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ORIGINAL TARIFF NO. 1

Substitute Third Revised Sheet No. 49 Canceling Second Sub. Second Revised Sheet No. 49

Cogeneration & Small Power Production

Rate Code CSPP

Availability:

To any Customer taking service under one of Company's standard electric rate schedules and who has entered into an Electric Service Agreement with Company for the interconnection and operation of on-site extended parallel distributed generation systems with a capacity of 100 kilowatts (kW) or less. The Qualifying Facility (QF) is a cogeneration facility or a small power production facility under 18 CFR Part 292, Subpart B. Service will be contracted for a minimum period of twelve months. Service hereunder is also subject to Company's Rules and Regulations.

Character of Service:

Regarding the character of electric service provided to Company by the QF see Section 16 of the Rules and Regulations. The interconnection and operation of Customer's distributed generation systems at each point of common coupling shall be considered as a separate application of the Rider. Service hereunder is subject to Company's interconnection process for distributed generation systems. All provisions of the applicable standard service schedule shall apply to distributed generation systems service under this Rider except as noted below.

Rules and Regulations:

Service hereunder is subject to the provisions of the Company's Electric Service Rules & Regulations and shall be available from Company at the rates and under the terms and conditions set forth in the currently applicable federal and/or state schedule, tariff or rider, or other superseding schedule, tariff or rider in effect from time to time. Such service shall include any additional services provided by Company under any revisions, amendments or other federal and/or state schedule, tariff or rider.

Definition of Peak Periods:

On-Peak: 7 AM - 8 PM CST weekdays.

Off-Peak: All other hours (including the holidays of New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day).

Season Definition:

Summer – May 16 through September 15

Customer billing or payment will be net of interconnection sales and purchases as separately stated.

Rates and Charges:

- I. <u>Interconnection Costs:</u> Interconnection costs will be as described in the Iowa Administrative Code (IAC) 199 – Chapter 45.
- II. Rates for Sales to Customer:

Power and energy delivered to the Customer at the same location shall be billed on the appropriate retail rate schedule for the class of Customer served where such rate schedule is the one for which Customer qualifies without consideration of the Qualifying Facility. All sales of electric service to Customer by Company shall be separately metered.

III. Rates for Purchase by Company:

Customer may sell all of the energy produced by its distributed generation system to the Company or use all or a portion of the distributed energy to meet its own electric requirements. All purchases of electricity by Company from Customer shall be separately metered through a bi-directional meter.

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Net Metering Monthly Cash-Out Rates:

The monthly cash-out rates below are applicable to monthly private generation credits in excess of a customer's load for those customers participating in Company's "Net Metering Pilot-Renewable Energy Facilities" tariff. Customer's Qualifying Facility (QF) generates at the discretion of Customer. Output of QF may be used to offset the Customer's personal electricity requirements and any output not consumed by Customer may be supplied to Company. The rates below are "as available" rates updated quarterly based upon current avoided costs.

a. Where time-of-use metering is not required by the facility, \$0.0288 per kWh for all energy delivered at distribution voltage.

b. Where time-of-use metering is not required by the facility, \$0.0279 per kWh for all energy delivered at transmission voltage. T, R

c. With time-of-use metering and energy delivered at distribution voltage the rates per kWh are:

Periods	Summer	Winter
On-Peak	\$0.0443 per kWh	\$0.0330 per kWh
Off-Peak	\$0.0258 per kWh	\$0.0229 per kWh

d. With time-of-use metering and energy delivered at transmission voltage the rates per kWh are:

Periods	Summer	Winter	
On-Peak	\$0.0429 per kWh	\$0.0320 per kWh	Τ,
Off-Peak	\$0.0250 per kWh	\$0.0222 per kWh	Τ,

Capacity Credit:

Applicable for generation capacity received only during the summer on-peak periods for firm power and energy delivered from the QFs to the Company. The rates for capacity credit are based on the Midcontinent Independent System Operator, Inc. (MISO) Zone 3 capacity auction clearing price adjusted for transmission and distribution losses to reflect the level at which the QFs connects to the Company's system based upon current avoided costs and are subject to change. (Customers whose resources are accredited by MISO for capacity will receive a credit. The value of the credit will be actual accredited capacity for the resource that the Company receives from MISO for use in the Planning Resource Auction (PRA) on a year-by-year (or season-by-season) basis. Under the current MISO Resource Adequacy construct, PRA accredited capacity is in the form of Zonal Resource Credits (ZRCs) that assumes solar receive an accreditation of 50 percent of nameplate capacity and wind receive 18.4 percent of nameplate capacity.)

