

SABAH RENEWABLE ENERGY ENACTMENT 2024

SABAH RENEWABLE ENERGY (TECHNICAL AND OPERATIONAL
REQUIREMENTS) RULES 2024

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SABAH RENEWABLE ENERGY ENACTMENT 2024

(No. 18 of 2023)

SABAH RENEWABLE ENERGY (TECHNICAL AND OPERATIONAL
REQUIREMENTS) RULES 2024

(G.N.S 4 of 2024)

IN exercise of the powers conferred by section 17 and paragraph 63(d) of the Sabah Renewable Energy Enactment 2024, the Minister makes the following rules:

PART I

PRELIMINARY

Citation and commencement

1. (1) These rules may be cited as the Sabah Renewable Energy (Technical and Operational Requirements) Rules 2024.

(2) These Rules come into operation on 3 January 2024.

Interpretation

2. In these Rules, unless the context otherwise requires —

“acceptance test” means a test to measure the performance of a renewable energy installation at a designed generation output;

“communication facilities” means the facilities and equipment necessary, in accordance with prudent utility practices, to enable a designated control centre to communicate with a renewable energy installation connected to a connection point through a medium or high voltage direct connection;

“connection point” means the physical point where the supply lines of a renewable energy installation and electricity distribution network of a distribution licensee are connected;

“consumption meter”, in relation to a low voltage renewable energy installation connected to a connection point through a low voltage indirect connection,

means the meter used to record the electricity consumption referred to in paragraph 8(b);

“designated control centre”, in relation to a major renewable energy installation, means the control centre of the distribution licensee as designated in writing by the distribution licensee from time to time for the purposes of communicating with the major renewable energy installation;

“electrical protection scheme” means a scheme for detecting and protecting an installation from —

- (a) possible damage caused by electrical disturbances arising within the installation; and
- (b) other faults or malfunctions arising from the operation or non-operation of another person’s electrical protection scheme;

“emergency condition” means a situation that —

- (a) is described or regarded as such in any code issued by the Commission; or
- (b) in the distribution licensee’s reasonable judgment and based on prudent utility practices —
 - (i) presents an imminent physical threat of danger to life, health or property;
 - (ii) threatens the safety, reliability or security of its electricity distribution network;
 - (iii) could reasonably be expected to cause a significant disruption to its electricity distribution network; or
 - (iv) could reasonably be expected to adversely affect the distribution licensee’s ability to meet its obligations to provide safe, adequate and reliable electricity service to consumers, including other utilities with which the electricity distribution network is interconnected;

“high voltage” has the meaning assigned to it in regulation 2 of the Electricity Supply Regulations 2024;

“high voltage direct connection” means the connection of a renewable energy installation directly to a high voltage supply line;

“initial operation date”, in relation to a feed-in approval holder, means the date on which his or its renewable energy installation first delivers renewable energy to the distribution licensee’s electricity distribution network for testing purposes;

“insulation co-ordination study” means a study to determine the adequacy of insulation used in an electricity distribution network based on a proposed connection of a medium voltage renewable energy installation to a connection point;

“interconnection facilities” means the facilities and equipment necessary, in accordance with prudent utility practices, to connect a renewable energy installation to a connection point and enable a distribution licensee to receive renewable energy from the renewable energy installation while maintaining the stability of the electricity distribution network, including protection devices, metering equipment and applicable communication facilities;

“kW” means kilowatt;

“kWp” means kilowatt peak;

“low voltage” has the meaning assigned to it in regulation 2 of the Electricity Supply Regulations 2024;

“low voltage direct connection” means the connection of a renewable energy installation directly to a low voltage supply line;

“low voltage indirect connection” means the connection of a renewable energy installation to a supply line indirectly through the internal distribution board of the feed-in approval holder where the renewable energy installation is connected to an electrical point within the premises of the feed-in approval holder instead of the point of common connection;

“low voltage renewable energy installation” means a renewable energy installation having a net export capacity of up to and including 72kW or rated kWp of up to and including 72kWp;

“maintenance outage” means a planned outage for the purpose of performing work on a major renewable energy installation, in which work could be postponed by at least seventy-two hours, but in the opinion of the feed-in approval holder should not be postponed until the next scheduled outage;

“major renewable energy installation” means a renewable energy installation having a net export capacity exceeding 3MW or rated kWp exceeding 3,000kWp;

“medium voltage” has the meaning assigned to it in regulation 2 of the Electricity Supply Regulations 2024;

“medium voltage direct connection” means the connection of a renewable energy installation directly to a medium voltage supply line;

“medium voltage renewable energy installation” means a renewable energy installation having a net export capacity exceeding 72kW or rated kWp exceeding 72kWp;

“MW” means megawatt;

“net export capacity”, in relation to a non-PV installation, means the maximum level of electrical power which such installation can deliver to an electricity distribution network at the connection point;

“network reinforcement works” means works or actions to upgrade or reinforce a distribution licensee’s electricity distribution network in order to distribute renewable energy generated by a renewable energy installation in accordance with prudent utility practices;

“non-PV installation” means a renewable energy installation utilizing renewable resources other than solar photovoltaic;

“outage” means the occurrence of any loss of, interruption to or reduction in the ability of a renewable energy installation to generate renewable energy;

“ownership boundary”, in relation to a renewable energy installation, means the connection point;

“power system study” means a study to determine the optimal technically feasible method for a proposed connection of a medium voltage renewable energy installation to a connection point, including the matters set out in paragraphs 4(6)(a) to (e);

“protection co-ordination study” means a study on the co-ordination between the electrical protection schemes of a renewable energy installation and the distribution licensee’s electricity distribution network, including the calculation of all relay settings in the renewable energy installation based on the short circuit levels at the connection point;

“protection devices” means devices and equipment within an electrical protection scheme including relays, their associated circuit breakers and fuses;

“prudent utility practices” means the practices, methods and standards generally followed by the electricity supply industry in Malaysia during the applicable period, with respect to the design, construction, installation, testing, operation and maintenance of electricity generating and distribution installations of the same or similar type used by the renewable energy installation, interconnection

facilities, communication facilities or the electricity distribution network, as the case may be, and includes —

- (a) the requirements of all applicable laws including the Enactment, Electricity Supply Enactment 2024 and their subsidiary legislation;
- (b) the requirements of all codes issued by the Commission;
- (c) such requirements as may be determined by the Commission in the guidelines issued from time to time;
- (d) applicable guidelines issued by distribution licensees that are consistent with the requirements of paragraphs (a) to (c);
- (e) the operation and maintenance standards recommended by the suppliers and manufacturers of such electricity generating and distribution equipment;
- (f) the International Electrotechnical Commission standards; and
- (g) the Institute of Electrical and Electronics Engineers standards;

“PV installation” means a renewable energy installation utilizing solar photovoltaic as its renewable resource;

“qualified person” means a person possessing qualifications as set out in the Fifth Schedule;

“rated kWp”, in relation to a PV installation, means the maximum direct current power such installation can produce under standard test conditions of 1,000 watts per square meter of solar irradiation and 25 degrees Celsius ambient temperature;

“reliability run” means a test to measure the generation stability of a renewable energy installation over a period of time;

“revenue meter” means the metering equipment installed in accordance with rule 17 and utilized to measure the quantity of renewable energy generated by a renewable energy installation which is delivered through the interconnection cables up to a connection point; and

“scheduled outage” means a planned outage, other than a maintenance outage, that is required for —

- (a) the inspection, preventive maintenance or corrective maintenance, repair or improvement of a major renewable energy installation; or

- (b) a major overhaul of a major renewable energy installation in accordance with prudent utility practices,

which has been co-ordinated with the distribution licensee in accordance with subparagraphs 4(1) to (3) of the Fourth Schedule.

