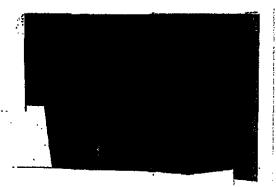
- (i) Annual Planned Maintenance Outages 2 weeks per Unit per year, typically scheduled for one week in the spring and one week in the fall.
- (ii) Periodic Major Maintenance major CT and ST overhauls that typically occur roughly on five-year cycles, depending on operations, typically requiring about 3 weeks per event.

Annual estimated days of scheduled maintenance outage time is provided below. These estimates are subject to change based on factors including operating time, equipment condition and vendor recommendations. Planned maintenance is typically scheduled during non-peak (spring, fall) months in coordination with Buyer.

Year	Major Outage	[1]	1/2	113
	Description	(days)	(days)	(days)
2009		14	14	14
2010		14	14	14
2011	Unit 1 & 2 - CT HGP	28	28	14
2012	Unit 3 CT HGP	14	14	28
2013	Unit 1 ST Maj	28	14	14
2014	Unit 2 & 3 ST Maj	14	28	28
2015		14	14	14
2016	Unit 1 & 2 CT HGP	28	28	14
2017	Unit 3 - CT HGP	14	14	28
2018		14	14	14
2019		14	14	14
2020	Unit 1 -CT HOP + STMaj	30	14	14
2021	Unit 2 -CT HGP + STMaj	14	30	14
2022	Unit 3 CT HGP + STMaj	14	14	30
2023		14	14	14
2024		14	14	14
2025		14	14	14

PLEASE NOTE THAT THIS IS ONLY A BUSINESS PROPOSAL. THIS IS NOT A LEGAL BINDING OFFER AND DOES NOT OBLIGATE EITHER PARTY TO ENTER INTO AN AGREEMENT REGARDING THE SUBJECT HEREIN. THIS PROPOSAL IS SUBJECT TO AND CONDITIONED UPON MARKET CONDITIONS, RECEIVING AUTHORIZED MANAGEMENT APPROVAL AND SIGNING A DEFINITIVE WRITTEN AGREEMENT CONTAINING TERMS AND CONDITIONS MUTUALLY AGREEABLE TO BOTH PARTIES. THIS MESSAGE AND ANY FILES TRANSMITTED WITH IT ARE PRIVILEGED INFORMATION AND ARE CONFIDENTIAL OR. OTHERWISE THE EXCLUSIVE PROPERTY AND SOLELY FOR THE EXCLUSIVE USE OF THE INDIVIDUAL. OR ENTITY THAT IS THE INTENDED RECEIVENT.

Duke Energy Ohio, Inc. Request for Proposals for Power Supply Preliminary Proposal #1



#### Strictly Private and Confidential

August 27, 2008

DUKE ENERGY OHIO RFP c/o Jon Summerville Burns & McDonnell 9400 Ward Parkway Kansas City, MO 64114

Re: Preliminary Non-Binding Offer #1 for Duke Energy Ohio RFP

Dear Mr. Summerville:

"Company"), an indirect, wholly-owned subsidiary of
is pleased to provide this preliminary, non-binding proposal (the "Preliminary
Proposal # 1") to Duke Energy Ohio, inc. ("Duke Energy"), according to the specifications outlined in
Duke Energy's Request for Proposals for Peaking/Intermediate Power Supply.

#### (I) Executive Summary:

The Company proposes a sale of the "Facility"), a 545 MW natural gas-fired combined cycle facility located in Michigan to Duke Energy for effective by December 31, 2009. The Facility is connected to the MISO transmission system and is qualified as a Generation Resource, as defined in MISO's Business Rules and Open Access Transmission and Energy Markets Tariff (TEMT).

The Facility utilizes the Orion configuration consisting of six GE LM6000 combustion turbines, one GE MS7001EA combustion turbine and two GE steam turbines. The Facility is a part of the Midwest ISO (MISO Generation Node: MISO III) and is an active participant in the real-time and day-ahead MISO epergy markets. The Facility has achieved over a 99% annual availability factor since its commercial operation date of 2002.

#### (II) Statements:

- 3.2.1 Proposal shall remain in effect through December 31, 2009.
- 3.2.2 The Certification and indemnity Agreement (Exhibit C) is attached.

Duke Energy Ohio, Inc. Request for Proposals for Power Supply Preliminary Proposal #1



#### (III) Contract Terms:

The Company expects both Duke Energy and the Company to provide standard tier I and tier II representations and warranties in a purchase and sale agreement ("PSA"). Prior to signing the PSA Duke Energy would be able to conduct appropriate due diligence, including, but not limited to, a site visit, and review of the following:

- 1. Organizational Documents
- 2. Financing Documents
- 3. Project Operating Documents
- 4. ERISA/Employee Matters
- 5. Tax Matters
- 6. Historical Financial Statements
- 7. Historical and Projected Budgets
- 8. Historical O&M and Technical Information
- 9. Federal and State Regulatory Compliance
- 10. Environmental Matters .
- 11. Litigation/Other Third Party Liabilities
- 12. Real Property Matters
- 13. Cash Management Matters
- 14. Insurance Matters
- 15. Information Technology

#### (IV) Proposal Limitations:

obligation to sell the Facility to Duke Energy is contingent upon the Company's successful conversion of its toll on the Facility into a direct Facility ownership interest by December 31, 2009.

leases the Facility through 30, 2018 and holds a call option on 100% of the common equity or exercisable in 2018. Moreover, has an option to purchase the Facility in 2020. intends to utilize commercially reasonable efforts to effectively exercise the stated options early, in anticipation of delivering the Facility to Duke Energy by December 31, 2009.

#### (Y) Term Sheet -Asset Sale/Purchase:

Please see attachment.

Ouke Energy Ohio, Inc.
Request for Proposals for Power Supply
Preliminary Proposal #1

#### Ownership Offer - Life of Unit Term Sheet

Résource

(the "Facility")

The Facility is a natural gas-fired combined cycle electrical

generating facility located in

Michigan.

Primary Fuel Source .

**Natural Gas** 

**Primary Fuel Pricing Point** 

Canadian Gas - Dawn, Ontario

Secondary Fuel Source

n/a

Secondary Fuel Pricing Point

<u>n/a</u>

**MISO Commercial Pricing Node** 

MISO CO

Seller

**Purchaser** 

DUKE ENERGY OHIO, INC.

**Capacity Amount** 

MISO Capacity: 545 MW

Base Dependable Capacity:

416 MW

**Duct Firing Dependable Capacity:** 

129 MW

Energy

As Scheduled

Scheduling

Scheduling shall be performed to the maximum flexibility

allowed by MISO and in accordance with the MISO

Agreement.

#### Purchase Price

Lump Sum Payment.

**Lump Sum Payment Year \$\$** 

2009

Fixed O&M\*

AW-month

Fixed O&M Escalation

2.5% per year

Year of Fixed O&M Cost Quote

2009

Duke Energy Ohio, Inc. Request for Proposals for Power Supply Preliminary Proposal #1

Variable O&M ("VOM")\*

WW

Variable O&M Escalation

Escalates by the year-over-year change in CPI

Year of Variable OttM Cost Quote

2009

MS7001EA Start-Up Cost\*

start

LM6000 Start-Up Cost\*

.

There is no start-up payment for the first 300 start-

ups per LM6000 unit per year

Start-Up Cost Escalation

Escalates by the year-over-year change in CPI

Year of Start up Cost Quote

2009

**Capital Spending** 

Schedule

At this time, no Facility upgrades or life extension efforts

have been planned.

Maintenance Spending

Schedule

GE Contractual Services Annual Administrative Fee of escalating at the year-over-year change in CPI.

Variable fees under the GE Contractual Services Agreement

yary with dispatch levels.

**Plant Heat Rates** 

See Exhibit A and Exhibit B

**Base Capacity:** 

8,250 - 8,450 btu/kwh

Base Capacity

and Duct Firing:

9,250 - 9,500 btu/kwh

**Guaranteed Heat Rate** 

n/a

Availability

See Exhibit C for historical and projected scheduled

maintenance/planned outage events, in addition to a

summary of the Facility's historical operating performance.

Minimum run time

1 Hour

Start time to

Synchronization

See Exhibit D and Exhibit E

Ramp Rate

See Exhibit F





### Heat Role Table Geology HERT

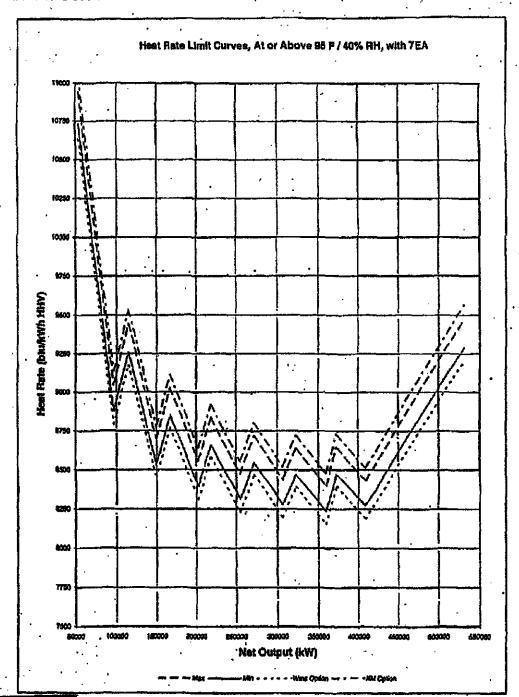
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## **EXHIBIT B: FACILITY HEAT RATE CURVES**

Heat Rate Curve
At or Above 95 F / 40 % RH

7EA Operating At Standard Atmospheric Pressure



## **EXHIBIT C: PLANNED OÙTAGE EVENTS**

Planited Ot	itage Event	s
Planned Turbina Maintenance Activity	Intervals (Hours of Operation)	(4)
MS7001EA Combustion Inspection	12,000	144
MS7001EA Hot Gas Path Inspection	24,000	288
M97001EA Major Inspection	48,000	600
Steam Turbine-Generator Minor Inspection	24,000	240
Steam Turbine-Generator Major Inspection	48,000	672
LM6000 Hot Section	24,000	96'
LM6000 Engine Exchange for Major Overhaul	· 48,000	60

	istorical O <sub>l</sub>	erating P	erformance
Start Date	End Date	Availability	Comment
7/1/2002	12/31/2002	89,08%	ri/a
1/1/2003	12/31/2003	98.96%	n/a
1/1/2004	12/31/2004	29.93%	n/a
1/1/2005	12/31/2005	99.36%	n/a · `
1/1/2006	12/31/2006	99.80%	n/a
1/1/2007	12/31/2007	97.02%	Steam Turbine Outage

LM8000	· ·	-,	
	n√a	5,500	2016 to 2018
MS7001EA (	335	7,000	October 2009
Unit Effe	ent# of G active ( tarts	urrent# of Operating Flours	Next Planne Outage

## EXHIBIT D: FACILITY START-UP AND SHUTDOWN GAS AND NOTIFICATION LEAD TIME

Condition of Facility		2 LMe	00 Slad	MS700	EA Slad		art to Bese le Capacity		Blart ic
i	i '' '	Stari	Stop	Start	5top	Start	Stop	Start	Slop
Hot	Gas Allowance (AllABtu HHV)	315	100	700	145	1730	445	1854	689
	Notice Required (rain)	71	13	93	17	101	30	114	43
	Gas Allowance (MMBIG HIV)	305	100	783	148	1878	445	2106	569
(12 ≤ Down ≤ 24 hrs)	Notice Required (min)	78	13	104	• 17	108	30	128	43
	Gas Allowance (MMBlu HHV)	640	100	1398	145	2385	445	2592	569
(Dawn > 24 hrs)	Notice Required (min)	158	13	178	17	188	30	208	43

#### Nobe

- 1) "2 LM8000 Start" final condition is 2 LM8000 Units at 100% load and 1 steam kurbine, on duct firing.
- 2] "MS700 [EA Blact" line! condition to the MS700 (EA Unit at 100% load and 1 sleam turbine, no duct filing.
- 3) Operation of additional units after achievement of Facility startup for 2 LM8000 and MS7001EA cases is shown in the individual Unit Table.
- 4) "Facility Start to Bass Dependable Capacity" final condition is MS7001EA Unit at 100% load, 5 LM6000 Units at 100% load and 2 steam turbless, so duct living.
- 6) "Facility Start to Dependeble Capacity" final condition is the MS7001EA Unit at 100% load, 6 LM8000 Units at 100% load and 2 atoms implices, with duol firing to Dependeble Capacity.
- 6) Times shown are for starts initiated with day shead notice. For starts initiated with less than day shead notice, and 30 minutes to Start Helico Required in table shows.



Condition of Unit	Gas Consumption (MMB(u t # (V)		INB OOJEA	1.100	2000	Sleam	Turbina	Duct	Burner .
	1	Glert	Stop	Stert	Stop	Start	Stop	Start	Slop
Hot (Down < 12 hrs)	Expected Gross Gas .	442	145	120	50	22	0	0	0
	Additional Start Cas per Bection 6.4	190		28		18			
	Notice Required (min)	63	17	48	. 13	27	18	8.	26
Warm (12 ≤ Down ≤ 24 hrs)	Expected Gross Gas	50e	146	148	. 60	29	0	0	0
(14 7 mm/10 7 mm/1)	Additional Start Gas per Section 6.4	214		29	· · · ·	23			
	Notice Required (min)	87	17	50	. 13	34	16	8	28
Cald (Down > 24 hrs)	Expected Gross Gas	657	145	169	50	60	0	0	. 0
	Additional Start Gas per Section 8.4	232		31		48			
	Notice Required (min)	70	17	53	, 13	84	16	- 5	25

- Notes:

  1) The Facility is assumed to be in a hel condition and delivering Net Electrical Energy when individual units are being started or stopped.
- 2) Unit startup Gas is the Gas required to start the unit and bring it to full load and full unitred HRSG steam production.
- 3) Steam turbine startup Gas is the incremental Gas consumed by Units to supply warmup steam to the steam furbine until it is synchronized.
- 4) Shuldown Gas is the Gas required to unload the unit and bring it to a full stop.
- 5) Notice Required is the time required from receipt of a Dispaich order that requires a Unit start or stop until the desired Unit condition is achieved.
- 6) HRSG's are assumed to be at full unfired ateam production prior to the beginning of Duct Burner operation.
- 7) Multiple LM6000 tigil staris Dispatched at the same finie will result in Unit starts initiated at 1 minute intervals.

## **EXHIBIT F: RAMP RATE TABLES**

## Ramping Performance at 95 F / 40% RH / 14.19 psia

		9.345%	as ve √R	amp Ran	ges:			
MS7001EA	LM6000's	Steam Turbines On	Output at Minimum Load (MW)	40 Minute Product (MV)	Product	30 Minute Product (I/W)		60 Minute Product (MW)
1	Ō	1	56	58	68	68	68	68
1 1	1.	' 1 ·	71	88	109	124	124	124
1 1	2	2	<b>86</b>	128	153	170	170	. 170
1 1	3	2	95	169	203	239	239	239
1	4	2	110	209	250	295	295	295
1 1	5	2	126	250	297	350	350	350
1	. 6 '	2	141	289	339	394	394	394

		C	ontract R	amp Rar	iges:		
MS7001EA On		Turbines	Product	Product	30 Minute Product (MW/min)	Product	Product
1 1	0 1 2	1 1 2	5.8 8.8 12.8	4.5 7.3 10.2	2.3 4.1 5.7	1.5 2.8 3.8	1.1 2.1 2.8
1	3	. 2	16.9 20.9 26.0	13.6 16.6 19.8	8.0 9.8 11.7	5.3 6.5 7.8	4.0 4.9 5.8
1	8	2	725.9	22.6	13.1	8.8	6.6

- Operating Assumptions:
  (1) Facility configuration does not change over the time period.
- (2) Duct burners are operated in conjunction with Units to achieve ramp range.(3) Duct burner ramping starts immediately at the conclusion of Unit ramping.
- (4) LM6000 Minimum Load is 12 MVV (about 27% load).
- (5) MS7001EA Minimum Load is 50% load.