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Capacity credit (in \$/kWh) is calculated as:

<u>Seasonal capacity auction clearing price (\$/kW/Year) times PRA accreditation rate</u> Spring and Summer on-peak hours (276 hours), Fall on-peak hours (273 hours), and Winter on-peak hours (360 hours)

Resource Type	On-peak Capacity Adder	
On-Peak (kWh)Wind	\$0.00039 per kWh	T, R
On-Peak (kWh)Solar	\$0.00000 per kWh	T, R
Capacity Component (All kWh) Dispatchable	\$0.00203 per kWh	T, R

Monthly Energy Purchase Rates:

Any Qualifying Facility (QF) up to and including 100 kW may negotiate a legally enforceable obligation for the sale of energy and capacity for a specified term at a rate based upon avoided costs, and, at the option of the facility, the avoided costs may be determined at the time of delivery or time the obligation is incurred. Avoided energy cost will be set equal to the hourly real-time Midcontinent Independent System Operator, Inc.(MISO), locational marginal price (LMP) for the ALTW.ALTW load zone adjusted for transmission and distribution losses to reflect the level at which the QF connects to the system. Distribution and transmission losses are described further in the terms and conditions section of this tariff. For QFs with a capacity over 100 kW, the Company will purchase energy and capacity at the MISO real-time LMP rates at the option of the QF or have the option to negotiate an individually determined sales rate based on the Company's avoided costs.

Net Metering Pilot - Renewable Energy Facilities – Annual Cash-Out Rates:

For energy delivered from the QF to the Company under the Net Metering Pilot Cash Out provisions in this rate schedule shall be a weighted average of the MISO real-time LMP associated with the typical solar or wind resource generation profiles. The avoided cost rate will be updated annually.

Resource Type	Transmission Voltage	Distribution Voltage
Solar	\$0.046769 per kWh	\$0.048214 per kWh
Wind	\$0.060078 per kWh	\$0.061934 per kWh

These annual cash out rates are based upon the following load resource profiles of kWh delivered to the Company by generation technology.

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Solar Profile – Distribution of kWh Received by IPL