PART II

PLANNING

Connection confirmation check

3. (1) Subject to subrule (8), an eligible producer who proposes to construct —

- (a) a PV installation having a rated kWp exceeding 12kWp up to and including 425kWp; or
- (b) a non-PV installation having a net export capacity exceeding 12kW up to and including 425kW,

and connect the installation to a connection point shall, before making an application to the Commission for a feed-in approval under the Sabah Renewable Energy (Feed-In Approval and Feed-In Tariff Rate) Rules 2024, submit a written request to the distribution licensee whose electricity distribution network is proposed to be connected to the installation for such distribution licensee to carry out a connection confirmation check in respect of the proposed connection.

(2) The request submitted under subrule (1) shall be accompanied by the rated kWp or net export capacity of the proposed installation.

(3) Upon receipt of the request under subrule (1), the distribution licensee shall —

- (a) conduct a connection confirmation check to confirm whether the proposed connection is technically possible; and
- (b) prepare and submit a report of the connection confirmation check to the eligible producer in a form to be determined by the Commission,

within thirty days of receipt of such request.

(4) If the distribution licensee finds that the connection is not technically possible,

the distribution licensee shall clearly specify the reasons in the report prepared and submitted under subrule (3).

(5) The eligible producer shall pay —

- (a) one thousand ringgit to the distribution licensee as the costs for carrying out the connection confirmation check exceeding 12kW or 12kWp up to and including 180kW or 180kWp; or
- (b) five thousand ringgit to the distribution licensee as the costs for carrying out the connection confirmation check exceeding 180kW or 180kWp up to and including 425kW or 425kWp.

(6) A distribution licensee who fails to comply with subrule (3) or (4) commits an offence under these Rules.

(7) In the event of any dispute between the distribution licensee and eligible producer on any aspect of the connection confirmation check, the distribution licensee or eligible producer may appeal to the Commission within thirty days from the date of receipt of the report of the connection confirmation check referred to in paragraph (3)(b) and the determination of the Commission shall be final and binding.

(8) The provisions of subrule (1) shall not apply to an eligible producer who proposes to construct —

- (a) a PV installation to be ultimately connected to one distribution substation to which other existing PV installations are connected and the total rated kWp of such PV installations including the proposed PV installation exceed 425kWp; or
- (b) one or more PV installations proposed in a housing development area to be ultimately connected to one distribution substation and the total rated kWp of such PV installations exceed 425kWp.

(9) For the purpose of subrule (8), “housing development area” means an area of a single unit or multiple units of houses, shop houses, flats, condominiums and apartments developed or to be developed by one housing developer.

Power system study

4. (1) An eligible producer who proposes to construct —
- (a) a PV installation having a rated kWp exceeding 425kWp;
 - (b) a non-PV installation having a net export capacity exceeding 425kW;
or
 - (c) a PV installation as described in paragraph 3(8)(a) or 3(8)(b),

and connect the installation to a connection point shall, before making an application to the Commission for a feed-in approval under the Sabah Renewable Energy (Feed-In Approval and Feed-In Tariff Rate) Rules 2024, submit a written request to the distribution licensee whose electricity distribution network is proposed to be connected to the installation, for such distribution licensee to carry out or cause to be carried out a power system study in respect of the proposed connection.

(2) The request submitted under subrule (1) shall be accompanied by such technical information as may be determined by the Commission in respect of the proposed installation that is required by the distribution licensee in order to carry out the power system study.

(3) Upon receipt of the request under subrule (1) and the information under subrule (2), the distribution licensee shall carry out or cause to be carried out a power system study in accordance with these Rules and such other requirements as may be determined by the Commission.

(4) In the case of a request made by an eligible producer proposing to construct an installation as described in paragraph 3(8)(a), 3(8)(b), 4(1)(a) or 4(1)(b), the distribution licensee shall complete or cause the study to be completed within the period as set out in the second column of the First Schedule according to the net export capacity or rated kWp of the proposed installation as set out in the first column of the First Schedule.

(5) In the case of a request made by an eligible producer proposing to construct an installation as described in paragraph 3(8)(a), 3(8)(b), 4(1)(a) or 4(1)(b), the eligible producer shall pay to the distribution licensee the costs for carrying out the power system study the amount as set out in the third column of the First Schedule in accordance with the net export capacity or rated kWp of the proposed installation as set out in the first column of the First Schedule.

(6) Upon the completion of a power system study and payment of the applicable costs under subrule (5), the distribution licensee shall prepare and submit or caused to be prepared and submitted a report to the eligible producer setting out —

- (a) the technical feasibility of a connection between the proposed installation and a connection point;
- (b) the determination of the location of the connection point in accordance with rule 5;
- (c) any network reinforcement works required to be undertaken by the distribution licensee and the estimated time frame for the works;
- (d) any equipment ratings or specifications of the proposed installation required by the distribution licensee in order to safely connect it to the connection point; and
- (e) such other matters as may be determined by the Commission.

(7) In the event of any dispute between the distribution licensee and eligible producer on any aspects of the power system study, the distribution licensee or the eligible producer may appeal to the Commission within thirty days from the date of receipt of the report of the power system study referred to in subrule (6) and the determination of the Commission shall be final and binding.

(8) In the event of any increase in the net export capacity or rated kWp of the proposed installation after the completion of a power system study —

- (a) a new power system study shall be carried out by the distribution licensee; and
- (b) the provisions of subrules (2), (3), (4), (5), (6) and (7) shall apply, *mutatis mutandis*, to the new power system study.

(9) A distribution licensee who fails to comply with subrule (3), (4) or (6) commits an offence under these Rules.