# #6

## Strictly Private and Confidential

August 27, 2008

DUKE ENERGY OHIO RFP c/o Jon Summerville Burns & McDonnell 9400 Ward Parkway Kansas City, MO 64114

Re: Preliminary Non-Binding Offer #2 for Duke Energy Ohio RFP.

Dear Mr. Summerville:

or the "Company"), an indirect, wholly-owned subsidiary of is pleased to provide this preliminary, non-binding proposal (the "Preliminary Proposal # 2") to Duke Energy Ohio, Inc. ("Duke Energy"), according to the specifications outlined in Duke Energy's Request for Proposals for Peaking/Intermediate Power Supply.

## (I) Executive Summary:

The Company proposes offering Duke Energy a 30 year Life of Asset Power Purchase Agreement (the "PPA") on the (the "Facility"), a 545 MW natural gas-fired combined cycle facility located in Michigan commencing on or before January 1, 2010. The Facility is connected to the MISO transmission system and is qualified as a Generation Resource, as defined in MISO's Business Rules and Open Access Transmission and Energy Markets Tariff (TEMT).

The Facility employs the Orion configuration consisting of six GE LM6000 combustion turbines, one GE M57001EA combustion turbine and two GE steam turbines. The Facility is a part of the Midwest ISO (MISO Generation Node: MISO ) and is an active participant in the real-time and day-ahead MISO energy markets. The racility has achieved over a 99% annual availability factor since its commercial operation date of July 1, 2002.

In exchange for all of the energy, capacity and ancillary services associated with the Facility, Duke Energy would pay:

Upfront capacity payment:

Monthly capacity payment:

kilowatt month (escalated at CPI)

**Energy Payment:** 

Heat Rate \* Gas Index + VOM + Start Charges

Please refer to the attached term sheet for further details.



#### (II) Statements:

- 3.2.1 Proposal shall remain in effect through December 31, 2009.
- 3.2.2 The Certification and Indemnity Agreement (Exhibit C) is attached.

#### (III) Contract Terms:

The Company will seek the following contract terms if selected to the short list:

- 1) Duke Energy will be responsible for all emissions and carbon dioxide costs incurred during the term of the PPA.
- 2) Duke Energy will be entitled to a capacity payment rebate provided that the Facility's availability falls below the guaranteed availability, but for force majeure events.
- 3) The Company expects both Duke Energy and the Company to provide standard tier i and tier ii representations and warranties in a power purchase agreement ("PPA"). Prior to signing the PPA Duke Energy would be able to conduct appropriate due diligence, including, but not limited to, a site visit, and review of the following:
  - 1. Organizational Documents
  - 2. Financing Documents
  - 3. Project Operating Documents
  - 4. ERISA/Employee Matters
  - 5. Tax Matters
  - 6. Historical Financial Statements
  - 7. Historical and Projected Budgets
  - 8. Historical O&M and Technical Information
  - 9. Federal and State Regulatory Compliance
  - 10. Environmental Matters
  - 11. Litigation/Other Third Party Liabilities
  - 12. Real Property Matters
  - 13. Cash Management Matters
  - 14. Insurance Matters
  - 15. Information Technology

### (IV) Proposal Limitations:

obligation to sell the Facility's energy, capacity and ancillary services to Duke Energy beyond June 30, 2018, is contingent upon the Company's successful conversion of its toll on the Facility into a direct Facility ownership interest by December 31, 2009. The common equity of exercisable in 2018.

in turn, holds an option to purchase the Facility in 2020 intends to utilize commercially reasonable efforts to effectively exercise the stated options early and consolidate its ownership of the Facility by December 31, 2009. In the event that the Company fails to consolidate its ownership of the Facility, will remunerate to Duke Energy on December 31, 2010 and continue to perform under the Company's existing PPA through June 30, 2018.

# Life of Asset PPA (30 Years) Term Sheet

**Product** 

Unit Firm capacity as defined in the EEI Master Power

Purchase and Sales Agreement, Schedule P.

Seller

Purchaser

DUKE ENERGY OHIO, INC.

Transmission Interconnection Point MISO

**Delivery Point** 

CIN.CGE Commercial Pricing Node within MISO

Gas Pricing Point

Canadian Gas - Dawn, Ontario

**Term of Contract** 

30 years

**Capacity Amount** 

MISO Capacity: 545 MW
Base Dependable Capacity: 416 MW

Duct Firing Dependable Capacity: 129 MW

Energy.

As Scheduled

Scheduling

Scheduling shall be performed to the maximum flexibility

allowed by MISO and in accordance with the MISO

Agreement.

# Pricing Information

a. Initial Payment (PPA Prepayment)

Year of Initial Payment

2009

b. Capacity Pricing

**Capacity Price** 

MW-yea

Year of Capacity Price Quote

2009

Capacity Price Escalation/Year

Escalates by the year-over-year change in

<u>CPI</u>

c. Energy Pricing --- Production Cost Based

1. Variable O&M ("VOM")

WW

**VOM Escalation** 

Escalates by the year-over-year change in CPI.

Year of VOM Cost Quote

<u>2009</u>

11. Guaranteed Heat Rate (HHV)

See Exhibit A and Exhibit B

iii. Gas Pricing Point

Canadian Gas - Dawn, Ontario

iv. MS7001EA Start-Up Charge .

start

M6000 Start-Up Charge

start

There is no start-up payment for the first 300

start-ups per LM6000 unit per year

Start up Cost Escalation

Escalates by the year-over-year change in CPI

Year of Start up Cost Quote

2009

**Total Production Cost =** 

{(Variable O&M + Guaranteed Heat Rate \* Gas Price over Term) + Start-Up Cost}

Note: Energy pricing includes all ancillary service costs, Midwest ISO charges, taxes and other fees necessary for delivery to the Delivery Point.

Plant Heat Rates

See Exhibit A and Exhibit B

Base Capacity:

8.250 - 8.450 btu/kwh

Base Capacity and Duct Firing:

9,250 - 9,500 btu/kwh

**Guaranteed Heat Rate** 

<u>n/a</u>

Guaranteed

Peak: 97%

Availability

Off-Peak: 96%





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#### Mouse

All ambient conditions are at standard atmosphishic pressure.

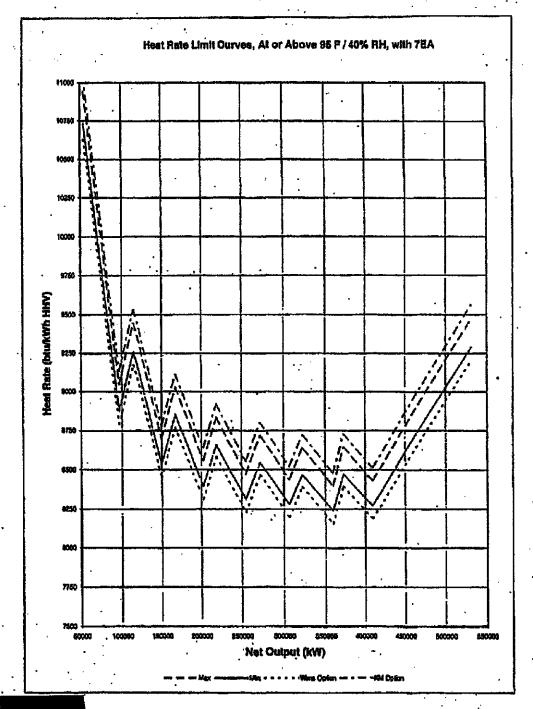
Above table in the steady state operation. One Schedule 10.0 for Startup and Shakkown had allocations.

Above table in the street and acceptance and includes minimum and stationers that table for specific operation configurations. Heavily tracition of item.

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## **EXHIBIT B: FACILITY HEAT RATE CURVES**

(Heat Rate Curve At or Above 95 F / 40 % RH 7EA Operating At Standard Atmospheric Pressure





## Strictly Private and Confidential

August 27, 2008

DUKE ENERGY OHIO RFP c/o Jon Summerville Burns & McDonnell 9400 Ward Parkway Kansas City, MO 64114

Re: Preliminary Non-Binding Offer #3 for Duke Energy Ohio RFP

Dear Mr. Summerville:

\* "Company"), an indirect, wholly-owned subsidiary of

(' '), is pleased to provide this preliminary, non-binding proposal (the "Preliminary
Proposal # 3") to Duke Energy Ohio, Inc. ("Duke Energy"), according to the specifications outlined in
Duke Energy's Request for Proposals for Peaking/Intermediate Power Supply.

#### (I) Executive Summary:

The Company proposes offering Duke Energy a 30 year Life of Asset Power Purchase Agreement (the "PPA") on the (the "Facility"), a 545 MW natural gas-fired combined cycle facility located in Michigan commencing on or before December 31, 2010. The Facility is connected to the MISO transmission system and is qualified as a Generation Resource, as defined in MISO's Business Rules and Open Access Transmission and Energy Markets Tariff (TEMT).

The Facility employs the Orion configuration consisting of six GE LM6000 combustion turbines, one GE MS7001EA combustion turbine and two GE steam turbines. The Facility is a part of the Midwest ISO (MISO Generation Node: MISO and is an active participant in the real-time and day-ahead MISO energy markets. The racility has achieved over a 99% annual availability factor since its commercial operation date of July 1, 2002.

In exchange for all of the energy, capacity and ancillary services associated with the Facility, Duke Energy would pay:

Capacity Payment part A:

per kilowatt month (no escalation)

Capacity Payment part B:

per kilowatt month (escalated at CPI)

**Energy Payment:** 

Heat Rate \* Gas Index + YOM + Start Charges

Please refer to the attached term sheet for further details.

## (II) Statements:

- 3.2.1 Proposal shall remain in effect through December 31, 2009.
- 3.2.2 The Certification and Indemnity Agreement (Exhibit C) is attached.

## (III) Contract Terms:

The Company will seek the following contract terms if selected to the short list:

- 1) Duke Energy will be responsible for all emissions and carbon dioxide costs incurred during the term of the PPA.
- 2) Duke Energy will be entitled to a capacity payment rebate provided that the Facility's availability falls below the guaranteed availability, but for force majeure events.
- 3) The Company expects both Duke Energy and the Company to provide standard tier I and tier II representations and warranties in a power purchase agreement ("PPA"). Prior to signing the PPA Duke Energy would be able to conduct appropriate due diligence, including, but not limited to, a site visit, and review of the following:
  - 1. Organizational Documents
  - 2. Financing Documents
  - 3. Project Operating Documents
  - 4. ERISA/Employee Matters
  - 5. Tax Matters
  - 6. Historical Financial Statements
  - 7. Historical and Projected Budgets
  - 8. Historical OBM and Technical Information
  - 9. Federal and State Regulatory Compliance
  - 10. Environmental Matters
  - 11. Litigation/Other Third Party Liabilities
  - 12. Real Property Matters
  - 13. Cash Management Matters
  - 14. Insurance Matters
    - 15. Information Technology

#### (IV) Proposal Limitations:

obligation to sell the Facility's energy, capacity and ancillary services to Duke Energy beyond June 30, 2018, is contingent upon the Company's successful conversion of its toll on the Facility into a direct Facility ownership interest by December 31, 2009 currently is the holder of a call option on 100% of the common equity of exercisable in 2018.

in turn, holds an option to purchase the Facility in 2020. Intends to utilize commercially reasonable efforts to effectively exercise the stated options early and consolidate its ownership of the Facility by December 31, 2009. In the event that the Company fails to consolidate its ownership of the Facility, the PPA Seller has offered would terminate on June 30, 2018.



## Life of Asset PPA (30 Years) Term Sheet

**Product** 

Unit Firm capacity as defined in the EEI Master Power

Purchase and Sales Agreement, Schedule P.

Seller

**Purchaser** 

DUKE ENERGY OHIO, INC.

Transmission Interconnection Point MISO

**Delivery Point** 

CIN.CGE Commercial Pricing Node within MISO

**Gas Pricing Point** 

Canadian Gas - Dawn, Ontario

**Term of Contract** 

30 years

Capacity Amount

MISO Capacity:

Base Dependable Capacity: 416 MW **Duct Firing Dependable Capacity:** 129 MW

**Energy** 

As Scheduled

Scheduling

Scheduling shall be performed to the maximum flexibility

allowed by MISO and in accordance with the MISO

Agreement.

## Pricing Information

a. Capacity Pricing

Capacity Price A

Year of Capacity

Price A Quote

2009 ·

Capacity Price A Escalation/Year

<u>0% per year (no escalation)</u>

Capacity Price B

Year of Capacity Price B Quote

Capacity Price B Escalation/Year

Escalates by the year-over-year change in CPI

b. Energy Pricing --- Production Cost Based

i. Variable O&M ("VOM")

MWh

**VOM Escalation** 

Escalates by the year-over-year change in CPI

Year of VOM Cost Quote

2009

ii. Guaranteed Heat Rate (HHV)

See Exhibit A and Exhibit B

III. Gas Pricing Point

Canadian Gas - Dawn, Ontario

iv. MS7001EA Start-Up Charge

start

M6000 Start-Up Charge

start

There is no start-up payment for the first 300

start-ups per LM6000 unit per year.

Start up Cost Escalation

Escalates by the year-over-year change in CPI

Year of Start up Cost Quote

2009

Total Production Cost =

{(Variable O&M + Guaranteed Heat Rate \* Gas Price over Term) + Start-Up Cost}

Note: Energy pricing includes all ancillary service costs, Midwest ISO charges, taxes and other fees necessary for delivery to the Delivery Point.

Plant Heat Rates

See Exhibit A and Exhibit B

Base Capacity:

8,250 - 8,450 btu/kwh

Base Capacity and Duct Firing:

9,250 - 9,500 btu/kwh

**Guaranteed Heat Rate** 

n/a

Guaranteed

Peak: 97%

Availability

Off-Peak: 96%



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#### Holes

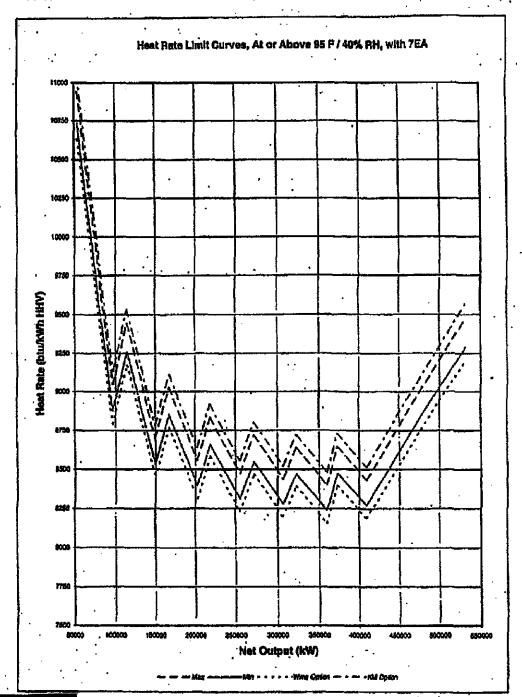
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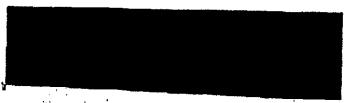
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Above table is for Hisphallon proposes and includes relains and reastingus ived rates for specific operating configurations. House tracking of feet use

## **EXHIBIT B: FACILITY HEAT RATE CURVES**

<u>iHeat Rate Curve</u> At or Above 96 F / 40 % RH 7EA Operating
At Standard Atmospheric Pressure





\*8

## Strictly Private and Confidential

August 27, 2008

DUKE ENERGY OHIO RFP c/o Jon Summerville Burns & McDonnell 9400 Ward Parkway Kansas City, MO 64114

Re: Preliminary Non-Binding Offer #4 for Duke Energy Ohio RFP

Dear Mr. Summerville:

"Company"), an indirect, wholly-owned subsidiary of
is pleased to provide this preliminary, non-binding proposal (the "Preliminary
Proposal # 4") to Duke Energy Ohio, Inc. ("Duke Energy"), according to the specifications outlined in
Duke Energy's Request for Proposals for Peaking/intermediate Power Supply.

