# SCHEDULE NB-1

# RESIDENTIAL NET BILLING

## I. AVAILABILITY

This Net Billing Rate is available to any residential member in good standing of Noble REMC (Noble) who owns and operates a solar, wind, or biomass generating facility rated 20 kW or less and designed to operate in parallel with Noble's distribution system.

## II. CONDITIONS OF SERVICE

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

1. is fueled by solar, wind, or biomass energy;
2. has a nameplate capacity less than or equal to 20 kW;
3. is owned and operated by the member and is located on the member's premises;
4. is intended primarily to offset all or part of the member's own electrical load requirements; and
5. 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.

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

The eligible net billing 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 net billing facility shall provide Noble proof of qualified installation of the net billing facility. Certification by a licensed electrician shall constitute acceptable proof.

The member shall install, operate, and maintain the net billing 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 net billing facility and the interconnection facilities, at reasonable times and upon reasonable advance notice to the net billing member.

A member operating a net billing facility shall maintain homeowner's, commercial, or other liability insurance providing coverage in the amount of not less than one hundred thousand dollars ($100,000) against losses or damages arising from the operation of the member's net billing facility. The member shall submit evidence of such insurance to Noble with the completed Application for Interconnection. Noble REMC'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.

## III. CHARACTER OF SERVICE

The type of service rendered under this rate schedule shall be single-phase, sixty (60) hertz, 120/240 volts, three-wire. Service under this rider may also be limited due to electric circuit and system capacities.

## IV. 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 net billing facility in parallel with Noble's distribution system or the schedule is withdrawn by action of Noble's Board of Directors or the Indiana Utility Regulatory Commission. This schedule is subject to periodic review by Noble's Board of Directors and may change at their discretion.

## V. 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 net billing facility and Noble's distribution system shall have adequate interrupting capability for the maximum expected short circuit duty and meet ANSI standard C37. Net billing facilities not meeting these standards will not be approved to connect to Noble's system.

## VI. MONTHLY CHARGES

The total bill for service shall be the sum of the Fixed Monthly Charge, any applicable Facilities Charge, and the Energy Charge as shown below.

### 1. Fixed Monthly Charge

Charge per Service Location per Month (Rate 7 & 71) $57.50

### 2. Facilities Charge

The member will be assessed an additional monthly facility charge when Noble is required to install any equipment to accommodate the net billing facility. The additional facility charge shall be based on one-twelfth (1/12) of Noble's annual fixed costs associated with the investment in facilities.

### 3. Energy Charge

The kWh charge and credit shall be equal to Noble's average cost of wholesale power. This rate as of the effective date of this rider is shown below:

All kWh $0.0794 per kWh

If the energy consumed by the member during the billing period exceeds the energy generated by the member's generation during the billing period, then such net energy shall be billed at the above rate.

If the energy generated by the member's generation during the billing period exceeds the electricity consumed by the member during the billing period, then such net energy shall be purchased by Noble at the above rate.

Any monthly bill resulting in a credit amount will be carried forward to the next monthly billing. Any credit remaining at the end of a calendar year will be paid by Noble to the member. The member is still liable for any applicable Indiana State sales tax.

### 4. Power Cost Adjustment

This adjustment applies to energy both sold and purchased by Noble. Refer to Appendix PCA.

## VII. METERING

One of the following metering options, if not already present, shall be installed on the member's premises by Noble to properly record the net energy of the net billing facility:

1. One main watt-hour meter capable of measuring the net flow of energy.
2. One main watt-hour meter measuring the flow of energy to the member and a second watt-hour meter measuring the flow of energy to Noble. The difference in readings will be used to obtain the measurement of net energy for monthly billing purposes.

Noble may, at its own expense, install additional meters to monitor the flow of electricity.

## VIII. CONNECTION AND DISCONNECTION

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

In order to isolate the net billing 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 net metering 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 net billing 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.

## IX. 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 net billing 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 REMC'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.
5. If the proposed generator is to be interconnected on a single-phase shared secondary, the total name plate capacity of all of the generators on the shared secondary, including the proposed generator, does not exceed 20 kW.

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

## X. 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 net billing installation, the member shall revert to the standard tariff in effect and applicable to the member.
4. Noble shall have access to the net billing 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.

## XI. TERMS OF PAYMENT

Refer to Appendix B.

## XII. LATE PAYMENT CHARGE

Refer to Appendix B.

## XIII. INTERPRETATION

Refer to Appendix B.

## XIV. ALL OTHER NON-RECURRING CHARGES

Refer to Appendix B.

## XV. TERMS AND CONDITIONS APPLICABLE TO RATE SCHEDULES

Refer to Appendix A.

## XVI. OPERATION ROUND UP

Refer to Appendix E.