Determination of location of connection point

5. (1) A distribution licensee shall determine the location of the connection point which is —

- (a) nearest to a proposed renewable energy installation; or
 - (b) at any other location.
- (2) The distribution licensee in determining the location of a connection point under subrule (1) shall have regard to —
 - (a) the total net export capacity or rated kWp of installations including the proposed renewable energy installations as specified in the second column of the Second Schedule that can be technically connected to the connection point at its nominal voltage level as specified in the first column of the Second Schedule;
 - (b) public safety and private safety; and
 - (c) the technical feasibility of a connection between the proposed installation and a connection point based on the results of the power system study carried out in accordance with rule 4.
- (3) The cable connecting the renewable energy installation to the distribution licensee's electricity distribution network shall terminate at the distribution licensee's nearest existing facilities in such network where the revenue meter shall also be located.
- (4) If a separate switching station is required in accordance with prudent utility practices and the distribution licensee requires the feed-in approval holder to provide such separate switching station outside the distribution licensee's existing premises —
 - (a) such switching station shall be located as close as reasonably practicable to the distribution licensee's existing premises, having regard to the availability, suitability and value of land to be acquired by the feed-in approval holder for the switching station; and
 - (b) the connection point and revenue meter shall be located at the location of such switching station.
- (5) If a distribution licensee determines the location of a connection under paragraph (1)(b), the provision of subrule 11(2) shall apply.
- (6) In the event of any difference of opinion between a distribution licensee and any eligible producer as to whether the location as determined by the distribution

licensee under paragraph 5(1)(a) is the nearest point to the proposed renewable energy installation, either of them may appeal to the Commission within thirty days from the date of receipt of the report of the power system study referred to in subrule 4(6) and the determination of the Commission shall be final and binding.

(7) If the Commission determines that the location of the connection point is not at the nearest point to the proposed renewable energy installation, the Commission may —

- (a) re-determine the location of the connection point; or
- (b) allow the location of the connection point to remain at the point as determined by the distribution licensee.

(8) If the Commission makes the determination under paragraph 7(b), the provision of subrule 11(2) shall apply.

(9) The location of the connection point determined or re-determined, as the case may be, under this rule shall be the location identified by the eligible producer in making an application to the Commission for a feed-in approval.

PART III

CONNECTION TO ELECTRICITY DISTRIBUTION NETWORK

Conditions to connection

6. (1) No connection between a renewable energy installation owned by a feed-in approval holder and a connection point shall be made by a distribution licensee unless —

- (a) the feed-in approval holder and distribution licensee have entered into a renewable energy power purchase agreement in accordance with section 14 of the Enactment and the Sabah Renewable Energy (Renewable Energy Power Purchase Agreement) Rules 2024;
- (b) the renewable energy power purchase agreement referred in paragraph (a) has been registered by the Commission in accordance with subsection 14(6) of the Enactment;

- (c) the feed-in approval holder has submitted a written application to the distribution licensee for connection of his or its renewable energy installation to a connection point;
- (d) the connection has been made at the location referred to in subrule 5(9);
- (e) the method of connection is as permitted under this Part;
- (f) the requirements of rule 13 and, wherever applicable, subparagraph 6(7) of the Third Schedule have been met; and
- (g) the connection is carried out by the distribution licensee or a qualified person authorized by the distribution licensee in accordance with prudent utility practices.

(2) Subject to subrule (1), a distribution licensee shall connect a renewable energy installation to the applicable connection point —

- (a) in the case of an application for connection made by a feed-in approval holder under subsection 15(1) of the Enactment relating to a low voltage renewable energy installation, within thirty days of receipt of such application; and
- (b) in the case of an application for connection made by a feed-in approval holder under subsection 15(1) of the Enactment relating to a medium voltage renewable energy installation, within sixty days of receipt of such application.

(3) A person who contravenes subrule (1) commits an offence under these Rules.

Low voltage direct connection

7. A distribution licensee may connect a low voltage renewable energy installation through a low voltage direct connection to a connection point that is technically feasible according to prudent utility practices.

Low voltage indirect connection

8. (1) A distribution licensee may connect a low voltage renewable energy installation to a connection point through a low voltage indirect connection if —

- (a) the installation utilizes solar photovoltaic as its renewable resource and the installation is installed in the premises of the feed-in approval holder;
- (b) the distribution licensee's supply line at the connection point supplies electricity to such premises exclusively for the consumption of the feed-in approval holder who owns such renewable energy installation; and
- (c) the total net export capacity or rated kWp of installations including the proposed renewable energy installation as specified in the second column of the Second Schedule does not exceed the nominal voltage level of the connection point as specified in the first column of the Second Schedule.

(2) Notwithstanding subrule (1), the low voltage indirect connection shall not affect the distribution licensee's rights as provided under the Electricity Supply Enactment 2024.

Medium voltage direct connection

9. (1) Subject to rule 10, a distribution licensee shall connect a medium voltage renewable energy installation to a connection point through a medium voltage direct connection, provided that such connection is found to be technically feasible pursuant to a connection confirmation check carried out under rule 3 or a power system study carried out under rule 4.

(2) If a medium voltage direct connection is required to be carried out under subrule (1), the relevant feed-in approval holder and distribution licensee shall comply with the provisions of the Third Schedule.

High voltage direct connection

10. (1) A distribution licensee may connect a medium voltage renewable energy installation to a connection point through a high voltage direct connection if —

- (a) the distribution licensee and feed-in approval holder agree to such connection; and
- (b) such connection is found to be technically feasible pursuant to a power system study carried out under rule 4.

(2) If a high voltage direct connection is agreed to be carried out under subrule (1), the feed-in approval holder and distribution licensee shall comply with the provisions of the Third Schedule and all other applicable prudent utility practices.

PART IV

RESPONSIBILITIES AND COSTS

Pre-operational responsibilities and costs

11. (1) Subject to subrule (2) —

- (a) a feed-in approval holder shall be responsible at his or its own cost for carrying out —
 - (i) the design, construction, installation and testing of his or its renewable energy installation and applicable interconnection facilities up to the connection point; and
 - (ii) any necessary modification to the distribution licensee's existing electricity distribution network required to facilitate the acceptance of renewable energy generated by the renewable energy installation,

in accordance with prudent utility practices; and

- (b) a distribution licensee shall be responsible at its own cost for carrying out any required network reinforcement works in accordance with prudent utility practices to facilitate the transfer of renewable energy from the connection point to other parts of its electricity distribution network, where applicable, in the manner set out in the report of a power system study carried out under rule 4, unless the feed-in approval holder and distribution licensee mutually agree otherwise.

(2) If the location of a connection point is determined by a distribution licensee under paragraph 5(1)(b), the distribution licensee shall reimburse the feed-in approval holder the difference, if any, between —

- (a) the costs of all installations, including any applicable interconnection facilities, and works required for the connection of the renewable energy installation up to the location of the connection point as determined by the distribution licensee; and
- (b) the costs of all installations, including any applicable interconnection facilities, and works required for the connection of the renewable energy installation up to the location of a connection point situated at the point of the distribution licensee's electricity distribution network that is nearest to the renewable energy installation, having regard to the matters described in subrule 5(2).