### (i) Executive Summary:

The Company proposes offering Duke Energy a 30 year Life of Asset Power Purchase Agreement (the "PPA") on the (the "Facility"), a 545 MW natural gas-fired combined cycle facility located in , Micrigan commencing on or before December 31, 2010. The Facility is connected to the MISO transmission system and is qualified as a Generation Resource, as defined in MISO's Business Rules and Open Access Transmission and Energy Markets Tariff (TEMT).

The Facility utilizes the Orion configuration consisting of six GE LM6000 combustion turbines, one GE MS7001EA combustion turbine and two GE steam turbines. The Facility is a part of the Midwest ISO (MISO Generation Node: MISO CONS.CC.PLYM) and is an active participant in the real-time and day-ahead MISO energy markets. The Facility has achieved over a 99% annual availability factor since its commercial operation date of July 1, 2002.

In exchange for all of the energy, capacity and ancillary services associated with the Facility, Duke Energy would pay:

Capacity Payment part A:

per kilowatt month (escalated at 3% per year)

Capacity Payment part B:

per kilowatt month (escalated at CPI)

**Energy Payment:** 

Heat Rate \* Gas Index + VOM + Start Charges

Please refer to the attached term sheet for further details.



## (II) Statements:

- 3.2.1 Proposal shall remain in effect through December 31, 2009.
- 3.2.2 The Certification and Indemnity Agreement (Exhibit C) is attached.

### (III) Contract Terms:

The Company will seek the following contract terms if selected to the short list:

- 1) Duke Energy will be responsible for all emissions and carbon dioxide costs incurred during the term of the PPA.
- 2) Duke Energy will be entitled to a capacity payment rebate provided that the Facility's availability falls below the guaranteed availability, but for force majeure events.
- 3) The Company expects both Duke Energy and the Company to provide standard tier I and tier II representations and warranties in a power purchase agreement ("PPA"). Prior to signing the PPA Duke Energy would be able to conduct appropriate due diligence, including, but not limited to, a site visit, and review of the following:
  - 1. Organizational Documents
  - 2. Financing Documents
  - 3. Project Operating Documents
  - 4. ERISA/Employee Matters
  - 5. Tax Matters
  - 6. Historical Financial Statements
  - 7. Historical and Projected Budgets
  - 8. Historical O&M and Technical Information
  - 9. Federal and State Regulatory Compliance
  - 10. Environmental Matters
  - 11. Litigation/Other Third Party Liabilities
  - 12. Real Property Matters
  - 13. Cash Management Matters
  - 14. Insurance Matters
  - 15. Information Technology

#### (IV) Proposal Limitations:

obligation to sell the Facility's energy, capacity and ancillary services to Duke Energy beyond June 30, 2018, is contingent upon the Company's successful conversion of its toll on the Facility into a direct Facility ownership interest by December 31. 2009 currently is the holder of a call option on 100% of the common equity of exercisable in 2018.

in turn, holds an option to purchase the Faculty in 2020 intends to utilize commercially reasonable efforts to effectively exercise the stated options early and consolidate its ownership of the Facility by December 31, 2009. In the event that the Company fails to consolidate its ownership of the Facility, the PPA Seller has offered would terminate on June 30, 2018.

## Life of Asset PPA (30 Years) Term Sheet

**Product** 

Unit Firm capacity as defined in the EEI Master Power

Purchase and Sales Agreement, Schedule P.

Seller

Purchaser

Transmission Interconnection Point MISO

Delivery Point

CIN, CGE Commercial Pricing Node within MISO

Gas Pricing Point

Canadian Gas - Dawn, Ontario

**Term of Contract** 

30 years

**Capacity Amount** 

MISO Capacity: 545 MV

Base Dependable Capacity: 416 MW

Duct Firing Dependable Capacity: 129 MW

**Energy** 

As Scheduled

Scheduling

Scheduling shall be performed to the maximum flexibility

allowed by MISO and in accordance with the MISO

Agreement.

## **Pricing Information**

a. Capacity Pricing

Capacity Price A

MW-vear

Year of Capacity Price A Quote

2009

Capacity Price A Escalation/Year

3% per year (fixed escalation)

Capacity Price B

MW-year

Year of Capacity Price B Quote

2009

Capacity Price B Escalation/Year

Escalates by the year-over-year change in CPI

b. Energy Pricing --- Production Cost Based

1. Variable O&M ("VOM")

/MWh

VOM Escalation

Escalates by the year-over-year change in CPI.

Year of VOM Cost Quote

2009

ii. Guaranteed Heat Rate (HHV)

See Exhibit A and Exhibit B

iii. Gas Pricing Point

Canadian Gas - Dawn, Ontario

ly. MS7001EA Start-Up Charge

/start

M6000 Start-Up Charge

/start

There is no start-up payment for the first 300

start-ups per LM6000 unit per year

**Start up Cost Escalation** 

Escalates by the year-over-year change in CPI

Year of Start up Cost Quote

2009

Total Production Cost = {(Variable OttM + Guaranteed Heat Rate \* Gas Price over Term) + Start-Up Cost}

Note: Energy pricing includes all ancillary service costs, Midwest ISO charges, taxes and other fees necessary for delivery to the Delivery Point.

**Plant Heat Rates** 

See Exhibit A and Exhibit B

Base Capacity:

8,250 - 8,450 btu/kwh

**Base Capacity and Duct Firing:** 

9,250 - 9,500 btu/kwh

**Guaranteed Heat Rate** 

n/a

Guaranteed

Peak: 97%

Availability

Off-Peak: 96%





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#### Notes

All ambient conditions are all standard atmospheric pressure.

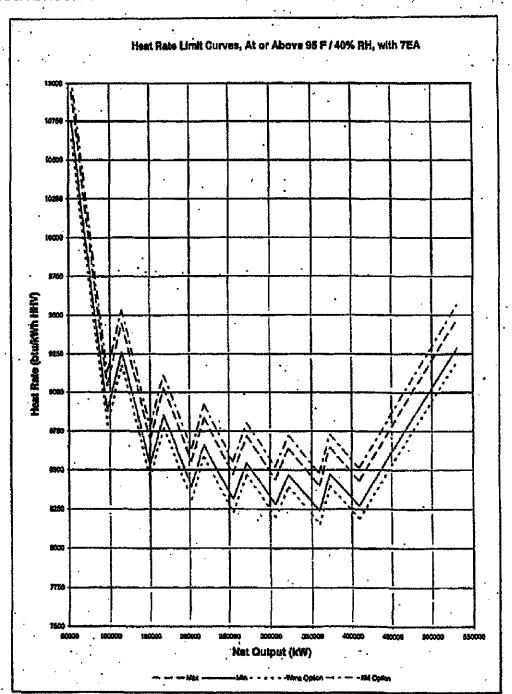
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Above table is for Municipal purposes and includes emissions and maximum heat rates for specific operating configurations. Howelf tracking of final use

## **EXHIBIT B: FACILITY HEAT RATE CURVES**

Heat Rate Curve
At or Above 95 F / 40 % RH

7EA Operating At Standard Atmospheric Pressure





## Strictly Private and Confidential

August 28, 2008

DUKE ENERGY OHIO RFP c/o Jon Summerville Burns & McDonnell 9400 Ward Parkway Kansas City, MO 64114

Re: Preliminary Non-Binding Offer #5 for Duke Energy Ohio RFP

Dear.Mr. Summerville:

"Company"), an indirect, wholly-owned subsidiary of \_\_\_\_\_\_\_\_), is pleased to provide this preliminary, non-binding proposal (the "Preliminary Proposal # 5") to Duke Energy Ohio, Inc. ("Duke Energy"), according to the specifications outlined in Duke Energy's Request for Proposals for Peaking/Intermediate Power Supply.

## (I) Executive Summary:

The Company proposes offering Duke Energy a Life of Asset Power Purchase Agreement (the "PPA") on the "Facility"), a 545 MW natural gas-fired combined cycle facility located in mcmgan commencing on or after January 1, 2009 and expiring June 30, 2018. The Facility is connected to the MISO transmission system and is qualified as a Generation Resource, as defined in MISO's Business Rules and Open Access Transmission and Energy Markets Tariff (TEMT).

The Facility employs the Orion configuration consisting of six GE LM6000 combustion turbines, one GE M57001EA combustion turbine and two GF steam turbines. The Facility is a part of the Midwest ISO (MISO Generation Node: MISO) and is an active participant in the real-time and day-ahead MISO energy markets. The Facility has achieved over a 99% annual availability factor since its commercial operation date of July 1, 2002.

In exchange for all of the energy, capacity and ancillary services associated with the Facility, Duke Energy would pay:

Capacity Payment part A:

per kilowatt month (no escalation)

Capacity Payment part B:

per kilowatt month (escalated at CPI)

**Energy Payment:** 

Heat Rate \* Gas Index + YOM + Start Charges

Please refer to the attached term sheet for further details.



- 3.2.1 Proposal shall remain in effect through December 31, 2009.
- 3.2.2 The Certification and indemnity Agreement (Exhibit C) is attached.

#### (III) Contract Terms:

The Company will seek the following contract terms if selected to the short list:

- 1) Duke Energy will be responsible for all emissions and carbon dioxide costs incurred during the term of the PPA.
- 2) Duke Energy will be entitled to a capacity payment rebate provided that the Facility's availability falls below the guaranteed availability, but for force majeure events.
- 3) The Company expects both Duke Energy and the Company to provide standard tier I and tier II representations and warranties in a power purchase agreement ("PPA"). Prior to signing the PPA Duke Energy would be able to conduct appropriate due diligence, including, but not limited to, a site visit, and review of the following:
  - 1. Organizational Documents
  - 2. Financing Documents
  - 3. Project Operating Documents
  - 4. ERISA/Employee Matters
  - 5. Tax Matters
  - 6. Historical Financial Statements
  - . 7. Historical and Projected Budgets
    - 8. Historical O&M and Technical Information
    - 9. Federal and State Regulatory Compliance
    - 10. Environmental Matters
    - 11. Litigation/Other Third Party Liabilities
    - 12. Real Property Matters
    - 13. Cash Management Matters
    - 14. Insurance Matters
    - 15. Information Technology

#### (IV) Proposal Limitations:

No proposal limitations apply to Preliminary Proposal #5.



## Life of Asset PPA Term Sheet

Product

Unit Firm capacity as defined in the EEI Master Power Purchase and Sales Agreement, Schedule P.

Seller

Purchaser

DUKE ENERGY OHIO, INC.

Transmission

-Interconnection Point

MISO

**Delivery Point** 

CIN.CGE Commercial Pricing Node within MISO

**Gas Pricing Point** 

Canadian Gas - Dawn, Ontario

**Term of Contract** 

Proposed PPA terminates June 30, 2018

**Capacity Amount** 

MISO Capacity: 545 MW
Base Dependable Capacity: 416 MW

Duct Firing Dependable Capacity:

129 MW

Energy

As Scheduled .

Scheduling

Scheduling shall be performed to the maximum flexibility allowed by MISO and in accordance with the MISO

Agreement.

## **Pricing Information**

a. Capacity Pricing

Capacity Price A

/MW-vear

Year of Capacity Price A Quote

2009

Capacity Price A Escalation/Year

0% per year (no escalation)

Capacity Price B

MW-year

Year of Capacity Price B Quote

2009

Capacity Price B Escalation/Year

Escalates by the year-over-year change in CPI

b. Energy Pricing --- Production Cost Based

i. Variable 0&M ("VOM")

/MWh

**VOM Escalation** 

Escalates by the year-over-year change in CPI

Year of VOM Cost Quote

<u> 2009</u>

ii. Guaranteed Heat Rate (HHV)

See Exhibit A and Exhibit B

iii. Gas Pricing Point

Canadian Gas - Dawn, Ontario

iv. MS7001EA Start-Up Charge

/start

M6000 Start-Up Charge

/start

There is no start-up payment for the first 300

start-ups per LM6000 unit per year.

Start up Cost Escalation

Escalates by the year-over-year change in CPI

Year of Start up Cost Quote

2009

Total Production Cost = {(Variable O&M + Guaranteed Heat Rate \* Gas Price over Term) + Start-Up Cost}

Note: Energy pricing includes all ancillary service costs, Midwest ISO charges, taxes and other fees necessary for delivery to the Delivery Point.

Plant Heat Rates

See Exhibit A and Exhibit B

**Base Capacity:** 

8,250 - 8,450 btu/kwh

Base Capacity and Duct Firing:

9,250 - 9,500 btu/kwh

**Guaranteed Heat Rate** 

<u>n/a</u>

Guaranteed Availability Peak: 97% Off-Peak: 96%





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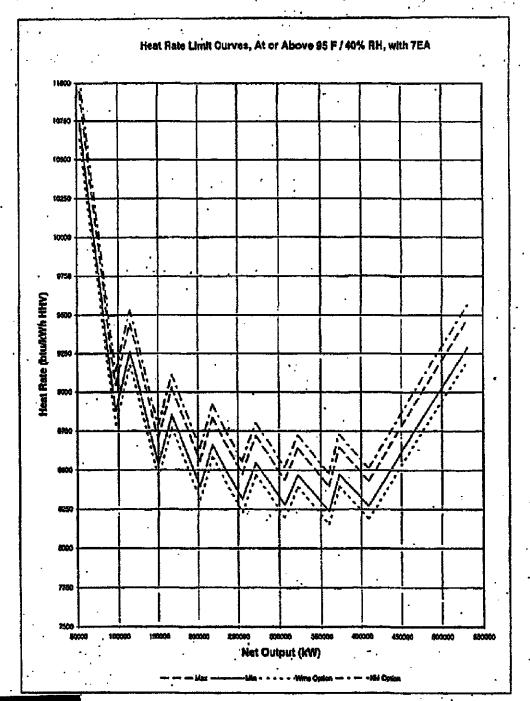
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## EXHIBIT B: FACILITY HEAT RATE CURVES

Heat Rate Curve
At or Above 95 F / 40 % RH

7EA Operating At Standard Atmospheric Pressure





#10

## Strictly Private and Confidential

August 28, 2008

DUKE ENERGY OHIO RFP c/o Jon Summerville Burns & McDonnell 9400 Ward Parkway Kansas City, MO 64114

Re: Preliminary Non-Binding Offer #6 for Duke Energy Ohio RFP

Dear Mr. Summerville:

"Company"), an indirect, wholly-owned subsidiary of
[is pleased to provide this preliminary, non-binding proposal (the "Preliminary
Proposal # 6") to Duke Energy Ohio, Inc. ("Duke Energy"), according to the specifications outlined in
Duke Energy's Request for Proposals for Peaking/Intermediate Power Supply.