						Month						
Hour	1	2	3	4	5	6	7	8	9	10	11	12
1:00:00 AM	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00000
2:00:00 AM	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.00000
3:00:00 AM	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
4:00:00 AM	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
5:00:00 AM	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
6:00:00 AM	0.000000	0.000000	0.000000	0.000000	0.000501	0.000800	0.000500	0.000082	0.000000	0.000000	0.000000	0.000000
7:00:00 AM	0.000000	0.000000	0.000116	0.001613	0.001979	0.002216	0.001890	0.001149	0.000810	0.000048	0.000000	0.000000
8:00:00 AM	0.000032	0.000704	0.003157	0.004675	0.004553	0.004917	0.004490	0.003633	0.003847	0.003375	0.000536	0.000073
9:00:00 AM	0.003120	0.004001	0.006342	0.007162	0.007485	0.007458	0.007489	0.006735	0.007020	0.006488	0.004177	0.003241
10:00:00 AM	0.005684	0.006714	0.009469	0.009957	0.009608	0.009984	0.010006	0.009850	0.009823	0.008768	0.006225	0.005768
11:00:00 AM	0.006820	0.008668	0.011631	0.011103	0.011147	0.011886	0.011993	0.011493	0.011592	0.010191	0.008082	0.007303
12:00:00 PM	0.007940	0.010127	0.012812	0.012610	0.011932	0.012944	0.013676	0.013103	0.012896	0.011410	0.008662	0.008006
1:00:00 PM	0.008356	0.010749	0.012907	0.012956	0.012784	0.012958	0.013696	0.013344	0.012938	0.011902	0.008707	0.007808
2:00:00 PM	0.007734	0.010291	0.012109	0.012084	0.011489	0.011583	0.013357	0.012153	0.011732	0.010725	0.007734	0.007387
3:00:00 PM	0.007252	0.008636	0.010603	0.010790	0.010084	0.010010	0.011897	0.011002	0.010652	0.008965	0.006199	0.006416
4:00:00 PM	0.005340	0.006244	0.007670	0.008126	0.007383	0.007413	0.009152	0.008813	0.007759	0.006217	0.003730	0.003981
5:00:00 PM	0.001972	0.003379	0.004712	0.004944	0.004727	0.005281	0.006343	0.005234	0.004158	0.002551	0.000587	0.000458
6:00:00 PM	0.000000	0.000335	0.001339	0.001922	0.002257	0.002592	0.003008	0.002295	0.001035	0.000072	0.000000	0.000000
7:00:00 PM	0.000000	0.000000	0.000000	0.000128	0.000592	0.000761	0.000763	0.000413	0.000006	0.000000	0.000000	0.000000
8:00:00 PM	0.000000	0.000000	0.000000	0.000000	0.000000	0.000021	0.000006	0.000000	0.000000	0.000000	0.000000	0.000000
9:00:00 PM	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
10:00:00 PM	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
11:00:00 PM	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
12:00:00 AM	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000	0.000000
Monthly	0.054248	0.06985	0.092866	0.098069	0.096521	0.100824	0.108266	0.099299	0.094268	0.08071	0.054638	0.050441

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Cogeneration & Small Power Production

Wind Profile – Distribution of kWh Received by IPL

Rate Code CSPP

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					Month								
Hour	1	2	3	4	5	6	7	8	9	10	11	12	
1:00:00 AM	0.003883	0.003883	0.0036	0.00285	0.003736	0.003299	0.002322	0.002212	0.003482	0.005166	0.004399	0.004473	
2:00:00 AM	0.003708	0.00387	0.003451	0.00292	0.003669	0.003317	0.002233	0.002264	0.003428	0.005078	0.004219	0.004794	
3:00:00 AM	0.003656	0.004045	0.003568	0.002952	0.003658	0.003352	0.002225	0.002311	0.003344	0.004935	0.004165	0.004591	
4:00:00 AM	0.003705	0.004024	0.003422	0.002914	0.003651	0.003258	0.002179	0.002386	0.003185	0.004795	0.004193	0.004455	
5:00:00 AM	0.003833	0.003886	0.003423	0.00275	0.003505	0.003328	0.002135	0.002341	0.003074	0.004681	0.004352	0.004318	
6:00:00 AM	0.003862	0.003951	0.003461	0.002674	0.003509	0.003354	0.001955	0.002226	0.003056	0.004559	0.004526	0.004372	
7:00:00 AM	0.00391	0.003983	0.003576	0.002611	0.003234	0.003191	0.001785	0.002125	0.003158	0.004579	0.00471	0.004275	
8:00:00 AM	0.003982	0.003909	0.003638	0.002544	0.003162	0.003121	0.001673	0.001994	0.002705	0.004542	0.00469	0.004206	
9:00:00 AM	0.003989	0.003733	0.003507	0.00249	0.003213	0.00338	0.00174	0.002057	0.002359	0.004276	0.004468	0.004031	
10:00:00 AM	0.00397	0.003329	0.003445	0.002563	0.003334	0.003366	0.001813	0.002063	0.002452	0.004202	0.004078	0.003842	
11:00:00 AM	0.004233	0.003208	0.003424	0.0027	0.003312	0.003212	0.001903	0.002127	0.00267	0.004185	0.004221	0.003861	
12:00:00 PM	0.0042	0.003193	0.003452	0.002753	0.003453	0.003317	0.001939	0.002081	0.002847	0.004395	0.004282	0.003887	
1:00:00 PM	0.004208	0.003207	0.003462	0.002753	0.003553	0.003516	0.001971	0.002118	0.003053	0.004681	0.004447	0.004013	
2:00:00 PM	0.004139	0.003232	0.003507	0.002739	0.003609	0.003721	0.002019	0.002216	0.003108	0.004712	0.004636	0.004163	
3:00:00 PM	0.004112	0.003274	0.003534	0.002769	0.003691	0.003487	0.001996	0.002175	0.0032	0.004643	0.004671	0.004265	
4:00:00 PM	0.004123	0.003335	0.003469	0.002797	0.00351	0.00372	0.001976	0.002137	0.003368	0.004574	0.004708	0.004222	
5:00:00 PM	0.004189	0.003231	0.003411	0.002732	0.003612	0.00371	0.001962	0.002085	0.003313	0.004444	0.004694	0.004008	
6:00:00 PM	0.004098	0.00313	0.0034	0.002664	0.003578	0.003609	0.001959	0.002031	0.003128	0.00438	0.004666	0.004162	
7:00:00 PM	0.004225	0.003173	0.003316	0.00266	0.003369	0.003592	0.001951	0.002089	0.00329	0.004536	0.004971	0.004498	
8:00:00 PM	0.004308	0.003315	0.003421	0.002611	0.003294	0.003375	0.001981	0.002184	0.003516	0.004853	0.005024	0.004537	
9:00:00 PM	0.004276	0.003477	0.003543	0.002597	0.003391	0.003324	0.002058	0.002253	0.003579	0.005115	0.004936	0.004554	
10:00:00 PM	0.004186	0.003654	0.003536	0.002638	0.003511	0.003457	0.002113	0.002287	0.003631	0.005214	0.004976	0.004798	
11:00:00 PM	0.004094	0.003792	0.003542	0.002738	0.003493	0.003508	0.002154	0.002257	0.003545	0.005252	0.004898	0.004815	
12:00:00 AM	0.004026	0.003936	0.003632	0.002786	0.003609	0.003364	0.002224	0.00217	0.003487	0.005247	0.004638	0.004655	
Monthly	0 096914	0 085768	0 083738	0.065205	0.083656	0 081878	0 048264	0.05219	0 075978	0.113045	0 109568	0 103796	
violitiny	0.050514	0.005700	0.003730	0.005205	0.000000	0.001070	0.040204	0.05215	0.075570	0.110040	0.100000	0.103730	