Operational responsibilities and costs

12. (1) Subject to subrule (2) —

- (a) a feed-in approval holder shall own, and shall be responsible at his or its own cost for operating and maintaining all installations located within his or its ownership boundary;
- (b) a distribution licensee shall own, and shall be responsible at its own cost for operating and maintaining all installations located beyond the feed-in approval holder's ownership boundary; and
- (c) for multiple feed-ins to one connection point where the interconnection cables terminate at a switching station located in proximity to the renewable energy installations with one cable interconnection between this switching station and the connection point of the distribution licensee, one feed-in approval holder shall own all renewable energy installations, and —
 - (i) unit losses in the interconnection between the switching station and the distribution licensee connection point will be apportioned to the respective renewable energy installations on a pro-rated basis; and
 - (ii) the feed-in approval holder is responsible for the operation and

maintenance of the switching station and the interconnection up to distribution licensee connection point,

in accordance with prudent utility practices.

(2) A feed-in approval holder shall transfer such assets to a distribution licensee as may be required to comply with the provision of subrule (1).

(3) The responsibilities specified in subrule (1) shall be without prejudice to any provisions in the renewable energy power purchase agreement entered into between a feed-in approval holder and distribution licensee under the Sabah Renewable Energy (Renewable Energy Power Purchase Agreement) Rules 2024 dealing with their rights and liabilities in the event that one of them is unable to operate his or its installation, or any part thereof, due to a fault, malfunction or other failure of any installation, or part thereof, of the other.

(4) The distribution of the unit losses in the interconnection and the responsibilities of a feed-in approval holder specified in subparagraphs (1)(c)(i) and (1)(c)(ii) shall be made in a separate written agreement between the distribution licensee and the feed-in approval holder to cater for the distribution and responsibilities.

Electrical protection schemes

13. (1) A feed-in approval holder and distribution licensee shall design, procure and install, and be responsible for the cost, type, design and installation of, his or its own electrical protection scheme in accordance with prudent utility practices.

(2) The distribution licensee shall ensure that the electrical protection schemes are properly co-ordinated for the reliable and safe operation of its electricity distribution network.

(3) The feed-in approval holder shall install an electrical protection scheme of the type and design which ensures that a fault occurring within the renewable energy installation does not adversely affect any part of the electricity distribution network.

(4) The distribution licensee shall install an electrical protection scheme of the type and design which ensures that a fault occurring within the electricity distribution network does not adversely affect any part of the renewable energy installation.

(5) A distribution licensee and feed-in approval holder shall install an electrical protection scheme that contain protection devices which, on the detection of a fault or malfunction, isolate the faulty part of the installation to —

- (a) minimize equipment damage and safety hazards during such fault or malfunction; and
- (b) maintain the continuity of power supply to the functioning parts of the installation.

PART V

COMMENCEMENT OF OPERATION

Acceptance test

14. (1) A feed-in approval holder shall, upon completion of the design and construction of his or its renewable energy installation, carry out or caused to be carried out an acceptance test on the installation in accordance with such requirements and procedures as may be determined by the Commission.

(2) Subject to subrule (1), a feed-in approval holder shall submit an acceptance test report for the installation prepared by a qualified person to the Commission within seven days from the date of completion of the acceptance test.

(3) A feed-in approval holder shall not make or permit to be made any material modification to the design or physical form of the renewable energy installation except with the prior written consent of the Commission if the modification results in any change in any information earlier submitted by or on behalf of the feed-in approval holder to the Commission in the application for a feed-in approval under the Sabah Renewable Energy (Feed-In Approval and Feed-In Tariff Rate) Rules 2024.

Feed-in tariff commencement date

15. (1) Unless otherwise permitted under the terms of an effective renewable energy power purchase agreement, the feed-in tariff commencement date shall not occur until —

- (a) the feed-in approval holder submits to the distribution licensee and the Commission —
 - (i) in relation to a renewable energy installation, a certificate from a qualified person stating that the renewable energy installation and

interconnection facilities have been designed, constructed, installed and tested in accordance with prudent utility practices; and

- (ii) in relation to a renewable energy installation connected to a connection point through a medium or high voltage direct connection, the documents described in paragraph 8 of the Third Schedule;
 - (b) where applicable, the feed-in approval holder submits to the Commission the documents specified in the third column of the First Schedule to the Sabah Renewable Energy (Feed-In Approval and Feed-In Tariff Rate) Rules 2024; and
 - (c) the meters to measure the renewable energy generated and delivered by the renewable energy installation have been sealed by the distribution licensee as co-ordinated with and witnessed by the feed-in approval holder within such period as may be determined by the Commission.
- (2) Subject to section 19 of the Enactment, a feed-in tariff commencement date shall not occur —
- (a) earlier than six months before the scheduled feed-in tariff commencement date specified in the applicable feed-in approval; or
 - (b) later than thirty-first day of December of the calendar year of the scheduled feed-in tariff commencement date specified in the applicable feed-in approval,

unless the prior written approval of the Commission is obtained.

(3) A feed-in approval holder shall provide the distribution licensee and the Commission with not less than fourteen days written notice before the estimated occurrence of the feed-in tariff commencement date.

(4) The Commission shall, whenever it is satisfied that the requirements under subrule (1) have been fulfilled, confirm in writing the feed-in tariff commencement date.

PART VI

OPERATION OF RENEWABLE ENERGY INSTALLATION

Operation consistent with prudent utility practices

16. (1) A feed-in approval holder shall operate his or its renewable energy installation in accordance with prudent utility practices.

(2) Without prejudice to the generality of subrule (1) —

(a) a feed-in approval holder who owns a major renewable energy installation and a distribution licensee shall comply with the provisions of the Fourth Schedule; and

(b) a feed-in approval holder who owns a renewable energy installation having a net export capacity exceeding 2MW or rated kWp exceeding 2,000kWp shall, at his or its own cost, purchase, install and operate such interconnection facilities as may be required for the operation of his or its installation and delivery of renewable energy to the distribution licensee in accordance with prudent utility practices.

(3) A person who fails to comply with subrule (1) commits an offence under these Rules.

PART VII

METERING AND PAYMENT

Revenue meter

17. (1) A feed-in approval holder shall, at his or its own cost, cause to be procured and installed a revenue meter in accordance with prudent utility practices.

(2) A feed-in approval holder shall ensure that the specifications, type and location of the revenue meter comply with prudent utility practices and such requirements as may be determined by the Commission.

(3) The revenue meter shall be —

- (a) installed by the distribution licensee or a qualified person authorized by the distribution licensee;
- (b) sealed by the distribution licensee; and
- (c) owned and maintained by the distribution licensee or feed-in approval holder in accordance with rule 12.

(4) No person may break the seal on a revenue meter except pursuant to an inspection or test carried out under rule 18.

(5) A feed-in approval holder shall, at his or its own cost, cause to be procured and installed a check revenue meter in accordance with prudent utility practices.