#### (I) Executive Summary:

The Company proposes offering Duke Energy a Life of Asset Power Purchase Agreement (the "PPA") on the "Facility"), a 545 MW natural gas-fired combined cycle facility located in . . . Michigan commencing on or after January 1, 2009 and expiring June 30, 2018. The Facility is connected to the MISO transmission system and is qualified as a Generation Resource, as defined in MISO's Business Rules and Open Access Transmission and Energy Markets Tariff (TEMT).

The Facility employs the Orion configuration consisting of six GE LM6000 combustion turbines, one GE MS7001EA combustion turbine and two GF steam turbines. The Facility is a part of the Midwest ISO (MISO Generation Node: MISO and is an active participant in the real-time and day-ahead MISO energy markets. The Facility has achieved over a 99% annual availability factor since its commercial operation date of July 1, 2002.

in exchange for all of the energy, capacity and ancillary services associated with the Facility, Duke Energy would pay:

Capacity Payment part A:

per kilowatt month (no escalation)

Capacity Payment part 8:

per kilowatt month (escalated at CPI)

**Energy Payment:** 

Heat Rate \* Gas Index + VOM + Start Charges

Please refer to the attached term sheet for further details.

- 1 •



Capacity Price B Escalation/Year

Escalates by the year-over-year change in CPI

b. Energy Pricing --- Production Cost Based

i. Variable O&M ("YOM")

/MWh

**VOM Escalation** 

Escalates by the year-over-year change in CPI

Year of VOM Cost Quote

<u> 2009</u>

fi. Guaranteed Heat Rate (HHV)

See Exhibit A and Exhibit B

iii. Gas Pricing Point

Canadian Gas - Dawn, Ontario

iv. MS7001EA Start-Up Charge

start

M6000 Start-Up Charge

1,817\*/start

There is no start-up payment for the first 300

start-ups per LM6000 unit per year.

Start up Cost Escalation

Escalates by the year-over-year change in CPI

Year of Start up Cost Quote

2009

**Total Production Cost =** 

{(Variable O&M + Guaranteed Heat Rate \* Gas Price over Term) + Start-Up Cost}

Note: Energy pricing includes all ancillary service costs, Midwest ISO charges, taxes and other fees necessary for delivery to the Delivery Point.

Plant Heat Rates

See Exhibit A and Exhibit B

**Base Capacity:** 

8,250 - 8,450 btu/kwh

Base Capacity and Duct Firing:

9,250 - 9,500 btu/kwh

· Guaranteed Heat Rate

<u>n/a</u>

Guaranteed Availability <u>Peak: 97%</u> Off-Peak: 96%





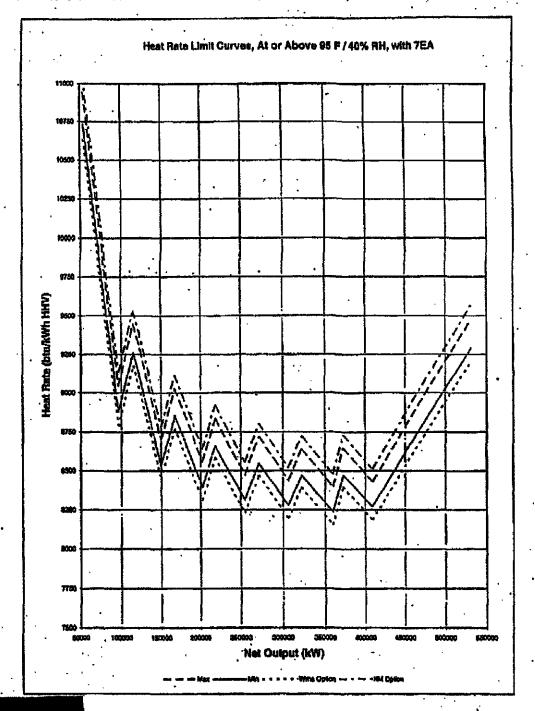
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## **EXHIBIT B: FACILITY HEAT RATE CURVES**

(Heat Rate Curve At or Above 95 F / 40 % RH 7EA Operating At Standard Atmospheric Pressure



# Exhibit D-Life of Asset PPA (30 Years) Sample Term Sheet

Note to bidder: Provide a separate to	erm sheet for each different Term or capacity offering						
Product	Unit Firm capacity as defined in the EEI Master Power Purchase and Sales Agreement, Schedule P.						
Seller							
Purchaser	DUKE ENERGY OHIO, INC.						
Transmission Interconnection Point							
Delivery Point	CIN.CGE Commercial Pricing Node within MISO						
Gas Pricing Point							
Term of Contract	4-4-4						
Capacity Amount	54 MW (Minimum of 50 MW)						
	DUKE ENERGY OHIO will evaluate any amount from minimum to Capacity Amount in increments of 50MW unless bidder so notes that only the Capacity Amount can be evaluated.						
Energy	As Scheduled						
Scheduling	Scheduling shall be performed to the maximum flexibility allowed by MISO and in accordance with the MISO Agreement.						
Pricing Information:							
a. Capacity Pricing							
Capacity Price	(\$/MW-yr)						
Year of Capacity Pric	e Quote						
Capacity Price Escala	tton/Year (%)						

b. Energy Pricing (Provide energy pricing in one of the following formats):

a.	Escalating Price Over Term	(\$/MWh) Escalating at% per year
ь.	Production Cost Based i. Variable O&M ii. Guaranteed Heat Rat iii. Gas Pricing Point	e (HHV) (\$/MWh) (Btu/kwh)
	(Variable O&M + Guaranteed	Heat Rate * Gas Price over Term)
C.	Scheduled Payment	(\$/MWh) in Year 1 (\$/MWh) in Year 2 (\$/MWh) in Year 3through end of Term
Year of	Energy Price Quote	
	inergy pricing to include all an and other fees necessary for d	ciliary service costs, Midwest ISO charges, taxes elivery to the Delivery Point.
Guaranteed He	eat Btu per kW	h (HHV)
Guaranteed Availability	%	
Unit 1: Octobe	nber 24, 1970 13.5MW or 2, 1970 13.5MW	

# Exhibit D-Life of Asset PPA (30 Years)

Sample Term Sheet Note to bidder: Provide a separate term sheet for each different Term or capacity offering **Product** Unit Firm capacity as defined in the EEI Master Power Purchase and Sales Agreement, Schedule P. Seller Purchaser DUKE ENERGY OHIO, INC. Transmission Interconnection Point **Delivery Point** CIN.CGE Commercial Pricing Node within MISO Gas Pricing Point Term of Contract Capacity Amount 82 MW (Minimum of 50 MVV) DUKE ENERGY OHIO will evaluate any amount from minimum to Capacity Amount in increments of 50MW unless bidder so notes that only the Capacity Amount can be evaluated. As Scheduled Energy Scheduling shall be performed to the maximum flexibility Scheduling allowed by MISO and in accordance with the MISO Agreement. **Pricing Information:** a. Capacity Pricing

(\$/MW-yr)

(%)

b. Energy Pricing (Provide energy pricing in one of the following formats)

Capacity Price

Year of Capacity Price Quote

Capacity Price Escalation/Year

a. Escalati	ng Price Over Term		(\$/MWh) Escalating at % per year
i. \ ii. C	on Cost Based /ariable O&M Guaranteed Heat Rate Gas Pricing Point	) (HHV)	(\$/MWh) (Btu/kwh)
(Variable	O&M + Guaranteed	Heat Rate * Gas Price	over Term)
c. Scheduk	· .	through end of Term	(\$/MWh) in Year 1 (\$/MWh) in Year 2 (\$/MWh) in Year 3
Year of Energy I	Price Quote		•
		cillary service costs, Mi elivery to the Delivery F	dwest ISO charges, taxes oint.
Guaranteed Heat	Btu per kWi	ı (HHV)	
Guaranteed Availability	%		•
Commercial operation Unit 1: August 28, 1970 Unit2: August 18, 1970 Unit 3: September 29, Unit 4: August 9, 1970	) 20.5MW 20.5MW 1970 20.5MW		



# ATTACHMENT A Proposed Term Sheet Option 1 - Blended proposal 1

Seller:	
Buyer:	Duke Energy Ohlo, Inc. ("DEO")
General:	proposes to sell its interest in three gas fired electric generation units as a package under the general terms and conditions outlined herein.
Assets: A.	a 620 MW (namenlate) natural das-powered combined cycle generating station owned 100% by   ocated in County, Ohio and interconnected to PJM Interconnection
₿.	a 640 MW (nameplate) natural das-nowered alimble cycle denerating station owned 75% by and 25% by located in unity Ohlo and Interconnected to the Midwest independent Transmission system Operator, Inc. ("MISO")
<b>C</b> .	a 640 MW (named atte) natural das-powered simple cycle generating station owned 100% by I ecated in iy, Illinois and Interconnected to PJM, is offering 320 MW of this unit under Option 1.
Transmission Arrangements:	All transmission agreements relating to AB will be assigned to DEO upon closing.
	are MISO external resources and as such will require firm point-to-point transmission to the PJM/MISO interface. currently owns 900 MW of firm point-to-point transmission that will be assigned to UEO upon closing. In order for to demonstrate that IA + C are qualified resource for this RFP, DEO must request, and MISO will have to agree to grant, NITS service from the PJM/MISO interface to the Cin Load Zone. currently has an additional request into PJM for 40 MW from PJM/MISO interface.
	The PJM assets can provide flexibility between markets for various options for both capacity and energy between the MISO and PJM markets
Existing Commodity Contracts:	Existing capacity and/or energy contracts or commitments will be assigned to DEO upon closing of the sale (contingent on receiving all third-party consents). Revenues and costs attributable to these contracts and commitments will accrue to prior to closing, and to DEO after closing.  A+C: has committed all available capacity from the asserts to PUN through May 31, 2012. Furthermore, capacity to PUM unless and until a firm commitment to purchase A and has been executed.  The is asset has existing toll and capacity commitments with 3 <sup>rd</sup> parties for portions of the plant's capacity and energy through January 2015.
	Accordingly, esset capacity will be available as follows upon roll-off of 3 <sup>rd</sup> party commitments:
	Expected Capacity Availability by Planning Year (Nameplate MW)  1990 1641 1732 1243 1344 1445 1546 >
	C 320 320 320 320 B. 230 330 360 880 380 430 480
	B <sub>2</sub> 230 390 380 880 380 430 480 A 620 620 620 620
	230 330 380 1,320 1,320 1,370 1,420
	La Copecity compared to P.M. unit June 1, 2012

(

Gas Information:	Gas Detail by L	Init	
	Receipt Delivery	Pipeline	
	C	Natural Gas	
	B -		
		Midwest Gas Transmission	
	A	Pan Handle	
		(Texas Eastern	
	The Rockies Express system is scharluled	to outpad payt year and is likely	e to provide
	additional fuel sunnly options to A	at TETCO M2, as well as the shall provide additional fuel su	e proposed
Other Existing Agreements:	Any agreements that are directly associated be transferred and assigned to DEO as part on receiving any required third-party consequence of the contracts of transmission requests, real estate optical agreements, water purchase contracts, and	rt of a said meiem upon closing, ents. DEO will assume all fina ments, which may include withou, transmission interconnect a DBA's, transmission agreement on contracts, market operation	incial rights at limitation, greements, is, pending on service
Sale Price:	or the second		
	The proposed sale price is a linked blend assets and includes the value contracts or commitments associated with e	e of all capacity and energy	
Commercial			<del></del>
Pricing Nodes:			
		:	
		. Balance	
		f	
<u> </u>			
Contract Terms:	Seller proposes to sell the Products proposed conditions listed in Attachment B, Proposed	Sale Contract Terms and Cond	tions.
Conditions	Contingent on receiving Duke Energy Corporated and all regulatory and third-party consents refreshing such pricing in eccordance with 5 of this proposal is subject to the negotiation, agreement. This proposal shall not be deem would form a binding agreement.	Pricing is indicative and is subjection 5:3.3 of the RFP. Implem preparation, and execution of a	ct to Seller rentation definitive



#13 xc = 17 Specs

## ATTACHMENT C-1

# Projected Annual Fixed and Variable O&M Costs

	ــــــــــــــــــــــــــــــــــ		
	:		PROPERTY OF STATES OF STATES
	7	Plant Chgs	
		G&A Direct	
•		TOTAL	1
	<u> </u>		
	B	Plant Chgs	
	-	G&A Direct	
	-	TOTAL	
	-	10174	
	A	Plant Chgs	
		G&A Direct	
		TOTAL	•
NOTES:			•
(i) This fin	ancial p	resentation represe	
		A Indirect costs su	
		9. Properly Taxes	•
		C. Property/ Liabili	
		D. Depreciation	-
			,
(2) The !	5 ]	igures represent fir	



# CONFIDENTIAL Planned Capital expenditures for each plant hedule of any upgrades or life extension efforts) Maintenance and Environmental Projects | Year Project Office | Wild Projects Replace UPS Batterles General eculoment 10 years Miscelaneous valves 10yra Arc Flesh & Remois Racking Warehouse Driveway Blacking 17 8000 Cyber Security Upgrade Purchase Megger Bite 3 battery Repl PDC No2 125VDC Betterle Well Pump Replacement Site Treolor U1-8 Mark V <+MM> Upgrade Blacktop Between CC2 Tanks Purchase Site Truck an implicate Liferbook Site Oil Vernish Equipment Replace UPS Batteries General equipment 10 years on Misc Valves 10yrs In Misc Valves 10yrs Arc Flash and Remots Recking IT 6000 Cyber Security Upgrade Purchase Sits Truck Site Utility Valucie ${\cal B}$ SN6 CHITY VERNER Replace well pump member! Replace well pump No2 Repl PDC No2 125VDC Batteries Site Tractor U1-8 Mark V <HMI> Upgrade Re line Clarifier On Line Water Wash Upgrade Replace MOV2120 Make-up tank Cathodic Protect Arhmonia Pump Area Enclosure Trans Blowdon Chiller Upgrade Replace MDV1120 CCW Backup Pump Re line Make up water tenks Condensate Fill to HP IP Drums CT salet valves CT General Equip. Personnel Emergency Response IT 6000 Cyber Security Upgrade CEMS Gas Weather Shaller Replace Endoment Warehouse CCW System Capacity Increase Demin Water Relability Improv Enlarge Steam System Draine GE Automated Start up Controls Heat Trace System Pipe Rack Enclosure | Turbins Bild Access Doors | CT2 HGPI numb | LTSA | CT1 HGPI numb | LTSA | BFP ARC Valve Replace HRSG 1 | BFP ARC Valve Replace HRSG 2 | Heat Evoh, Actuator Install River Water Intake Dike Plant Cooling System Remex Plant Cooling System Norte Chiller Chemical Injection Admin Bid Expension Condenser CW Aditator ins Duct Burner Skid Shelter Vecuum Pump for Condens Replace Sile Vehicle Turbine Skid Sathroom

# **ATTACHMENT C-3**

# **Outage Schedule**

Confidentiality Notice – This document is considered Duke confidential. The content of this document is only intended for the internal use of Duke Employees. Do not distribute this document or its contents outside of Duke. Lee does not have any significant outages scheduled between now and 2013, due to low operating hours.