Terms and Conditions:

The use of this rider requires that special precautions be taken in the design of associated metering and control systems. The following terms and conditions describe these precautions and shall be followed on all Customer-owned distributed generation systems inclusive of QFs.

- The Customer will be compensated for all energy received from the distributed generation system as a bill credit unless the Customer requests cash payment. IPL will only issue a check for cash payment for balances of \$100 or more. The schedule for these payments is subject to annual review.
- 2. The Customer shall pay for any increased capacity of the distribution equipment serving them and made necessary by the installation of its distributed generation system.
- 3. The Customer's 60 hertz generator output must be at the voltage and phase relationship of the existing service or of one mutually agreeable to the Company and the Customer.
- The Customer will provide equipment to maintain a 100 percent power factor (+ or 5 percent) during C periods of the distributed generation system operation.

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Terms and Conditions: (continued)

- 5. The Company reserves the right to disconnect the Customer's distributed generation system from its C system if it interferes with the operation of the Company's equipment or with the equipment of other company Customers.
- 6. Prior to installation, a detailed electrical diagram of the distributed generation system and related C equipment must be furnished to the Company for its approval for connection to the Company's system. No warranties, express or implied, will be made as to the safety or fitness of the said equipment by the Company due to this approval.
- 7. Equipment shall be provided by the Customer that provides a positive means of preventing feedback to the Company during an outage or interruption of the system.
- 8. The Customer shall install, own and maintain all equipment deemed necessary by the Company to C assure proper parallel operation of the distributed generation system.
- 9. The transmission loss factors shall be the ITC-Midwest transmission owner loss data currently posted with MISO. This factor is subject to change and can be found at <u>www.misoenergy.org</u>.
- 10. The distribution loss factor is 3.09 percent prior to the addition transmission losses.

Prompt Payment Provision:

After 20 days, add 1 1/2 percent on the past-due amount.