Inspection and testing of revenue meter

18. (1) A distribution licensee or feed-in approval holder may at any time submit a written request to the Commission to inspect or test a revenue meter.

(2) Upon receiving the written request under subrule (1), the Commission shall —

- (a) inspect or test the revenue meter not later than fourteen working days from receipt of the request submitted under subrule (1) or any other extended period as determined by the Commission;
- (b) provide the relevant distribution licensee and feed-in approval holder with not less than twenty-four hours' prior written notice of such inspection or test; and
- (c) permit the distribution licensee, feed-in approval holder and their representatives to witness such inspection or test and any adjustment made to the revenue meter.

(3) If any revenue meter is found to be defective or inaccurate by more than the extent allowable under prudent utility practices, the revenue meter shall be adjusted, repaired, recalibrated or replaced by the distribution licensee at its own cost.

(4) If a check revenue meter has been installed and the feed-in approval holder and the distribution licensee are unable to agree on the amount of adjustment necessary to correct the measurements made by the defective or inaccurate revenue meter referred to in subrule (3), the check revenue meter shall be used to determine the amount of such inaccuracy.

(5) If there is no check revenue meter, or if the check revenue meter is also found to be defective or inaccurate by more than the extent allowable under prudent utility practices, and the feed-in approval holder and distribution licensee are unable to agree on the amount of adjustment necessary to correct the measurements made by the defective or inaccurate revenue meter or check revenue meter, the distribution licensee shall install a new and calibrated meter in parallel with the revenue meter to determine the inaccuracy of the revenue meter.

(6) If the feed-in approval holder and the distribution licensee are unable to agree on the actual period during which the inaccurate measurements were made, the period during which the measurements are to be adjusted shall be as follows:

- (a) in respect of a renewable energy installations having a net export capacity exceeding 72kW or rated kWp exceeding 72kWp, one half of the period calculated from the last previous test of the revenue meter to the date of the current test that found such revenue meter to be defective or inaccurate; and
- (b) in respect of renewable energy installations having a net export capacity up to and including 72kW or rated kWp up to and including 72kWp, three months prior to the date on which the revenue meter is found to be defective or inaccurate.

(7) If the period specified under subrule (6) covers a period for which feed-in tariffs have already been paid by the distribution licensee to the feed-in approval holder, the distribution licensee shall use the corrected measurement as determined under subrules (3), (4), (5) and (6) to recalculate the amount of feed-in tariffs due for the period of inaccuracy.

(8) The feed-in tariffs which have been paid to the feed-in approval holder shall be subtracted from the re-calculated amount of feed-in tariffs due for the period of inaccuracy.

(9) The balance of the subtraction made under subrule (8), if any, shall be paid —

- (a) if positive, by the distribution licensee to the feed-in approval holder; or
- (b) if negative, by the feed-in approval holder to the distribution licensee.

(10) Any balance required to be paid under subrule (9) shall be made within fifteen calendar days from the date of receipt by the distribution licensee or feed-in approval holder, as the case may be, of a statement from the feed-in approval holder or distribution licensee, as the case may be, requesting such balance.

(11) Any balance required to be paid under paragraph 18(9)(a) may be set off against any payment due from the feed-in approval holder to the distribution licensee.

Meter readings

19. (1) Subject to subrules (2) and (5), a distribution licensee shall —

- (a) read all revenue meters on a monthly basis; and
- (b) not later than seven days after reading each revenue meter, issue a payment advice to the relevant feed-in approval holder setting out —
 - (i) the amount of renewable energy generated and delivered by the feed-in approval holder's renewable energy installation to the distribution licensee; and
 - (ii) the amount of feed-in tariffs payable by the distribution licensee to the feed-in approval holder for such renewable energy.

(2) If a low voltage renewable energy installation is connected to a connection point through a low voltage indirect connection, the feed-in approval holder who owns such installation shall read the applicable revenue meter and consumption meter on the same day and at as proximate in time as possible on a monthly basis in such manner as may be specified by the distribution licensee.

(3) In the event it is not possible for the licensee to read the meter due to the following circumstances:

- (a) the gate is locked;
- (b) the door is locked;
- (c) the owner of the premise or its agent denies entry;
- (d) the premises is guarded by a fierce and loose dog;
- (e) the meter is blocked from normal sight;
- (f) where the meter glass is not clean, not clear or foggy due to the consumer's act;
- (g) the circumstances are beyond the licensee's control such as natural disaster, passage to the premise is blocked due to riot, commotion and strike; or
- (h) any other circumstances which would endanger to the safety of licensee,

the licensee shall bill the consumer based upon the consumer's consumption record and history for the previous three months consecutively and make the necessary adjustment to the consumer's account when the actual meter reading is obtained.

(4) The feed-in approval holder shall submit the readings made under subrule (2) to the distribution licensee, in such form and method as may be specified by the distribution licensee, not later than the seventh day of the month following the month during which the renewable energy was generated and delivered by the feed-in approval holder to the distribution licensee.

(5) The distribution licensee shall, not later than seven days after receiving the meter readings submitted under subrule (3), issue a payment advice to the feed-in approval holder setting out —

- (a) the amount of renewable energy generated and delivered by the feed-in approval holder to the distribution licensee; and
- (b) the amount of feed-in tariffs payable by the distribution licensee to the feed-in approval holder for such renewable energy.

(6) A distribution licensee may request a feed in approval holder to read the revenue meter in respect of a renewable energy installation having a net export capacity of less than 72kW or rated kWp of less than 72kWp on the distribution licensee's behalf.

(7) If the feed-in approval holder agrees to read the revenue meter under subrule (6), the feed-in approval holder shall submit the revenue meter reading to the distribution licensee in such form and method as specified by the distribution licensee.

(8) The distribution licensee shall, not later than seven days after receiving the meter readings submitted under subrule (7), issue a payment advice to the feed-in approval holder setting out —

- (a) the amount of renewable energy generated and delivered by the feed-in approval holder's renewable energy installation to the distribution licensee; and
- (b) the amount of feed-in tariffs payable by the distribution licensee to the feed-in approval holder for such renewable energy.

(9) Without prejudice to subrules 18(3), 18(4), 18(5), 18(6), 18(7), 18(8), 18(9), 18(10) and 18(11), meter readings under this rule shall be *prima facie* evidence

of the amount of renewable energy supplied by the feed-in approval holder to the distribution licensee.

Payment of feed-in tariffs

20. (1) A distribution licensee shall pay the applicable feed-in tariffs to each feed-in approval holder not later than thirty days after the issuance of a payment advice under paragraph 19(1)(b), subrule 19(5) or 19(8).

(2) If a distribution licensee fails to —

- (a) pay a feed-in approval holder the applicable feed-in tariffs in accordance with subrule (1); or
- (b) issue a payment advice to a feed-in approval holder under paragraph 19(1)(b), subrule 19(5) or 19(8),

the feed-in tariffs which the feed-in approval holder would have otherwise received if not for such failure shall be a debt due to the feed-in approval holder by the distribution licensee.