_	Start Date	End Date	# Days	# Weeks
	3/4/2012	3/17/2012	13	1.9
	3/11/2012	3/24/2012	13	1.9
	10/7/2012	10/20/2012	13	1.9
	10/14/2012	10/27/2012	13	1.9
	3/3/2013	3/16/2013	13	1.9
	3/10/2013	3/23/2013	13	1.9
1	10/8/2013	10/19/2013	13	1.9
	10/13/2013	10/26/2013	13	1.9
	4/25/2008	5/4/2008	9	1.3
	11/14/2008	11/23/2009	g	1.3
١	3/6/2009	3/15/2009	9	1.3
	10/9/2009	10/18/2009	9	1.3
	3/19/2010	3/28/2010	9	1.3
Į	10/8/2010	10/17/2010	9	1.3
	4/1/2011	4/10/2011	ð	1.3
	9/16/2011	9/28/2011	12	1.7
	3/23/2012	3/31/2012	8	1.1
Į	9/21/2012	9/30/2012	9	1.3
	4/19/2013	4/28/2013	9	1.3
	11/15/2013	11/24/2013	9	1.3
١	4/25/2006	5/4/2008	9	1.3
	11/14/2008	11/23/2008	9_	1.3
	3/6/2009	3/15/2009	9	1.3
	10/9/2009	10/19/2009	9	1,3
	3/19/2010	3/28/2010	9	1,3
	10/8/2010	10/17/2010	g	1.3
	4/1/2011	4/10/2011	9	1.3
	9/16/2011	9/28/2011	12	1.7
	3/23/2012	3/31/2012	8	1.1
	9/21/2012	9/30/2012	9	1.3
	4/18/2013	4/28/2013	9	1.3
	11/15/2013		9	1.3

Page 19 of 23



# ATTACHMENT C-3 (Cont'd)

C and B

# **Unit Outage plan**

# outage requirements are derived in three ways:

- Time based, i.e. annual bore scope inspection. Outage provides an opportunity for an internal inspection without the disassembly of the unit, generally performed in 1 day.
- Performance based, i.e. address balance of plant equipment issues, generally 4 days or less.
- Equivalent Starts (600) or operating hours (12,000 Hrs.): i.e. combustion inspections, generally longer in duration (1.9 wks)

# A outage requirements are derived in three ways:

- Time based, i.e. annual bore scope inspection. Outage provides an opportunity for an internal inspection without the disassembly of the unit, generally performed in 1 day.
- Performance based, i.e. address balance of plant equipment issues, generally 4 days or less.
- Equivalent Starts (900) or operating hours (24,000 Hrs.): i.e. hot gas path inspections, generally longer in duration (1.7 wks).
- Steam turbine outages are performed in conjunction with the CT hot gas path inspections.





ATTACHMENT C-4
Forced outage performance history over last 5 years

	Forced	Outage R	ate			
Station Level		2003	2004	2005	2006	2007
	C	16.81%	0.29%	1.01%	0.67%	13.03%
	Š	0.00%	0.00%	0.00%	0.00%	2.54%
	A	4.40%	35.40%	19.25%	8.41%	2.94%
B	reliability data was not collected pr	or to 2006				

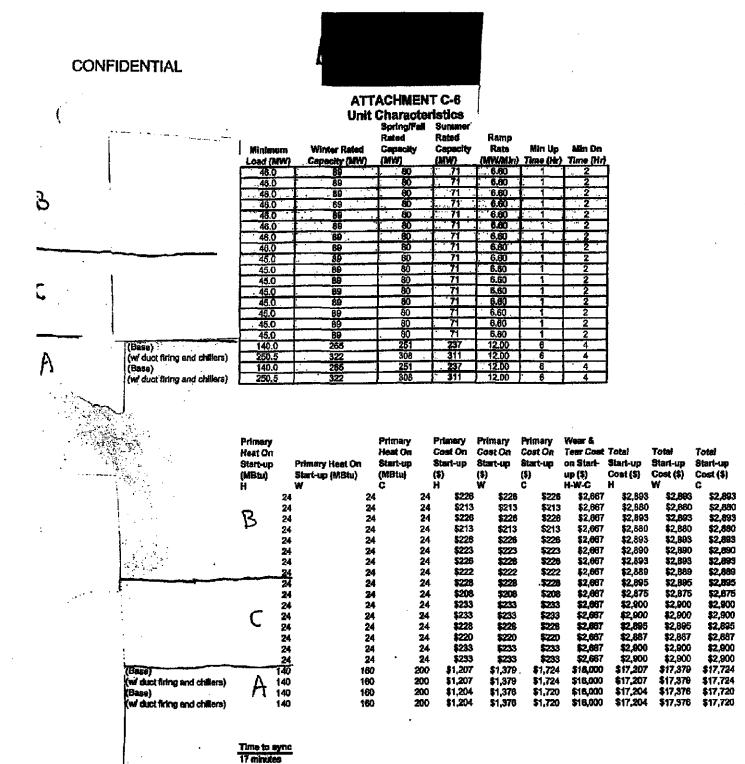


# **ATTACHMENT C-5**

# Run Characteristics Unit Heat Rate Values at Various Load Points Using April performance conditions and ratings

		Rate It	Heat Rate 50% of Max MW	Heat Rate 60% of Max MW	Heat Rate 70% of Max MW	Heat Rate 80% of Max MW	Heat Rate 90% of Max MW	Heat Rate 100% of Max MW
_	,	46		48	50	64	72	80
		14,329		14,110	13,398	12,876	12,480	12,172
		14,329		14,110	13,398	12,876	12,480	12,172
	_	14,329		14,110	13,398	12,876	12,480	12,172
1	R	14,329		14,110	13,398	12,876	12,480	12,172
í	•	14,329		14,110	13,398	12,878	12,480	12,172
1		14,329		14,110	13,398	12,876	12,480	12,172
i		14,329		14,110	13,398	12,876	12,480	12,172
		14,329		14,110	13,398	12,876	12,480	12,172
		46		48	56	64	72	80
:		14,404		14,089	13,360	12,839	12,444	12,137
ł		14,404		14,069	13,360	12,839	12,444	12,137
ĺ		14,404		14,069	13,360	12,839	12,444	12,137
l l	C.	14,404	•	14,069	13,360	12,839	12,444	12,137
1	-	14,404		14,089	13,360	12,839	12,444	12,137
l		14,404		14,069	13,360	12,839	12,444	12,137
		14,404		14,069	13,360	12,839	12,444	12,137
	•	14,404		14,069	19,360	12,839	12,444	12,197
		140	308	370	431	492	554	616
			154	185	216	246	277	308
1	CT in:	serv. 2	CT's	2 CT's 2	CT's	2 CT's	ZCT's 2	2 CT's
1	Α	7,779	7,600	7,312	7,121	6,995	7,192	7,404

Min Net Mi	N_		Mex Met MW	IO-A	Ю-В		10-C	April TPF	
1	3 C	46 45		247.4 247.3	8.315 B.31		0.0055 0.0055	1.027415986 1.025	
i	Ā	140	616	-	09.9 3357 8.2266	5.299 187522	0.00163 0.00176	1.005 Bas 1.005 Wit	e n chillers and duct burners



17 minutes

# Proposal #2 - Ownership Offer

# I. Summary

(

(

is a Midwest Independent System Operator ("MISO") Market Participant and has 600 MW of Capacity with the ability to satisfy the definition of a Generation Resource; as such term is defined in the MISO Tariff now being promulgated at the FERC. The results of the deliverability tests of the Midwest ISO are provided as Attachment 1.

Proposal #2 provides Duke with an offer for ownership of and its nominal 600 MW dual fuel (natural gas and distillate oil) electric generation facility located in Shio, which is approximately 15 miles south of began commercial operations in June 2002. Natural gas is transported to the by the

is comprised of four GE 7FA combustion turbines coupled with four GE 7FH2 hydrogen-cooled generators to produce power. The system is designed to operate on natural gas or distillate oil. Each package includes: a DLN combustion system; a fire detection, suppression and alarm system; an on-line/offline water wash system; a 6oHz hydrogen-cooled generator; an air inlet system with air filtration; a fuel oil supply system, a natural gas fuel system including pre-heaters and scrubbers; lubricating and hydraulic oil systems; an excitation system; an exhaust system; a starting and rotor turning system; a generator cooling system; and turbine control system. Demineralized water is injected for NOx control when burning distillate oil.

Each unit is cooled utilizing a closed loop fin fan cooling system circulating a glycol/water mixture and air water heat exchangers.

has a Generation and Interconnection Operating Apreement with a wholly owned subsidiary of This agreement enables the facility to provide power to the MISO market. Each generator is connected to an 18/345 kV step-up transformer. Two auxiliary transformers provide standby and starting power to the station. Either auxiliary transformer can provide power to start any unit through bus tie breakers via two static starting devices. The static starting devices are cross connected such that all four units can be started from either static starting device.

The control room is equipped with two for remote operator control. Located in each local control cubicle is a computer that can also be utilized to operate any of the four units. AGC has not been installed at the facility, but can be installed. The facility has installed system which enables remote online combustion tuning by GE. The facility has a Continuous Emissions Monitoring System to monitor and report plant operations and emissions.

Sanitary waste water is handled by an on-site septic tank. Waste water from plant operations is connected to an oil/water separator and the demineralizer effluent is discharged to the storm water retention ponds.

Facility Summary	
Category	Data
Location	ОН
Market Area	MISO
COD	2002
Construction Contractor	GE
Nominal Capacity	600 MW
Type/Equipment	Four GE 7FA CT's
Fuel	Natural gas and distillate oil
Electrical Interconnection	
Gas Pipeline Interconnect	EOGC
Site	36 acres
Employees	7 non-union employees

# II. Statements

- 1) The structure of the Proposals herein shall remain outstanding until midnight (Eastern Time) on December 31, 2008.
- 2) A signed Certification Agreement Attachment 2 Exhibit C is provided in a form that is acceptable to IPA APT Generation, LLC.

# III. Contract Terms

inticipates entering into a mutually negotiated purchase and sale agreement with Duke Energy Ohio, Inc. for the

# IV. Proposed Limitations

The maximum annual fuel usage for emission units combined shall not exceed any of the following:

- 1) 14,020 million cubic feet of natural gas per rolling 12-month period;
- 2) 15.77 million gallons of #2 fuel oil/distillate oil usage per rolling 12-month period; and
- 3) a cumulative 14,020 million cubic feet of fuel (natural gas and #2 oil/distillate oil usage) per rolling 12-month period where:
  - 1 million cubic feet of natural gas = 1 million cubic feet of fuel; and

(

1 million gallons of #2 fuel oil/distillate oil = 889 million cubic feet of fuel.

Based on the above limitations the air permit allows for a total of approximately 8,800 total operating hours per year on natural gas only (avg 2,200 for each of 4 CTs) (no oil burned), or a total of approximately 1,128 total hours per year on oil if no natural gas is burned. Using a combination of natural gas and oil will result in a total facility operating hour limitation that will fall between these two parameters.

# V. Term Sheet

Please see Attachment 3 - Exhibit D. Additional supporting information regarding the functional specifications are provided in Attachment 6 - Exhibit E.

# Vi. Company Organization and Financial Data

is a direct wholly-owned subsidiary of which in turn is an indirect wholly-owned subsidiary of is an indirect wholly-owned subsidiary of a leading independent power generation company with interests in 33 GW (gross) of power generating capacity, located in 20 countries across five core regions — North America, Europe, Middle East, Australia and Asia. As of FYE December 2007, generated for revenue and EBITDA of

The following chart summarizes :

North American portfolio.

Asset	Location	Fuel	Gross capacity power MW	IPR Owner- ship	Net capacity power MW
	Georgia	Gas	j	50%	159
	Illinois	Gas	}	100%	303
	Massachusetts	Gas		100%	539
	Massachusetts	Gas		100%	488
	Massachusetts	Gas		100%	160
	Ohio	Gas/Oil		100%	616
	Pennsylvania	Gas/Oil		100%	б25
	Texas	Coal	<u> </u>	100%	667
	Texas	Gas		100%	913
	Texas	Gas		100%	1,423
	Texas	Gas		50%	220

Gas/Oil	313	100%	313
LNG	548	35%	192
7	7.353		6,618

More information about the company is available on the internet at

Financial data for are provided in Attachment 7.

# Exhibit D-Ownership Offer --Life of Unit Sample Term Sheet

Note to Bidder: Provide a separate	term sheet for each different asset option offered
Resource	
Primary Fuel Source	Natural Gas
Primary Fuel Pricing Point	Dominion Bast Ohio
Secondary Fuel Source	Distillate Oil
Secondary Fuel Pricing Point	ОН
MISO Commercial Pricing Node	
Seller	
Purchaser	DUKE ENERGY OHIO, INC.
Capacity Amount	See Attachment 1 MW (Minimum of 50 MW)
	DUKE ENERGY OHIO will evaluate any amount from minimum to Capacity Amount in Increments of 50MW unless bidder so notes that only the Capacity Amount can be evaluated.
Energy	As Scheduled
Scheduling	Scheduling shall be performed to the maximum flexibility allowed by MISO and in accordance with the MISO Agreement.
Purchase Price (Provide purchase	price in one of the following formats)
a. Fixed Purchase Price O	ver Life of Asset(\$/MW-year)
b. Lump Sum Payment Lump Sum Payment Ye	ar \$\$ 1/1/2009 (\$)
Fixed O&M	(See Attachment 5)(\$/MW-month)
Fixed O&M Escalation	(See Attachment 5)(% per year)
Year of Fixed O&M Cost Quote	(See Attachment 5)
Variable O&M	(See Attachment 5)(\$/MWh)

# DUKE ENERGY OHIO Request for Proposals for Power Supply

# CONFIDENTIAL

Variable O&M Escalation	(See Attachment 5)(% per year)
Year of Variable O&M Cost Quote	(See Attachment 5)
Capital Spending Schedule	Provide schedule of any upgrades or life extension efforts (See Attachment 5)
	Provide schedule of annual maintenance expenses ee Attachment 5 No major outages scheduled until 13 under current run regime.)
<b>CKATAMENTALION</b> leat Rate  See Attach	Btu per kWh (HHV) minimum load (define MW load) Btu per kWh (HHV) 50% load Btu per kWh (HHV) 70% load Btu per kWh (HHV) 90% load Btu per kWh (HHV) 90% load Btu per kWh (HHV) 100% load (define MW load)
Availability	Attach scheduled maintenance outages planned for next five years and equivalent forced outage performance for past five years (if from an existing resource).
Minimum run time	(hours)
Start time to Synchronization	.25 (hours)
Start up Cost (S	ee Attachment 5) (\$\start)
Start up Cost Escalation (S	ee Attachment 5) (% per year)
Year of Start up Cost Quots	See Attachment 5)
Ramp Rate 1	4MW/min per unit KAMMASKAX

Monthly Heat Rate Attachment

| Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate (HFV) | Heat Rate

Nov Sep
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# Duke RFP Response Exhibit D-Ownership Offer-Life of Unit

Attachment to Exhibit D addressing Fixed and Variable O&M, Capital Spending for Performance Enhancements and the Maintenance Spending Schedule.

