SCHEDULE LPDG-1

Large Power and Commercial MEMBER-Owned Generation

# Availability

This Generation rate is available to any member in good standing of Noble REMC (Noble) who receives electric service and owns and operates a solar, wind, or biomass generating facility that is designed to operate in parallel with Noble’s distribution system. All conditions of service must be met to qualify for this rate.

# CONDITIONS OF SERVICE

For purposes of this rider, an eligible generation facility is an electrical generating facility that complies with the following requirements:

1. is fueled by solar, wind, or biomass energy;
2. is owned and operated by the member and is located on the member’s premises;
3. is intended primarily to offset all or part of the member’s own electrical load requirements; and
4. is designed and installed to operate in parallel with Noble’s distribution system without adversely affecting the operation of Noble’s equipment, without adversely affecting service to other members, and without presenting safety hazards.
5. The member shall reimburse Noble for all upgrades to its distribution system necessary to accommodate the generation facility or its output.
6. is a non-residential member.

A member seeking to interconnect an eligible generation facility to Noble’s distribution system must submit a completed Application and Agreement for Interconnection which are available upon request.

If a qualifying member generates more power than they consume, Noble REMC may, at its discretion, purchase any excess power from the member at the WVPA wholesale rate (time of use) subject to the WVPA (wholesale agreement).

The eligible generation facility shall meet all applicable codes relating to the installation of electrical equipment, including the National Electric Code, the National Electric Safety Code, and state and local codes. The eligible generation facility shall provide Noble proof of qualified installation of the generation facility. Certification by a licensed electrician shall constitute acceptable proof.

The member shall install, operate, and maintain the generation facility in accordance with the manufacturer’s suggested practices for safe, efficient, and reliable operation.

Noble may perform on-site inspections to verify the proper installation and continuing safe operation of the generation facility and the interconnection facilities, at reasonable times and upon reasonable advance notice to the member.

A member operating a generation facility shall maintain commercial, or other liability insurance providing coverage in the amount of not less than one million dollars ($1,000,000) against losses or damages arising from the operation of the member’s generation facility. The member shall submit evidence of such insurance to Noble with the completed Application for Interconnection, with Noble REMC listed as an additionally insured party. Noble’s receipt of evidence of liability insurance does not imply an endorsement of the terms and conditions of coverage.

Noble will be solely responsible for determining when a member meets the above qualifications.

# Member Responsibilities The Member and the generation facilities installer are responsible for coordination of design, installation, operation and maintenance of any generation system installed on Noble’s distribution system, and for conforming to the requirements of our tariffs and rules, and applicable governmental laws and regulations (local, state, and federal). These requirements are designed to protect Noble’s distribution system facilities; avoid electrical interference problems; ensure the safety of members, Noble employees and the general public; and maintain overall system reliability. The Member is required to notify Noble if a material modification is made to their generation facility at any time during or after the installation process. A material modification is any modification that changes the maximum electrical output of your facility or changes the interconnection equipment, including:

* Changing from certified to non-certified devices
* Replacing a component with a component of different functionality or UL listing

The Member is responsible for the proper installation, operation and maintenance of the specified protective devices. Finally, the Member shall obtain, at their expense, any and all authorizations, permits and licenses required for the construction and operation of your generating facilities.

# CHARACTER OF SERVICE

Service rendered under this rider shall be as specified below:

1. SINGLE-PHASE

Single-Phase service shall be alternating current, sixty (60) hertz, at approximately 120/240 volts, three wire.

1. MULTI-PHASE

Multi-Phase service shall be alternating current, sixty (60) hertz, at approximately 120/208, 120/240, or 277/480 volts, four wire.

Other voltages may be available upon the member’s request subject to agreement by Noble REMC.

# TERM OF SERVICE

So long as the member meets the conditions for service cited herein, service under this schedule may continue from the date the member enters into a contract with Noble until the member no longer wishes to operate the generation facility in parallel with Noble’s distribution system or the schedule is withdrawn by action of Noble’s Board of Directors. This schedule is subject to periodic review by Noble’s Board of Directors and may change at their discretion.

# interconnection equipment

All generator interconnection equipment shall meet and be listed to UL standard 1741. The disconnect switch used to isolate the generator from Noble’s system shall meet ANSI standard C37. The main circuit breaker between the generation facility and Noble’s distribution system shall have adequate interrupting capability for the maximum expected short circuit duty and meet ANSI standard C37. Generation facilities not meeting these standards will not be approved to connect to Noble’s system.

# Incoming Rate Table

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Rate | 73 | 74 | 75 | 76 |
| Non Co-Gen Applicable Rate | 21,3,31 | 4 | 41 | 42 |
| Co-Gen Fixed Monthly Charge | $105 | $140 | $140 | $140 |
| Co-Gen Distribution Demand Charge | $6.25 | $6.25 | $6.10 | $5.90 |

# Monthly charges

The total bill for service shall be the sum of the applicable Distribution Service charges and Power Supply Service charges as shown below.