Disputes

21. Any claim, difference of opinion or dispute between a feed-in approval holder and distribution licensee arising out of or in connection with this Part shall be adjudicated and resolved in accordance with any applicable provisions of the renewable energy power purchase agreement entered into between them.

PART VIII

GENERAL

Prudent utility practices

22. All actions required by these Rules or taken pursuant to these Rules by any person shall be consistent with prudent utility practices.

Qualified persons

23. (1) A person who carries out the works as specified in column one of the Fifth Schedule shall possess the qualifications as specified in column two of the Fifth Schedule.

(2) A person who fails to comply with subrule (1) commits an offence under these Rules.

Approval of drawings, plans and other documents

24. Any review, comment or approval by the Commission or distribution licensee of any drawings, plans or other documents submitted by a feed-in approval holder under these Rules or any inspection or test undertaken by the Commission or distribution licensee of any renewable energy installation shall not —

- (a) constitute an endorsement of the design of the renewable energy installation;
- (b) constitute a warranty or other assurance by the Commission or distribution licensee of the safety, durability or reliability of the installation; or
- (c) release the feed-in approval holder from any of his or its duties, obligations or liabilities imposed by or provided for under these Rules or under the provisions of any renewable energy power purchase agreement.

Extension of time

25. (1) Notwithstanding anything contained in these Rules, where a time period is specified under these Rules or in any request by the Commission for an act to be done or a condition to be fulfilled, the person affected may request in writing to the Commission for an extension of time.

(2) The Commission may, upon receipt of the request made under subrule (1), allow such extension of time as it deems fit, provided that such person has furnished sufficient evidence to the Commission's satisfaction that the proposed extension of time —

- (a) is required not as a result of such person's act, omission or negligence;
- (b) could not have been reasonably foreseeable at the time of the application for the grant of the feed-in approval;

(c) is just and reasonable; and

(d) is not inconsistent with the matters set out in subsection 5(3) of the Enactment.

General penalty

26. Any person who commits an offence under these Rules shall, on conviction, be liable to a fine not exceeding three hundred thousand ringgit or to imprisonment for a term not exceeding three years or to both.

Sabah Lawnet

FIRST SCHEDULE

[Rule 4]

COMPLETION PERIOD AND COSTS FOR POWER SYSTEM STUDY

(1)	(2)	(3)
<i>Net export capacity or rated kWp of renewable energy installation</i>	<i>Period to complete power system study [commencing from the day all the information is provided under subrule 4(2)]</i>	<i>Power system study costs (RM)</i>
1. Above 425kW and up to and including 1MW or above 425kWp and up to and including 1,000kWp	30 days	20,000 per installation
2. Above 1MW and up to and including 10MW or above 1,000kWp and up to and including 10,000kWp	40 days	40,000 per installation
3. Above 10MW and up to and including 30MW or 10,000kWp and up to and including 30,000kWp	50 days	60,000 per installation
4. Above 425kW and up to and including 1MW or above 425kWp and up to and including 1,000kWp for housing development or individual applications on the PV to be connected to one distribution substation	60 days	500 per installation

1. An additional period of 10 days shall be granted to the distribution licensee if an insulation co-ordination study is deemed necessary and carried out by the distribution licensee as part of the power system study.
2. Additional costs of —
 - (a) twenty thousand ringgit shall be paid to the distribution licensee if an insulation co-ordination study is deemed necessary and carried out by the distribution licensee as part of the power system study; and
 - (b) ten thousand ringgit shall be paid to the distribution licensee for PV installations where a dynamic study to determine voltage fluctuations is necessary, and the solar radiation data is provided by the feed-in approval holder.

SECOND SCHEDULE

[Rules 5 and 8]

TOTAL NET EXPORT CAPACITY OR RATED kW_p OF INSTALLATIONS THAT CAN BE TECHNICALLY CONNECTED TO A CONNECTION POINT AT ITS NOMINAL VOLTAGE LEVEL

(1)	(2)
<i>Nominal voltage level at connection point</i>	<i>Total net export capacity or rated kW_p of installations including the proposed renewable energy installation that can be technically connected to the connection point</i>
1. 230 volts	Up to and including 12kW or 12kW _p
2. 400 volts	Up to and including 425kW or up to and including 425kW _p
3. 11 kilovolts (distribution substation)	Up to and including 2MW or up to and including 2,000kW _p
4. 11 kilovolts (main distribution substation, main switching station and main intake substation)	Up to and including 10MW or up to and including 10,000kW _p
5. 33 kilovolts	Up to and including 30MW or up to and including 30,000kW _p

THIRD SCHEDULE

[Rules 9 and 10]

PROVISIONS APPLICABLE TO MEDIUM AND HIGH VOLTAGE DIRECT CONNECTIONS

Submission and review of conceptual design of interconnection facilities

1. (1) A feed-in approval holder shall, not later than sixty days before commencing any physical construction of the interconnection facilities, submit to the distribution licensee —

- (a) the conceptual design of such facilities; and
- (b) a certificate from a qualified person certifying that the interconnection facilities when constructed in accordance with such conceptual design has conformed to prudent utility practices and the minimum requirements of the distribution licensee's applicable specifications and operational characteristics.

(2) The distribution licensee may at its own cost —

- (a) review the conceptual design submitted under subparagraph (1); and
- (b) recommend to the feed-in approval holder modifications, revisions and improvements to the interconnection facilities in accordance with prudent utility practices, provided that such recommendations are made in writing to the feed-in approval holder not later than thirty days after the submission made under subparagraph (1).

(3) The feed-in approval holder shall, at his or its own cost, comply with any recommendation made by the distribution licensee under subparagraph (2)(b) if it relates to the safe and secure operation of the interconnection facilities with the distribution licensee's electricity distribution network.

Rights of way

2. (1) A feed-in approval holder shall, at his or its own cost, acquire all necessary easements, licences, rights-of-way and access rights required to construct and install the interconnection facilities including the laying of any cables and erection of overhead lines.

(2) The distribution licensee shall, whenever possible, assist the feed-in approval holder with such acquisition.

(3) The feed-in approval holder shall reimburse the distribution licensee for all reasonable expenses incurred by the distribution licensee in providing such assistance.

Protection co-ordination study

3. (1) The feed-in approval holder shall procure at his or its own cost a protection co-ordination study to be carried out by a qualified person appointed by him.

(2) The feed-in approval holder shall submit to the distribution licensee not less than sixty days prior to the initial operation date —

(a) the results of the protection co-ordination study; and

(b) details of the proposed electrical protection scheme, including electrical protection methods, relay types, relay settings and breaker ratings together with the relevant calculations, for the generators, transformers and interconnecting cables.