Fixed O&M			_ ber WM-wouth pased ou _ ber Aest	600	ww
	Note:		not include insurance not include East Ohio Gas pips	eline charges	
Fixed O&M Escalation		2.50%	_		
Year of Fixed O&M Cost Quote		2009	-		
Variable O&M			per MWh (natural gas) per MWh (fuel oil)		
	Note:	Variable O&M ex	cludes allowance for mejor mei	ntenance	
Variable O&M Escalation		2.50%	_		
Year of Variable O&M Cost Quote		2009	•		
Capital Spending Schedule	Note:		ance enhancements outlined be valuated these in detail for the "		
Performa	ance En	hancements			
				Troy	
Estimated Co					
	ush (Note 1)		· · ·	6,0	
2) Inlet Fogging (or add Evap Cig) (Nos 3) GE Phase I Performance Enhancem			26.5 10.8		
4) a) Peak Firing (12 ppm) (Note 4) Ol			18.0		
		ring (9 ppm NOx)		7.2	
<b>Minimum</b> Tot	al Projected	Capacity Addition	s, MW (Note 5)	50.5	
NOTES: 1) Kay Push - GE 16Y Incremental casilal		nirci is increase ISV angle at	isse load from current angle of 82°-84° to a su	ggesled 87+1. Go	
2) Commissioninglast Increase in validate		n fiem eteberativa comiene on	GT talets. Cost 1980, not expected to exceed	MASAMA. Modesi	
3) GE Phase I perform	ance enhancement		seasa net output by 74 kipt. Glonificant cost. Ization, Low op combration liners, obradativa S ratio cost - 780).	i through, Casing	
		hich eastler poak listog. Only Pil erol (13 F8 charga).	applies in summer operation (ring gas. No in	createnins capital cost	ļ
6) Capacity enhancen Note in £2 above it is faintenance Spending Schedule			icity increase will need to be evaluated in	oranoulally.	
Based on averag	e of	48	starte/unit/year		
Levelized mainte	nance cost		per unit per start		
	caintion	2,50%		_	
b	ese year	2009		•	
N	ote;		fenance cost depends on numb n maintenance costs will be pro		

Exhibit D - Ownership Offer Life of Unit Availability EFORd

does not have a major outage shaduled in the next five years, subject to change based on dispetch.

Unit Month EFORd	Unit Month EFORd	Unit Costs EFORd	Unit Month El-ORd
Jan-63 0.00	Peb-03 0.00	Jan-03 0.50	Feb-03 6.00
Mar-03 0.00 0.00 2 0.00	Apr-03 4 0.00	Mer-03 0,00 Apr-03 0,00	Mar-03 0.00
May-03 0.00	WWW. 25 2 0.00	May-03 0.00	May 03 0.00
Jul-03 0.00	.ku-03 0.00	Jul 03 0.00	Jun-03 0.00 0.00
\$5.0 AUG DA \$6.58.	Aug-03 0.36	AVo-03) 0.58 Sep-03 0.00	Aug-03 0,36
OR 01 00 00	Oet-03 0.00	000 T 1000	Oct-03 0.00
Nov-03 0.00 Dec-03 0.00	Nov-03 0.00 Dec-03 0.00	Nov-03 0.00 Dic-03 0.00	Nov-03 0.00 Dec-03 0.00
Jan-04 0.00 Esp-04 0.00	Jan-04 0.00	Jan-04 0.00 Feb-04 0.00	Jan-04 0.00
Mar-04 0.90 ARE-04 0.00	Mar 04 0.00	Mar-04 0.00	Feb-04 0.00 Mar-04 0.00
ANT-04 0.00 May-04 0.00	Apr.04 0.00 May-04 0.00	Apr-04 0.00 May-04 0.00	Apr-04 0.00 May-04 0.00
Jun-04 0.00	Jun-04 0.00	Jun-04 0.00	Jun-04 0.00
Jul-04 0.00 Aug-04 0.00	Aug-04 0.00	Aug-04 0.00	Jul-04 0.00 Aug-04 0.00
Sep-04 0.00 Oct-04 0.00	Sep-04 0.00 Oct-04 0.00	8ep.04 0.00 ○○CC+04 ○○0.00	Sep-04 0.00 Oct-04 6.00
Nov-04 0,00	No.1-04 0.00	Noy-04 0.00	Nov-04 0.00
Dec-04 0.00 Jan-05 0.00	Dec-04 0.00	DRC-94 0.00 Jan-06 0.00	Jan-05 0.00
Feb 05 0.00 Mar-06 0.00	Feb-05 0.80 Mai-05: 0.00	Fab-05 0.00 Mar-05 0.00	Feb-05 0.00
A A 060 0.00	Apr-05 0.00	A04-05 0.00	Aur-06 0.00
May-05 0.00	Jun-05 <b>0.00</b>	May-05 0.00 107-052 0.00	May-96 0.00 Jun-95 0.00
Jul-05 0.38	Aug-05 0.00	Jul-05 0.96 \$\times \text{A00-05538-04-0.15}	Aug-05 0.00
Sep-05 0.00	#380.05 G L T0.00	Sep-05 0.00	569-06 T 0.00
Nov-05 0.00	Oct-05 3.88 *NOV-05 2 0.00	Oct 0 55 0,00 0.00	Oct-05 3.69 NoV-05 0.00
Jan-05 0.00	Dec-05 3.07 ■ Jan 20 3 2 0.00	1000	Dec-05 1,88 Jan 98 0,00
7 FAL 36 7 A 0.00	Feb-06 0.00	14n-06 0.00	Fab-06 0.00
Mar-96 0.00	Manus 0.00 Apr-06 0.00	Mar-06 0.00	Mai:96 0.00 Apr-06 0.00
May-08 0.00	#un-06 0.00	May-06 0.00	MW 483 \ 0.00
. <b>A.6-08</b>	25 J. F. DOT 25 JE 0.00	34.06 Q.QQ	Jul 05 4 0.00
Sep-08 0.00	Aug-08 0.00 E Sec-068 1972 0.00	8ap-06 0.00	Aug-06 0.00
35 0 C 36 E 45 0.00	Oct-06 0.00	Nov-06 0.00	Oct-08 0.00 0.00 00 000
98.2 (No. of 1982) 0.00	Dec-96 0.00	Dec-06 7 2 0.00	00.0 B0-oaQ
Jan-87 0.90	Feb-07 25.75	Jun-07 0.60 7 Feb-07/33/212.00	Feb-07 0.00
Mar-07 0.00	EMEQUE 3 4 0.00	Mar-07 0.00 20-07 - 0.00	Mar. 07-27-1 0.00
6/my-07 0.00	Apr-07 0.00	May-07 0.00	Agr-07 0.00
Jul-07 0.00	300-07 1.59 261-377 - 6.60	44-07 0.00	Jun-07 0.00
AV6-078-5-20.00	Aug-87 0.00	ZANG 37.32.22.4.16	Aug-87 à nó
Sep-07 0.00	94-07 19.70 Od-07 19.70	8ep-07 0.00 (SQL-07.722.040	8e6-07 0.00 Od-07 0.00
Nov-07 0.00 5882 DE-072-WE21.48	NON-073-55-0-09 Dec-07 0.60	Nov-67 0.00 046-07-2-2-2-0.00	NeW 07 0.00 Dec-07 0.50
Jan-08 0.00	2,51,01 (3,10,00)	Jan-08 0.00	7.0 de 20 0 00
Mar-08 0.00	Feb-08 0.00 7. <b>MM-0832750.00</b>	Fell-00 20 0 00 0 00 00 00 00 00 00 00 00 00	Feb-08 0.00 Neg-08 0.00
May-08 0.00	Apr-08 0.00 TMM-08 FALE 0.00	Apr 08 0.00	Apr-08 0.00 00.0 22400
Jun-08 29,42	Jun-08 20.93	Jen-08 33.97	Jua-08 160.00
Jul-08 0.00	<b>24.13.25.6</b> 0	Jul-08 0.00	300 Per \$ 5.00

Note for June 2008: had 0 service hours for June and the tack of service hours resulted in a extremely high EFOR'd. The 3.15 Forced Outage Hours due to a tripped switchyard breaker caused by relay testing conducted by the transmission company was the only Forced Outage Hours for all four units during June 2008.

# Duke Energy Ohio RFP - Requirements of Transmission Deliverability Tests

# Gross And Net Demonstrated Capability Test Data

Company:	Reported By:	÷6	
Plant	Unit No	<b>←)</b>	
Date Of Test, 106/14/07	Time of test begin	1300 :End	1700
Integrated Gross Gen.	Integrated Aux Power	Net Generation	
1st hour 155 MW	1 NAW	154 MW	
	W.	154 MW	
	1 MW	164 MW	
Four Hour Summary			
Net generation- Average of 4 hours: Prior Net Demonstrated Capability Throttle Pressure: N/A Steam Term: N/A	us: N	154 MW 149.5 MW	
Circulating Water inlet Temperature: N/A Ambient Air Temp	ure: N/A	8 7 7	

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Remarks are on page 2

# Duke Energy Ohio RFP - Requirements of Transmission Deliverability Tests

# Remarks:

- 1. Aux power is estimated to be 1 MW per Unit when running on natural gas.
  - 2. Net MWs are calculated by Gross MWs- Aux power.
- 3. Ideal rated conditions for this generator is 145,685 MMs @ 95 degrees and 60 % Humidity
  - 4. Rating based on initial performance testing completed during unit commissioning
- Effects of changes in humidity and baromitic pressure are assumed to be negligible for these units.
- 6. However all calculations are adjusted to a 60% humidity correction factor based on ambient temperature.
  - 5. Testing is performed and the actual output and temperatures are recorded.
    - 6. The result is then corrected to 95 degrees to obtain the Actual Unit rating.
      - 7. This rating is then adjusted to a wintertime temperature of 14 decrees
- in the month of January. (WINTERTIME RATING) 8. 14 degrees is used as it is the average fow temperature for
  - 9. This output rating at 14 degrees is the new NET DEPENDABLE CAPACITY.
- 10. The monthly seasonal deratings are based on the following: Jan, Feb, Dec are based on the average low temperature for the month
- Mar, Apr, May, Oct, and Nov are based on the MEAN temperature for the months. Jun, Jul, Aug and SEP are base on the average high temperature for the month
  - 11.ALL temperatures are the 30 year average or mean temperature for

Additional remarks:

Duke Energy Ohio RFP - Requirements of Transmission Deliverability Tests

Gross And Net Demonstrated Capability Test Data

N Reported By: UTH NO Company: Plant

1500 1100 End Net Generation Time of test begin Integrated Aux Power Date Of Test 06/15/07 2nd hour 1st hour

157 MW 156 MW 156 MW 155 MW Integrated Gross Gen. 158 MW 157 MW 157 MW 156 MW 3rd hour 4th hour

Four Hour Summary

156 MW Net generation- Average of 4 hours: Prior Net Demonstrated Capability Throttle Pressure; N/A

80.9 F Steam Temp: N/A Circulating Water Inlet Temperature: N/A Ambient Air Temp:

Remarks are on page 2



Duke Energy Ohio RFP - Requirements of Transmission Deliverability Tests

# Remarks:

- 1. Aux power is estimated to be 1 MW per unit when running on natural gas.
  - Net MWs are calculated by Gross MWs- Aux power.
- 3. Ideal rated condition for this generator is 145,685 MWs @ 95 degrees and 60 % Humidity
  - 4. Rated based on initial performance testing completed during unit commissioning
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- o in the month of January. (WINTERTIME RATING)
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Additional remarks:

References:

Duke Energy Ohio RFP - Requirements of Transmission Deliverability Tests

Gross And Net Demonstrated Capability Test Data

Сопрапу:	Reported By:		
Plant	Unit No	•••	ମୀ
Date Of Test, 06/14/07	Time of test begin	1400 End	1800
Integrated Gross Gen	Integrated Arx Power	Next Developing	
		184 MW	
2nd hour 156 MW	<b>\$10</b> 1	155 MW	
4th hour 156 MW	IN I NW	155 MW 155 MW	
Four Hour Summary			
Net generation- Average of 4 hours: Prior Net Demonstrated Capabiliy Throttle Pressure: N/A Steam Temp: N/A	4 hours:	154.75 MW 150 MW	
Circulating Water Inlet Temperature: NA Ambient Air Temp:	iperature: N/A	300 1	

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Remarks are on page 2

Duke Energy Ohio RFP - Requirements of Transmission Deliverability Tests

# Remarks:

- 1. Aux power is estimated to be 1 MW per unit when running on natural gas.
  - Net MWs are calculated by Gross MWs- Aux power
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Additional remarks;

References:

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Duke Energy Ohio RFP - Requirements of Transmission Delivershilly Tests

l,

Gross And Net Demonstrated Capability Test Data

Company:

Reported By: Unit No Plant

1400 End Time of test begin Date Of Test 06/14/07

বা

1800 Net Generation 153 MW 154 MW 153 MW 159 MW Integrated Aux Power Integrated
Gross Gen,
154 MW
155 MW
155 MW
155 MW 2nd hour 3rd hour 4th hour 1st hour

Four Hour Summany

153.5 MW 146.75 MW Net generation- Average of 4 hours:... Prior Net Demonstrated Capability...... Throttle Pressure: N/A

Steam Temp: N/A Circulating Water Inlet Temperature: N/A

Amblent Air Temp:

84.5 F

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Remarks are on page 2



# Duke Energy Ohio RFP - Requirements of Transmission Deliverability Tests

# Remarks:

- 1. Aux power is estimated to be 1 MW per unit when running on natural gas.
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    - 10. The monthly season deratings are based on the following temperatures:

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Jun,Jul, Aug and SEP are base on the average high temperature for the month Mar,Apr,Way,Oct, and Nov are based on the MEAN temperature for the months.

11.ALL temperatures are the 30 year average or mean temperature for

Additional remarks:

References:

# Proposal #1 - Purchased Power Agreement (30 years)

# i. Summary

is a Midwest Independent System Operator ("MISO") Market Participant and has 600 MW of Capacity qualified as a Network Resource (subject to a Network Customer (i.e. Duke Energy Ohio, Inc.) nominating it as a New Designated Resource in accordance with the Midwest ISO Transmission and Energy Market Tariff and related Schedules (the "Tariff"). All capitalized terms that are not defined herein shall have the meanings ascribed to them in the Tariff. As such, this Proposal assumes that Duke Energy Ohio, Inc. ("Duke") will nominate as a Network Resource for the Term and will comply with the requirements of the Tariff to ensure that will receive Network Service transmission under Duke's NITS contract for all Energy delivered pursuant to this Proposal.). The results of the deliverability tests of the Midwest ISO are provided as Attachment 1.

Proposal #1 consists of a 30 year PPA for peaking capacity and energy from the a nominal 600 MW dual fuel (natural gas and distillate oil) electric generating facility (the " I, beginning in January 1, 2009. The Is located in Luckey, Ohio, which is approximately 15 miles south of began commercial operations in June 2002. Natural gas is transported to the by the

The is comprised of four GE 7FA combustion turbines coupled with four GE 7FH2 hydrogen-cooled generators to produce power. The system is designed to operate on natural gas or distillate oil.

has a Generation and Interconnection Operating Agreement with a wholly owned subsidiary of This agreement enables the facility to provide power to the MISO market. Each generator is connected to an 18/345 kV step-up transformer. Two auxiliary transformers provide standby and starting power to the station. Either auxiliary transformer can provide power to start any unit through bus tie breakers via two static starting devices. The static starting are cross connected such that all four units can be started from either static starting device. AGC has not been installed at the facility.

will use a combination of its natural gas agreements with and interruptible gas contracts to secure the competitive gas when the is dispatched. If gas is not available will use distillate oil, subject to its operating permits, at market related prices. delivers its energy into the MISO system. is open to discussing with Duke the most cost effective and reliable method of delivering energy into the CIN.CGE node in a manner that appropriately allocates any risks in the most cost effective manner.

# ii. Statements

l.