## Distribution Service

### Fixed Monthly Charge

Fixed Monthly Charge per Service Location per Month:

|  |  |
| --- | --- |
| Customers qualifying for service under Schedule GSD, GS Three Phase | $105.00 |
| Customers qualifying for service under Schedules LP, LP-PS and LP-PP | $140.00 |
|  |  |

### Distribution Demand Charge

|  |  |
| --- | --- |
| Demand Charge per kW Billing Demand | $6.25 per kW |
| Credit for Primary Metering – Secondary Service | $0.15 per kW |
| Credit for Primary Metering – Primary Service | $0.35 per kW |
|  |  |

#### Determination of Distribution Service Billing Demand:

The demand to be used for billing purposes shall be the maximum fifteen (15) minute clock hour interval demand occurring during the billing period as indicated by a meter installed to measure demand. The measured demand may also be adjusted for power factor as provided for in the next paragraph.

At its option, Noble may install metering equipment to allow the determination of reactive components of power utilized by the customer. The customer’s utilization of equipment shall not result in an average power factor at the point of delivery of less than 90% lagging for the month. Should the average power factor be less than 90% lagging during any month, Noble may adjust the readings taken to determine the demand by multiplying the KW obtained through such readings by 90% and by dividing the result by the actual average power factor established during the current month. Such adjusted readings shall be used in determining the billing demand.

Noble reserves the right, at its option, to utilize kVA meters, RkVA meters, and/or other appropriate meters in those metering installations where the customer’s power factor is believed to be unsatisfactory according to the Noble’s standards. If such meters are installed, the billing demand in KW may be computed from such instruments.

The Distribution Service Billing Demand shall not be less than zero.

## Power Supply SERVICE \* see power supply rates (page 8 of 8)\*

### Applicable Rates

The Wholesale Demand and Energy Charges as used herein are per the service schedule applicable to power purchased for delivery to the member as set out in the Wabash Valley Power Association, Inc. FERC Electric Tariff, Original Volume No. 1, approved by the Federal Energy Regulatory Commission (wholesale rate).

### Line Loss Adjustment

Line losses as used herein shall be equal to the Noble’s average system line losses for the previous calendar year.

### Tax Adjustment

The total charges for power supply service shall include an adjustment for the Indiana Utility Receipts Tax (IURT) rate and any other revenue-based taxes effective during the month service is rendered.

### Power Supply Demand Charge

Demand Charge per billing kW of Power Supply Billing Demand shall be:

|  |
| --- |
| The Wholesale CP Demand Charge billed for power delivered to the member during billing month |
| (100% – line loss % – tax % rate) |

#### Determination of Power Supply Service Demand

The Power Supply Demand shall be the metered coincident kilowatt (kW) demand. This equates to the number of kW used in the clock hour interval between the hours of 2:00 p.m. and 8:00 p.m. Monday through Friday, Indianapolis, IN prevailing time (Billing Window), during which the total kW load for Noble’s power supplier is greater than any other clock hour interval in the Billing Window in such billing month, adjusted for power factor.

The Peak Power Factor for the billing month shall be calculated from the kilowatts “A” and reactive kilovolt-amperes “B”, both of which are used during the clock hour interval in which the Power Supply Demand occurs, by the following formula:

|  |  |
| --- | --- |
| Power Factor = | “A” |
| Square Root of (A2 + B2) |
|  |  |

If the peak Power Factor of less than 90% lagging, the Power Supply Demand for the member shall be adjusted in accordance with the following formula:

|  |  |
| --- | --- |
| Power Supply Billing Demand = | Power Supply Demand kW x .90 |
| Peak Power Factor |
|  |  |

If the peak monthly Power Factor is equal to or in excess of 90% lagging, then:

|  |  |
| --- | --- |
| Power Supply Billing Demand = | Power Supply Demand |

The Power Supply Billing Demand shall not be less than zero.

### Power Supply Energy Charge

|  |
| --- |
| Energy Charge per kWh delivered to the member for the On Peak and Off Peak periods shall be calculated as follows: |
| The total energy charges billed for power delivered during the billing month by pricing period |
| (100% – line loss % – tax% rate) |
|  |

The kWh energy shall be the member’s kWh consumption metered during the billing month. The member’s generation output shall be netted against its consumption on a clock hour basis. The sum of all hours where the member’s generated kWh energy output is greater than its consumption shall be considered delivered to the G&T and subject to the terms of the wholesale agreement. The sum of all hours where the member’s energy consumption exceeds its generation output shall be considered kilowatt-hours (kWh) energy delivered to the member. The Billing Energy shall be the total kilowatt-hours (kWh) delivered to the member by on-peak and off-peak period during the billing month.

On-peak kWh shall be kWh delivered to the member from 2:00 p.m. to 8:00 p.m. weekdays. All other hours during weekdays and all day weekends shall be off peak.

### Power Supply True-Up Adjustment

Noble shall charge or credit the member’s bill for adjustments resulting from the “Annual True-Up Mechanism” contained in the wholesale rate based on the ratio of the energy delivered to the member divided by the Noble’s total kWh sales for the preceding calendar year. This True-up Adjustment replaces any PCA Adjustment within this rate schedule.