(3) Within thirty days of receiving the submission made under subparagraph (2), the distribution licensee shall inform the feed-in approval holder in writing as to whether such proposed electrical protection scheme including electrical protection methods, relay types, relay settings and breaker ratings are acceptable to the distribution licensee.

(4) If such proposed electrical protection scheme, relay types, relay settings and breaker ratings are not acceptable to the distribution licensee —

(a) the distribution licensee shall specify in writing to the feed-in approval holder its reason for such non-acceptance; and

(b) the feed-in approval holder shall comply at his or its own cost with any reasonable requests of the distribution licensee to provide an acceptable electrical protection scheme, relay types, relay settings and breaker ratings.

Monitoring and inspection of construction of interconnection facilities

4. (1) The distribution licensee may, at its own cost, monitor and inspect the construction of the interconnection facilities, including carrying out inspections at the site of such facilities.

(2) The feed-in approval holder shall, at his or its own cost, comply with any request of the distribution licensee relating to —

(a) the compliance with the conceptual design of the interconnection facilities; and

(b) the safe and secure operation of the interconnection facilities in parallel with the distribution licensee's electricity distribution network.

No modification to interconnection facilities without consent

5. The feed-in approval holder shall not make or permit to be made any material modification to the design or form of the interconnection facilities except with the prior written consent of —

- (a) the distribution licensee; and
- (b) the Commission, if the modification results in any change in any information earlier submitted by the feed-in approval holder to the Commission in the application for its feed-in approval under the Sabah Renewable Energy (Feed-In Approval and Feed-In Tariff Rate) Rules 2024.

Requirements for initial operation date

6. (1) Upon completion of the construction of the interconnection facilities, the feed-in approval holder shall submit a written notice to the distribution licensee informing the distribution licensee of such completion, accompanied by —

- (a) the feed-in approval holder’s proposed initial operation date which shall fall not less than fourteen days after the date of such notice;
- (b) the feed-in approval holder’s proposed hourly schedule of renewable energy to be generated and delivered by the renewable energy installation for the period from the proposed initial operation date until the feed-in tariff commencement date; and
- (c) a certificate from a qualified person stating that the interconnection facilities have been designed and constructed in accordance with prudent utility practices.

(2) The distribution licensee shall, at its own cost, not later than fourteen days after receiving the notice in subparagraph (1), inspect the interconnection facilities in the presence of the feed-in approval holder or his or its representatives.

(3) After carrying out the inspection under subparagraph (2), the distribution licensee shall —

- (a) accept the proposed initial operation date; or
- (b) reschedule the initial operation date of the renewable energy installation if it reasonably determines that the parallel operation of the interconnection facilities with its electricity distribution network could adversely affect the safety and security of such network.

(4) In the event of any rescheduling of the initial operation date under subparagraph (3)(b), the distribution licensee shall, not later than three days after the inspection under subparagraph (2), inform the feed-in approval holder in writing of any defects or deficiencies identified during such inspection.

(5) The feed-in approval holder shall rectify the defects or deficiencies.

(6) Upon completion of the rectification under subparagraph (5), the provisions of subparagraphs (1), (2), (3) and (4) shall apply, *mutatis mutandis*, in respect of the rectified interconnection facilities.

(7) The initial operation date shall only occur upon the fulfillment of the following conditions:

- (a) the procedure as set out in subparagraphs (1) to (6) has been completed;
- (b) the feed-in approval remains in full force and effect;
- (c) no material default by the feed-in approval holder under the renewable energy power purchase agreement has occurred and continue to occur;
- (d) all permits, licences, approvals or other governmental authorizations required under applicable laws to construct, own and operate the renewable energy installation have been obtained and remain in full force and effect; and
- (e) the feed-in approval holder has submitted to the distribution licensee a written confirmation that the conditions set out in subparagraphs (a) to (d) have been fulfilled.

(8) The feed-in approval holder shall, within five days from the initial operation date, provide the distribution licensee and the Commission with written confirmation of the occurrence of the initial operation date.

Reliability run

7. Upon the occurrence of the initial operation date, the feed-in approval holder shall carry out a reliability run on his or its renewable energy installation in accordance with such requirements and procedures, and for such duration, as may be determined by the Commission.

Requirements for feed-in tariff commencement date

8. Unless otherwise permitted under the terms of an effective renewable energy power purchase agreement, the feed-in tariff commencement date shall only occur upon the fulfillment of the following conditions:

- (a) the feed-in approval holder has submitted to the distribution licensee and the Commission a certificate from a qualified person stating that the renewable energy installation has successfully completed a reliability run in accordance with paragraph 7;
- (b) the feed-in approval remains in full force and effect;
- (c) no material default by the feed-in approval holder under the renewable energy power purchase agreement has occurred and continue to occur;
- (d) all permits, licences, approvals or other governmental authorizations required under applicable laws to own and operate the renewable energy installation have been obtained and remain in full force and effect; and

- (e) the feed-in approval holder has submitted to the distribution licensee a written confirmation that the conditions set out in subsubparagraphs (a) to (d) have been fulfilled.

No change to initial operation date or feed-in tariff commencement date without approval

9. No change to the scheduled initial operation date or feed-in tariff commencement date of a renewable energy installation from that set out in the feed-in approval applicable to such installation shall be made by the feed-in approval holder or distribution licensee without the prior written approval of the Commission.

Submission of drawings and manuals to the distribution licensee

10. A feed-in approval holder shall, not later than fourteen days before the initial operation date, submit to the distribution licensee —

- (a) a copy of as-built drawings of the renewable energy installation and interconnection facilities; and
- (b) a copy of operation and maintenance manuals in connection with the interconnection facilities.

Transfer of interconnection facilities

11. (1) Upon the completion of the interconnection facilities, the feed-in approval holder shall transfer the interconnection facilities beyond his or its ownership boundary to the distribution licensee and take all actions necessary to effectuate the transfer to the distribution licensee of all rights, title and interest to the interconnection facilities so that the distribution licensee shall become the owner of such interconnection facilities.

(2) Without prejudice to paragraph 12, the distribution licensee shall be responsible for the operation and maintenance of the interconnection facilities following the transfer under subparagraph (1).

Defects in interconnection facilities

12. (1) Subject to subparagraph (2), if the distribution licensee discovers that the interconnection facilities or any part of the interconnection facilities that has been transferred to it —

- (a) was not designed, constructed, installed and tested in accordance with prudent utility practices; or
- (b) contains any defect in its design, materials or workmanship,

the feed-in approval holder shall, at his or its own cost, make all necessary repairs or replacements so that the interconnection facilities conform with the requirements of prudent utility practices and shall be free from any such defect.

(2) The obligation of the feed-in approval holder under subparagraph (1) shall not apply in respect of any non-conformance or defect arising —

- (a) from the distribution licensee's failure to operate and maintain the interconnection facilities in accordance with the operation and maintenance manuals referred to in paragraph 10 and prudent utility practices;
- (b) from the effects of ordinary wear and tear or erosion or corrosion which such facilities were not designed for; or
- (c) after an initial period of twelve months from the feed-in tariff commencement date, and in respect of any part of such facilities that was repaired or replaced during such initial period, after a period of twelve months from the date of completion of such repair or replacement.