- 1) The structure of the Proposals herein shall remain outstanding until midnight (Eastern Time) on December 31, 2008.
- 2) A signed Certification Agreement, Attachment 2 Exhibit C, is provided in a form that is acceptable to

# III. Contract Terms

anticipates entering into the proposed transaction for the sale of capacity and energy pursuant to an appropriately modified ISDA Master Agreement with Power Annex and Credit Support Annex anticipates inclusion of the following terms and conditions in any such contract:

- 1. Specifications for calling on energy from the
- 2. Adequate Credit Support as reasonably required.
- 3. Usual and customary representations and covenants, including the following:
  - a. Non-Reliance:
  - b. Eligible Commercial Entity and Eligible Contract Participant;
  - c. Commercial User;
  - d. Tax Payer and Payee Representations; and
  - e. Bankruptcy Code Representation.
- 4. Inclusion of provisions allowing for the following:
  - a. Calculation Agent;
  - Payments including Netting, Timeliness of Payment, Disputes and Adjustment of Invoices;
  - c. Set-Off:
  - d. Early Termination;
  - e. Events of Default, Termination Events, Rights and Value Calculations;
  - f. Transfer:
  - g. Limitation of Liability;
  - h. Additional Terms for Commodity Derivative Transactions including Market Disruption Events and Disruption Fallbacks;
  - I. Applicability of FERC Standard of Review Mobile-Sierra;
  - i. Consent to Recording:
  - k. Dealer Market Practices;
  - l. Trader Authority:
  - m. Delivery of Documents including Tax, Resolutions, Financial, Credit Support;
  - n. Severability; and
  - o. Confidentiality.

# IV. Proposal Limitations

The maximum annual fuel usage for emission units combined shall not exceed any of the following:

- 1) 14,020 million cubic feet of natural gas per rolling 12-month period;
- 2) 15.77 million gallons of #2 fuel oil/distillate oil usage per rolling 12-month period; and
- 3) a cumulative 14,020 million cubic feet of fuel (natural gas and #2 oil/distillate oil usage) per rolling 12-month period where:
  - million cubic feet of natural gas = 1 million cubic feet of fuel; and
     million gallons of #2 fuel oil/distillate oil = 889 million cubic feet of fuel.

Based on the above limitations, the air permit allows for a total of approximately 8,800 total operating hours per year on natural gas only (avg 2,200 for each of 4 CTs) (no oil is burned), or a total of approximately 1,128 total hours per year on oil if no natural gas is burned. Using a combination of natural gas and oil will result in a total facility operating hour limitation that will fall between these two parameters.

# V. Term Sheet

Term:

30 Years, beginning January 1, 2009

**Delivery Point:** 

This Proposal

assumes that Duke will nominate as a Network Resource for the Term and will comply with the requirements of the Tariff to ensure that will receive Network Service Transmission under Duke's NITS contract for all Energy delivered pursuant to this Proposal.

Contract Quantity:

600 MW - Duke would be entitled to all of the output of the facility. Actual achievable capacity will vary based on ambient conditions and over time due to degradation and

will need to be scheduled in the final documents.

Capacity Charge:

MW-year— Capacity payments would escalate through the term of the agreement at 1.5%.

**Contract Heat Rate:** 

10.9 MMBtu/MWh at summer nominal capacity on natural gas excluding starts. 11.7 MMBtus/MWh at summer nominal capacity on distillate oil excluding starts. Actual achievable heat rates will vary by fuel type, ambient conditions, and over time due to degradation. Heat rate at other load levels will need to be scheduled in the final

documents. Heat rate bonus/penalty formula to be negotiated.

Fuel Supply:

will purchase competitively priced natural gas and transportation available at the time that the is dispatched for delivery into the system. This could be a combination of firm and interruptible gas transportation contracts or natural gas supply from a third party delivered directly into the system. The

has fuel oil as a back up fuel because a peaking electric generation facility cannot economically afford the costs associated with providing firm gas supplies to the facility.

Gas transportation is supplied to the pursuant to an agreement dated November 2001. Key points of the agreement are as follows:

- The term of the agreement is for ten years and renewable yearly thereafter.
- The maximum daily transportation quantity is specified as 187,500 Mcf and maximum annual transportation is specified as 15,000,000 Mcf.
- Rates and charges include a fixed monthly payment of and a volumetric rate of per Dth for the period lune 1 to August 31 and per Dth for the period September 1 through May 31 with a delivery point charge per month of and a minimum annual payment of the second - is responsible for balancing gas supply and usage on an hourly basis if determines that their gas system requires hourly balancing.
- must notify not less than 30 minutes prior to start-up or shut-down or if there is any change in operations that cause hourly usage at the facility to change by more that 25%.
- receipt point is the primary receipt point for
- can nominate hourly deliveries to equal to the hourly usage at the plant with out incurring any charges for Firm Receipt Point Option Service. In the Winter Months such nominations are limited to a maximum of 5,875 Dth/hour.

 Wher is in operation quantities equal to the lower of 3,750 Dth/hour or actual burn must be delivered to

On site gas compressors are not required because the gas is supplied at sufficient pressure (approximately 435 psig).

Fuel Oil is delivered by truck and unloaded in an onsite truck unloading facility that is designed for spill containment and fire control. It is stored in two 2.25 million gallon storage tanks located in a banked and lined containment area.

Water for distillate oil operation is provided by the

The water is

demineralized by rented deminieralizers and is stored in a 4.5 million gallon demineralized water storage tank located on the site.

In order to insure that the is receiving competitively priced fuel gas, Duke shall have the option of taking over the fuel gas supply function upon 30 days written notice to

**Fuel Gas Delivery Point:** 

Delivery would be at the interconnection between and the Under terms to be negotiated, would provide all oil necessary to provide the backup fuel for each unit at the storage facilities (oil).

Start Fuel:

473 MMBtu per/Unit Start on natural gas and 515 MMBtu per/Unit Start on oil.

Variable O&M:

MWh on gas, MWh on oil, escalating annually at 2.5%, plus fuel related costs.

Start Charge:

per start per unit on gas, per start per unit on oil

Availability:

Availability guarantees/penalties to be negotiated

Scheduling:

Duke would be able to schedule the full seasonal capacity of the plant from minimum to maximum based on plant characteristics. Notice deadlines for scheduling to be

# Exhibit D-Life of Asset PPA (30 Years) Sample Term Sheet

Note to bidder: Provide a separate t	erm sheet for each different Term or capacity offering
Preduct	Unit Firm capacity as defined in the EEI Master Power Purchase and Sales Agreement, Schedule P.
Seller	
Purchaser	DUKE ENERGY OHIO, INC.
Transmission Interconnection Point	on Tobovanantina Beist
Delivery Point ^	on Interconnection Point CKKCGE TANKGENEEPIKKHANGENEENEENEED
Gas Pricing Point Dominion	East Ohio (see Fuel Supply in Section V above)
Term of Contract	30 Years
Cepacity Amount	MW
	(Minimum of 50 MW)
	DUKE ENERGY OHIO will evaluate any amount from minimum to Capacity Amount in increments of 50MW unless bidder so notes that only the Capacity Amount can be evaluated.
Energy	As Scheduled
Scheduling	Scheduling shall be performed to the maximum flexibility allowed by MISO and in accordance with the MISO Agreement.
Pricing Information:	
a. Capacity Priging	(\$/Year)
Capacity Price	(BIMW-YI)
Year of Capacity Pric	e Quote 2009
Capacity Price Escal	llow/Year 1.50% (%)

b. Energy Pricing (Provide energy		
MWh + unit per start a. Escalating Price Over T		MWh + (\$/MWh) Escalating at plus fuel costs
a. Localating Files Over 1	2.5	% per year
		The state of the s
b. Production Cost Based		****
I. Variable O&M		(\$/MVVh)
ii. Guaranteed Her iii. Gas Pricing Pol		(Btu/kwh)
(Variable O&M + Guara	inteed Heat Rate	Gas Price over Term)
c. Scheduled Payment		(\$/MWh) in Year 1
		(\$/MVVh) in Year 2
	through e	(\$/MWh) in Year 3
	anough e	in or renn
Year of Energy Price Quote	2009	
Note: Energy pricing to include and other fees necessar		ce costs, Midwest ISO charges, taxes e Delivery Point.
1.0000 number on vista	emal ores £ 1	1700 summer on distillate oil
	erkWh (HHV)	rivo summer on distillate oil
Rate	An erani di serait	
Guaranteed To Be Negotiated,	•	
Availability	n Time 4 hou	ı Ya
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MIMITALITY CO.	Mir Tring 4 TK	WIT D

# **Project Summary**

- This project installs ~14,000 IB30 units for a thermal storage capacity of 100 MW on approximately 3000 commercial buildings through out the DUKE ENERGY OHIO service area.
- Enables reduced cost of energy required to cool buildings.
- Shifts 500,000 KWH daily from Peak to off Peak hours, reshaping the load of the utility, optimizes generation assets and provides a storage buffer for intermittent renewable sources.
- This technology is a FIRM capacity that is distributed and dispatchable by the utility to fix multiple system wide issues to improve supply side generation reliability.
- Allows Duke Energy to select the optimum generation assets coal, gas or other, in off peak hours to be used in managing cost to the utility and their customers.
- Provides the infrastructure for renewable technologies.
  - Stores the 80 % of non coincident (night time) power generated by wind farms, for use during the peak of the day. Improving the reliability and economics of wind generation.
  - o Stores under valued off peak solar power and uses it for peak demand reduction.
- Provides the end user with "comfort without curtailment."
- · Reduces green house gas emissions.

This project will provide a completely distributed and dispatchable thermal energy storage system to approximately 3,000 buildings through out the DUKE ENERGY OHIO service area that are currently using commercial (direct exchange –DX) air conditioners. The

thermal storage unit makes ice at night when power is plentiful and least expensive. Then, during the heat of the day, our cool data controller turns off the building air-conditioning system and cools the building with the ice made by the the night before. This process provides a 95% shift in energy from peak to off peak hours. Taking advantage of the diurnal effect of weather, the technology will reduce the amount of energy required to provide cooling \*Note, dependent on climate zone. By shifting power consumed from peak to off peak, consumers take full advantage of the time of use rate (TOU) if available, and reduce the cost of the energy ) in the evening hours. The integrated distributed control used to charge the scheme incorporated in the allows the utility management team to control the changing and discharging eyele of the units. These units can be controlled individually as one complete 6KW storage scheme, as multiple units (6kw\*N= NKW ~ MW) in blocks of storage or as one large 100 MW distributed storage system. The controller communicates over the internet to servers that store vital performance information. This information can be made available to the end user, maintenance teams, the utility and to monitor and control the performance of each unit and optimize energy use.

technology is well proven and has been in use in California and Colorado for over 5 years. The technology has been tried and tested by major utilities in California, resulting in large scale funded programs. In order to transform the market and reduce dependency on traditional generation, utilities and state governments must work together to encourage commercial and government facilities to incorporate the technology into their buildings. This is done through aggressive programs like the proposed in this document. The

utility will rate base these assets, as they do other supply side systems, so that the consumer will use them as a part of their cooling systems, reshaping the utility load for optimal use of traditional generation, transmission and distribution and future renewable technologies. The units will be employed in a number of buildings through out the DTKF ENERGY OHIO service area currently using 3-15 Ton DX air conditioning units. The does not fully replace the current air conditioning systems, but works in conjunction with them to shift thermal load for 6 hours every cooling day of the year. For the sake of this project we are claiming 200 cooling days in a year. The project is turn key providing the installation through commissioning of all units and service for the term of the agreement.

The investment in the will avoid cost the utility would incur in additional generation assets such as peakers and will allow the utility to fully integrate renewable technologies on the grid without sacrificing reliability. This solution enables the utility to meet growing customers demand and will help to achieve more reliability in their transmission and distribution system.

In the case of transmission and distribution systems the will reduce on peak load of air conditioning freeing up on peak capacity to meet incremental load growth.

The cost avoidance of upgrading substations is in the magnitude of 5:1. In other words, the cost of upgrading one substation can now be redeployed over 5 substations by utilizing instead of increasing capacity. The avoided cost of this deployment will be in the tens of millions of dollars to the utility.

Utilizing the reduces CO2 emissions by 1.5 ton per unit annually. This project will improve CO2 foot print by 25,000 tons a year. Typically end users will realize a reduction in the cost required to cool buildings and our technology has superior dehumidification capability resulting in additional comfort without curtailment.

The estimated time line to deliver 100MW is 24 – 30 months for full deployment with incremental capacity and benefits achieved on a daily basis and in the range of 750KW - 1 MW per week. In addition to the initial 100 MW Ice Energy will continue to work with Duke Energy to deploy an additional 400 MW in areas designated by Duke for a total of 500MW peak shifting daily or 600GWh Annually.

Financing for this project is available and will comply with the utility recoverable rate base structure. The program can be "purchased" or conform to that of a "power purchase agreement". Examples are shown later in this document. Firming of the financials will require a team comprised of the utility and Ice Energy's finance group to fully develop the program to meet the utility operational and regulatory requirements. The falls within the guideline of the newly signed Ohio energy bill SB221 for rate recovery.

The program provides improved performance to the infrastructure of the utility by reshaping the load, optimizing traditional generation and distribution while providing a means to implement intermittent alternative technologies on the grid, reducing dependency on carbon based fuels.

### Exhibit D-Life of Asset PPA (30 Years) Sample Term Sheet

Note to bidder: Provide a separate term sheet for each different Term or capacity offering

**Product** 

Unit Firm capacity as defined in the EEI Master Power

Purchase and Sales Agreement, Schedule P.

Seller

Purchaser

**DUKE ENERGY OHIO, INC.** 

Transmission Interconnection Point Not Applicable

**Delivery Point** 

CIN.CGE Commercial Pricing Node within MISO

Gas Pricing Point

Not Applicable

Term of Contract

30 years

Capacity Amount

100 MW (minimum) to 500 MW (See note below)

Note: : :ontract is a firm, scheduled and/or dispatched 100 MW x 5 hour x 200 day per year, take-or-pay 30 year product. The s a fully financed, delivered, measured, verified, and maintained "SmartGrid" distributed energy storage resource. The capacity becomes available in monthly tranches over a two year installation phase period. In ollowing the initial 100 MW contract, the contract can be increased in increments of 25 MW (or more).

The distributed energy storage resources are owned by the but located on the buildings of Duke Energy commercial customers and dispatched or scheduled by Duke Energy to deliver stored off-peak energy during the on-peak period with a less than 15 minute response time. This is an opt-out program for Duke Energy customers and the customers do not participate financially. It is a means for Duke Energy to differentiate its retail energy offering to their customers and increases the probability of account retention while improving customer satisfaction. The participating customers benefit by marketing the benefits of employing "green" energy storage resources that reduce the impact of their energy usage on the environment. The

is not demand response, is not curtailment, it is a physical energy storage device that delivers stored energy on-peak and ultimately improves Duke Energy customer satisfaction.

DUKE ENERGY OHIO will evaluate any amount from minimum to Capacity Amount in increments of 50MW unless bidder so notes that only the Capacity Amount can

be evaluated.

Energy

As Scheduled

**Scheduling** 

Scheduling shall be performed to the maximum flexibility allowed by MISO and in accordance with the MISO

Agreement.

### **Pricing Information:**

a. Capacity Pricing

Capacity Price KW-mo

Year of Capacity Price Quote

2009

Capacity Price Escalation/Year

2.5 (%)

b. Energy Pricing (Provide energy pricing in one of the following formats)

a. Escalating Price Over Term

ii. Second 255 hours = kWh

Escalating at 2.5% per year

iii. Variable Maintenance Wall Wh Escalating at 2.5% per year

iv. Scheduled Payment W

1. upfront (1<sup>st</sup> 50MW of capacity)

2. 2nd 50 MW of capacity)

b. Scheduled Payment

(\$/MWh) in Year 1 \_\_ (\$/MWh) in Year 2

(\$/MWh) in Year 3

...through end of Term

Year of Energy Price Quote

2009

Note: Energy pricing to include all ancillary service costs, Midwest ISO charges, taxes and other fees necessary for delivery to the Delivery Point.