**True Up Formula**

* Prior Year Member kWh Sales / Prior Year REMC kWh Sales = Member % of Total Sales
* Member Refund = Member % of Total Sales x WVPA (G&T True-up) refund for prior year

# Metering

Noble shall install or cause to be installed metering equipment that is capable of recording bi-directional energy flows on an hourly basis as necessary to administer this rate.

# connection and disconnection

The Interconnection Application and Agreement must be executed by both parties prior to the generation facility being connected to Noble’s system.

In order to isolate the generation facility from Noble’s distribution system, the member shall install an outdoor, visible, lockable disconnect switch. This disconnect switch shall be accessible to Noble personnel at all times and located at or within 10 feet of the electric service meter location. The disconnect switch shall meet ANSI standard C37 and shall be lockable in the open or off position. In accordance with provisions of the NEC, a permanent, weatherproof sign shall be provided by the member. It shall be securely affixed on or immediately adjacent to the disconnect switch. The sign shall be clearly marked, “Generator Disconnect Switch”, with permanent ¾ inch letters or larger. If the installation has more than one disconnect switch, each disconnect switch must be identified with its function.

Noble may require that the member-owned generation facility be temporarily curtailed or interrupted in order for Noble to construct, install, maintain, repair, replace, or inspect any of its equipment or any part of its distribution system. Noble will strive to provide the member reasonable notice of interruption. In any such event, Noble shall not be obligated to accept any energy from the member. Noble will take reasonable steps to minimize the number and duration of such interruptions.

Noble may, at its own discretion, isolate or disconnect any generation facility if it has reason to believe that continued interconnection creates or contributes to a system emergency. System emergencies include, but not are limited to, a disruption of service to another member, a substantial deviation from a normal service standard, or an endangerment to life or property.

# SYSTEM LIMITATIONS

In order to help maintain proper utility voltages, to not overload distribution equipment, and to prevent improper operation of equipment, the following limitations and constraints are imposed on generation facilities:

1. The total nameplate capacity of all of the existing and proposed generation does not exceed 25% of the radial distribution circuit peak load and that total is also less than the radial distribution circuit minimum load.
2. The proposed generator’s nameplate capacity does not exceed 15% of the annual peak load for the line section with which it will interconnect. A line section is defined as that section of the distribution system between two sectionalizing devices.
3. The proposed generator does not contribute more than 10% to the distribution circuit’s maximum fault current at the point of the nearest interconnection with Noble’s primary distribution voltage.
4. The proposed generator’s nameplate capacity, in aggregate with all of the other generators on the distribution circuit, will not cause any distribution protective devices to exceed 85% of their short circuit interrupting capability.

Any generation exceeding the above limitations and constraints will not be allowed to interconnect to Noble’s distribution system. With regards to system capacity limitations and constraints, generation projects will be evaluated on a first-come, first-served basis. Any modifications to Noble’s distribution system required for the interconnection of a generation facility are at the expense of the member.

# Other Conditions of Service

1. Service under this rate will be furnished on a continuous twelve-month basis.
2. Noble may require corrective measures or devices for any generator or inverter that in the opinion of Noble will cause objectionable voltage fluctuations to other members. The member shall limit harmonic distortion per IEEE Standard 519.
3. At the removal of the generation installation, the member shall revert to the standard tariff in effect and applicable to the member.
4. Noble shall have access to the generation installation at all times.
5. Interruption or temporary stoppage of the supply of electric energy occasioned by fire, strike, equipment failure and casualty, or acts of God or public authorities, beyond the control of Noble, shall not constitute a breach of the obligation of Noble.

# Terms of Payment

Refer to Appendix B.

# Late Payment Charge

Refer to Appendix B.

# Interpretation

Refer to Appendix B.

# All Other Non-Recurring Charges

Refer to Appendix B.

# TERMS AND CONDITIONS APPLICABLE TO rATE sCHEDULES

Refer to Appendix A.

# OPERATION ROUND UP

Refer to Appendix E.

**2020 Power Supply Rates (Member Purchase from REMC)**

**Power Supply Service**

Coincident Peak Demand Charge\* $ 17.51 kW

On-Peak kWh Charge\*\* $0.056185 kWh

Off-Peak kWh Charge $0.045580 kWh

\*Coincident Peak Demand Charge is our power supplier’s highest kW

Hourly demand between the hours of 2-8 PM weekdays in the month.

\*\*On-Peak kWh are from 2-8 PM weekdays, except holidays.

\*\*\*Line loss % and URT % are included in the above rates.

Reference: See Power Supply Rate Worksheet in Rate Schedules folder for details.

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**2020 Power Supply Rates (REMC Purchase from Member)**

**Power Supply Service**

Coincident Peak Demand Charge $ 16.51 kW

On-Peak kWh Charge $0.052982 kWh

Off-Peak kWh Charge $0.042982 kWh