**Guaranteed Heat** 

Customer buys off-peak energy to recharge the storage resource

Rate

Guaranteed Availability 98%

August 27, 2008

To: Burns & McDonnell for Duke Energy Ohio

is pleased to offer Duke Energy Ohio ("Duke") a retrofit upgrade for the eight (8) Frame 7000EA CT's at the Duke Madison plant in Ohio.

Our proposal is based on installing our FULL Simplified Combined Cycle ("SCC") technology to each CT at the Madison plant to increase the power output of each CT. In addition to increasing the power output of each CT, a SCC retrofit will substantially reduce the full load and part load heat rate of each CT, lower the NOx emissions, lower CO emissions, and reduce CT maintenance cost by reducing the temperature of the gases entering the CT hot section which will extend the interval between hot section repairs/replacement.

The retrofit of our SCC technology to the existing Frame 7EA's at Madison will provide additional capacity at a cost competitive with the cost of peaking power. In addition, the retrofit of our SCC technology to the existing Madison Frame 7EA's will result in a plant with many of the characteristics of a Combined Cycle plant, but with the flexibility of the existing Simple Cycle plant. By the using Once Thru Steam Generators (OTSG) the units can start-up and shutdown like SCCT's yet improve the performance of the plant to close to that of a Combined Cycle by recovering the exhaust energy to produce steam which is injected into the Frame 7EA CT's to substantially increase power and improve efficiency.

With our upgrade/retrofit proposal the energy in the exhaust of each CT will be recovered in a OTSG supplied by to produce steam that will be injected into the CT via a set of supplied fuel nozzles (as a low Btu mixture of steam and fuel) and downstream of the combustion zone (ahead of the turbine hot section).

The steam injected into the CT will increase the mass flow and specific heat of the gases powering the CT and will lower the temperature of the gases flowing into the turbine hot section.

Since we interpret the RFP to request power in increments of 50mw we have offered 150mw in power. However, the power provided by a SCC retrofit to the eight CT's at the Madison site will be 185mw. If for some reason (CT or system constraint) there are times when the full increase in power made available by the SCC retrofit cannot be used by Duke our SCC retrofit can alternatively be used to further reduce fuel consumption by allowing Duke to reduce CT fuel input (part load the CT) with some/all of the steam injection associated with our upgrade/retrofit SCC used to boost the power output to the

base load rating of the CT or to a higher power output within the CT or system requirements at the time.

Our proposal includes the supply of eight (8) sets of our SCC hardware along with the supply of eight (8) OTSG's manufactured by along, along with the supply of the HP feedwater pumps and the installation of the equipment outlined herein. Our proposal does not include the following:

- 1. Raw water in the quantity required by the retrofit of our SCC to each CT.
- 2. A water treatment facility to supply water to OST's OTSG specification.
- If the existing GE Frame 7EA CT's use a DLN/DLE combustor the cost to
  convert the CT's to a wet combustion system which is required if we are going to
  inject steam via the fuel nozzles.

Assuming our proposal is accepted we expect the retrofit of our SCC technology to the eight (8) Madison 7EA CT's to provide an additional 185mw of power, along with a general reduction in CT heat rate of approximately 2500 Btu's per kwhr.

In addition, NOx emissions will be reduced to 5 ppmvd @ 15% O2, while the interval between hot section repairs (and thus maintenance expense) will be reduced substantially. As mentioned earlier, in periods where there is no demand for the extra power the SCC upgrade provides, the SCC upgrade/retrofit can be used to further improve (reduce) the fuel consumption of each CT by using fuel to part load the CT and then using the new steam injection capability to boost the CT power to the required power output/base load.

The OTSG's we provide can be operated "dry" and thus there is no need for a bypass stack to be able to operate the CT as a SCCT with no steam production/injection.

The price associated with the above Scope of Supply is Assuming an order in early 2009 we would expect to install SCC on each CT starting in late 2009 with the last CT retrofit prior to December 31, 2010. It is our intent to complete as much of our work as possible prior to June 1, 2010.

Most of the work associated with installation of our SCC technology and the 'OTSG's can be done without impacting the operation of the existing Madison CT's. The installation of the retrofit SCC's and the associated OTSG's will be done in such a way that a short outage is all that is required to finalize the SCC retrofit/upgrade to each CT.

Our Proposal is based on developing a set of mutually agreed Progress Payments to be a part of the final Contract.

Our proposal is valid until January 1, 2009 and the price quoted is firm for the project as described above. Note this proposal shall only become a Contract upon acceptance by Duke and acknowledgement by

### In Addition Please Note:

While our proposal as submitted is focused on upgrading/retrofitting the 7EA CT's at the Duke Madison plant, a similar upgrade is available for other Duke plants using LM2500, LM6000, Frame 6B and Frame 7EA CT's, including the Henry County LM6000 plant and the Vermillion and Lee 7EA plants.

Our proposal as submitted is based on retrofitting each gas turbine with an OTSG. If Duke is interested is a less costly upgrade/retrofit it is possible to use supplemental firing to "double" the steam produced by each OTSG. This would result in a less fuel efficient retrofit, but would substantially reduce the cost of the FULL SCC retrofit/plant upgrade.

### Exhibit D-Ownership Offer -Life of Unit Sample Term Sheet

Note to Bidder: Provide a separate	term sheet for each different asset option offered
Resource	Upgrade, Retrofit of SCC to Madison 7 EA CT's
Primary Fuel Source	No Additional Fuel required – Energy Recovery
Primary Fuel Pricing Point	N/A
Secondary Fuel Source	. N/A
Secondary Fuel Pricing Point	N/A
MISO Commercial Pricing Node	Madison Plant
Saller	
Purchaser	DUKE ENERGY OHIO, INC.
Capacity Amount	185 MW (Minimum of 50 MW)
•	DUKE ENERGY OHIO will evaluate any amount from minimum to Capacity Amount in increments of 50MW unless bidder so notes that only the Capacity Amount can be evaluated.
Energy	As Scheduled
Scheduling	Scheduling shall be performed to the maximum flexibility allowed by MISO and in accordance with the MISO Agreement.
Purchase Price (Provide purchase p	orice in one of the following formats)
a. Fixed Purchase Price Ov	ver Life of Asset(\$/MW-year)
b. Lump Sum Payment Lump Sum Payment Yea	r \$\$(\$)
Fixed O&M	(\$/MW-month)
Fixed O&M Escalation	(% per year)
Year of Fixed O&M Cost Quote	
Variable O&M	(\$/MWh)

DUKE ENERGY OHIO Request for Proposals for Power Supply

Variable O&M Escalation	******	(% per year)
Year of Variable O&M Cost Quote		
Capital Spending Schedule	Provide schedule of an	y upgrades or life extension efforts
Maintenance Spending Schedule	Provide schedule of an	nual maintenance expenses
,		
Guaranteed Heat Rate  NON NON NON 8400	NE Btu per kWh (HHV) NE Btu per kWh (HHV) NE Btu per kWh (HHV)	70% load
Availability		tenance outages planned for next int forced outage performance for an existing resource).
Minimum run time	NONE	(hours)
Start time to Synchronization		_ (hours)
Start up Cost	-	_(\$/start)
Start up Cost Escalation		(% per year)
Year of Start up Cost Quote	-	•
Ramp Rate		(MW/hour)

## Term Sheet Energy Storage Ownership Offer for Lump Sum

Resource

Compressed Air Energy Storage

**Primary Fuel Source** 

**Natural Gas** 

**Primary Fuel Pricing Point** 

**Dominion East Ohio** 

Secondary Fuel Pricing Point

Electricity

MISO Commercial Pricing Node

First Energy Hub

Seller

Purchaser

DUKE ENERGY OHIO, INC.

**Capacity Amount** 

804 MW (Expandable to 1,600 MW)

Energy

As Scheduled

Scheduling

Scheduling shall be performed to the maximum flexibility allowed by MISO and in accordance with the MISO Agreement.

**Purchase Price** 

Lump Sum Payment

Lump Sum Payment Year \$\$

2008

### Indicative Term Sheet.

# DUKE ENERGY OHIO/ CONFIDENTIAL NON-BINDING SUMMARY OF PRINCIPAL COMMERCIAL TERMS FOR TOLLING AGREEMENT

Parties	
,	ı and Duke Energy Ohio, an Ohio corporation and affiliate of Duke Energy Corporation.
Facility Providing Products and Services (the "Facility")	An air compression and are all gas-fired surface generation facility located at project site (the "Site") in thio, initially consisting of six integrated compression/generation units (each, a "Dedicated Unit") having:
	(i) 110 MW of compression capacity at reference conditions;
,	(ii) 134 MW of generation capacity at reference conditions; and
	(iii) any capacity of such Dedicated Units to provide ancillary services;
	(collectively, "Unit Capacity"); and
	338 million cubic foot underground cavern space underlying the Site (the ') and associated facilities.
Products and Servir	will make available from the Facility, and Duke Energy will purchase and pay for:
·	(i) (a) lbs of working air storage and delivery capacity at a maximum injection rate of Kw/lb/s per Dedicated Unit and maximum withdrawal rate of lb/Kw-hr per Dedicated Unit; and (b) to the extent uncommitted and available, overrun working air capacity on an interruptible basis up to lbs (collectively, "Storage Services");
	(ii) Unit Capacity of the initial six Dedicated Units; and
	(iii) all Renewable Energy Credits or attributes produced from operation of the initial sbx Dedicated Units.
Term	30 years from commencement of commercial operations
Pricing; Responsibility for	Fee for (in year 2011 dollars):
Power and Gas	(i) Storage Services: month]; and
·	(ii) Unit Capacity: www.month].
	All fees for Storage Services and Unit Capacity provided in each month will be billed in advance

	monthly, with involce paid on the tenth day of each month.
	The amount of all fees shall escalate by 3.0% annually, with initial escalation beginning on the date of commencement of commercial operations (pro rated for such initial calendar year if commercial operations commence after January 1) and annually thereafter on each January 1.
	All fees will be increased or decreased by an amount not greater than 20% in proportion to any variation in actual hard costs of constructing the facility (calculated at completion), above or below a target hard construction cost estimate to be agreed (currently estimated at
	Duke Energy Ohio will deliver to the Facility and pay for all electric energy and natural gas required to compress air and generate electricity.
Transmission Interconnection	On site at the facility into MISO existing 138 KV transmission lines near the Sub station about 3.5 miles away
Delivery Point	·
Gas Pricing Point	Dominion East Ohio
Energy	As Scheduled
Scheduling	Scheduling shall be performed to the maximum flexibility allowed by MISO and in accordance with the MISO Agreement.
Availability	The lower 98% or the equipment manufacturer's warranty after an appropriate break in period.
Operation & Maintenance	A jointly established Operating Committee will set annual operating budgets for fixed and variable O&M expenses to be incurred under the tolling agreement. will be financially responsible solely for Owner's Expenses, which are limited to plant staff inport and associated overhead, insurance and property tax. All other operation and maintenance costs and expenses related to the operation of the Facility under the tolling agreement will be for the account of Duke Energy Ohlo.
	will bill all O&M expenses in advance monthly according to the annual budget, with invoice payable on the tenth day after issuance. Variations between actual and budgeted O&M will be reconciled via a cash payment or other agreed offset at calendar year end.
Project Financing	The tolling agreement will be structured such that the Facility can be financed on a non-recourse basis to sponsor, and the parties' obligations under the tolling agreement will be conditioned on obtaining satisfactory financing. Duke Energy Ohio will be required to provide adequate credit support, including contracting through or securing a guarantee from an investment grade credit entity with a minimum credit rating of Baa3 (Moody's) and BBB (S&P). Additional credit support from Duke Energy Ohio could result in lower annual pricing.
Expansion of Facility/Third-Party Products and Services	The tolling agreement will contain mutually acceptable terms and conditions permitting Norton or its third-party designees to:

(i) construct additional surface generation or other facilities at the Site capable of using air storage services from the delivered via common air and natural gas handling and delivery and related resulties, some of which common facilities may comprise components of the existing Facility (including the and associated piping and manifolds); and

(ii) market, sell and deliver products and services, on a firm or interruptible basis, from such facilities to third parties using all air storage and delivery capacity of the (currently estimated at approximately 371,334 tons), not committed to Duke Energy Ohio, it being understood that Duke Energy Ohio's right to overrun capacity shall be curtailed to the extent such capacity is contracted to third parties.

Duke Energy Ohio, Inc. Request for Proposals for Power Supply Preliminary Proposal #6



### (II) Statements:

- 3.2.1 Proposal shall remain in effect through December 31, 2009.
- 3.2.2 The Certification and Indemnity Agreement (Exhibit C) is attached.

### (III) Contract Terms:

The Company will seek the following contract terms if selected to the short list:

- 1) Duke Energy will be responsible for all emissions and carbon dioxide costs incurred during the term of the PPA.
- 2) Duke Energy will be entitled to a capacity payment rebate provided that the Facility's availability falls below the guaranteed availability, but for force majeure events.
- 3) The Company expects both Duke Energy and the Company to provide standard tier I and tier II representations and warranties in a power purchase agreement ("PPA"). Prior to signing the PPA Duke Energy would be able to conduct appropriate due diligence, including, but not limited to, a site visit, and review of the following:
  - 1. Organizational Documents
  - 2. Financing Documents
  - 3. Project Operating Documents
  - 4. ERISA/Employee Matters
  - 5. Tax Matters
  - 6. Historical Financial Statements
  - 7. Historical and Projected Budgets
  - 8. Historical O&M and Technical Information
  - 9. Federal and State Regulatory Compliance
  - 10. Environmental Matters
  - 11. Litigation/Other Third Party Liabilities
  - 12. Real Property Matters
  - 13. Cash Management Matters
  - 14. Insurance Matters
  - 15. information Technology

#### (IV) Proposal Limitations:

No proposal limitations apply to Preliminary Proposal #6, however please note that the delivery point for Preliminary Proposal #6 is the Facility's bus bar (MISO generation node:

as opposed to Duke Energy's commercial pricing node (CIN.CGE). In calendar years 2005 through 2007, the Facility's generation node has historically cleared at a MISO MISO published data.

Duke Energy Ohio, Inc. Request for Proposals for Power Supply Preliminary Proposal #6



### Life of Asset PPA Term Sheet

**Product** 

Unit Firm capacity as defined in the EEI Master Power

Purchase and Sales Agreement, Schedule P.

Seller

Purchaser

DUKE ENERGY OHIO, INC.

Transmission

Interconnection Point

**MISO** 

**Delivery Point** 

MISO

. Gas Pricing Point

Canadian Gas - Dawn, Ontario

**Term of Contract** 

Proposed PPA terminates June 30, 2018.

Capacity Amount

MISO Capacity: - 545 MW
Base Dependable Capacity: 416 MW

Duct Firing Dependable Capacity: 129 MW

Energy

As Scheduled

Scheduling

Scheduling shall be performed to the maximum flexibility allowed by MISO and in accordance with the MISO

Agreement.

### Pricing Information

a. Capacity Pricing

Capacity Price A

MW-was

Year of Capacity

Price A Quote

2009

Capacity Price A Escalation/Year

0% per year (no escalation)

Capacity Price B

MW-ven

Year of Capacity
Price B Quote

2009