Sabah Lawnet

FOURTH SCHEDULE

[Rule 16]

PROVISIONS APPLICABLE TO MAJOR RENEWABLE ENERGY INSTALLATIONS

Notification of daily availability of renewable energy

1. A feed-in approval holder shall, commencing from the day immediately before his or its feed-in tariff commencement date and continuing for each day throughout the effective period, notify to the designated control centre —

- (a) the estimated operational and maximum levels of renewable energy which his or its major renewable energy installation can make available to the distribution licensee; and
- (b) any anticipated interruption to or unavailability of renewable energy from such installation and the level of the interruption or unavailability of the renewable energy,

for the subsequent day.

Normal operation

2. A feed-in approval holder shall, during normal operating conditions, provide the designated control centre such continuous information as is reasonably practicable under prevailing circumstances on the operational conditions of the major renewable energy installation, including its active and reactive power export capacity, voltage, frequency and any other condition that may affect the stability of the distribution licensee's electricity distribution network.

Emergency condition

3. During an emergency condition, the feed-in approval holder shall —

- (a) upon a request made by the designated control centre, make all reasonable efforts to deliver renewable energy from his or its major renewable energy installation into the distribution licensee's electricity distribution network;
- (b) comply with reasonable instructions of the designated control centre until the electricity distribution network has returned to normal;
- (c) co-operate with the designated control centre in establishing emergency plans including a recovery plan from a local or widespread electrical blackout or load curtailment;
- (d) co-operate with the designated control centre in executing restoration procedures requiring an orderly plan for the safe and rapid restoration of the distribution licensee's electricity distribution network;
- (e) if his or its major renewable energy installation has been isolated from the

distribution licensee's electricity distribution network due to an emergency condition —

- (i) be allowed to reconnect the installation only under the direction of the designated control centre; and
- (ii) be ready for his or its installation to pick up load as soon as possible;
- (f) be contactable by the designated control centre at all times;
- (g) take all reasonable steps to reschedule any upcoming maintenance outage or scheduled outage of his or its renewable energy installation that coincide with the emergency condition, and if any such outage cannot be rescheduled in accordance with prudent utility practices, inform the designated control centre of the nature, commencement and duration of such outage; and
- (h) maintain automatic voltage regulators in operation until the designated control centre requests that manual adjustments be made.

Planned outages

4. (1) A feed-in approval holder shall, within thirty days after the feed-in tariff commencement date and thereafter not less than sixty days prior to the first day of each subsequent calendar year, submit to the distribution licensee a proposed schedule of scheduled outages for such calendar year in respect of his or its major renewable energy installation.

(2) The schedule of scheduled outages submitted under subrule (1) shall include the feed-in approval holder's estimate of —

- (a) the times of operation;
- (b) the quantities of renewable energy to be generated;
- (c) the number of scheduled outages and other reductions of output and the reasons for such outages and reductions;
- (d) the earliest and latest commencement dates, times and durations of such scheduled outages, including a description of the scope of work to be carried out during such outages,

in respect of his or its major renewable energy installation.

(3) The distribution licensee may, upon giving not less than thirty days prior written notice to the feed-in approval holder, request the feed-in approval holder to revise his or its proposed schedule for the timing and duration of any scheduled outage or other reduction of output of the major renewable energy installation to accommodate the requirements of the distribution licensee in accordance with prudent utility practices.

(4) The feed-in approval holder shall provide the designated control centre with not less than seven days prior notice of each scheduled outage of his or its major renewable energy installation co-ordinated and agreed under subparagraphs (1) to (3).

(5) The feed-in approval holder shall co-ordinate maintenance outages with the distribution licensee in accordance with prudent utility practices and the requirements of the electricity distribution network, including providing the distribution licensee with at least forty-eight hours prior written notice of any maintenance outage, which notice shall include the scheduled commencement date, time and estimated duration of such maintenance outage.

Unplanned outages

5. A feed-in approval holder may interrupt the delivery of renewable energy to a distribution licensee due to an unplanned outage, provided that the feed-in approval holder —

- (a) notifies the distribution licensee of such interruption as soon as practicable;
- (b) provides the distribution licensee with an estimated duration of the unplanned outage; and
- (c) provides the distribution licensee with an explanation of such unplanned outage after its occurrence.

Distribution licensee's maintenance schedule

6. The distribution licensee shall, not later than forty-eight hours prior to any planned maintenance of its supply lines, facilities or meters which may impact the operations of a major renewable energy installation, notify the feed-in approval holder the proposed schedule and description of such maintenance.

Records on operation

7. (1) A feed-in approval holder shall maintain an accurate and up-to-date operating log at his or its major renewable energy installation with records of active and reactive renewable energy generation for each hour changes in operating status, scheduled outages, maintenance outages, unplanned outages and any unusual conditions found during operation or inspections.

(2) The Commission and distribution licensee shall have the right, upon reasonable written notice to the feed-in approval holder and at reasonable times of the day, to examine the operating log throughout the period described in subparagraph (3).

(3) The records and data in the operating log shall be maintained by the feed-in approval holder for a minimum period of eight years after the creation of such records or data and for such longer period as may be required under any applicable law.

FIFTH SCHEDULE

[Rule 23]

QUALIFICATIONS FOR QUALIFIED PERSONS

(1)	(2)
<i>Description of work</i>	<i>Minimum Qualifications</i>
1. Electrical system design work up to 60 Amperes, electrical wiring and installation of electrical systems and any certification or written confirmation relating thereto other than that in connection with PV installation required under these Rules or the Sabah Renewable Energy (Feed-In Approval and Feed-In Tariff Rate) Rules 2024	Certificate of Competency as a Wireman issued by the Energy Commission
2. Electrical system design work up to 60 Amperes, electrical wiring and installation of electrical systems and any certification or written confirmation relating thereto and in connection with PV installation required under these Rules or the Sabah Renewable Energy (Feed-In Approval and Feed-In Tariff Rate) Rules 2024	(i) Certificate of Competency as a Wireman issued by the Energy Commission; and (ii) Certificate of training on solar photovoltaic systems for wiremen and chargemen issued by the Commission
3. Electrical system design work, and any certification or written confirmation relating thereto required under these Rules or the Sabah Renewable Energy (Feed-In Approval and Feed-In Tariff Rate) Rules 2024	Registered with the Board of Engineers Malaysia as a Professional Engineer (Electrical)
4. Solar photovoltaic system design, and any certification or written confirmation relating thereto required under these Rules or the Sabah Renewable Energy (Feed-In Approval and Feed-In Tariff Rate) Rules 2024	Certificate in solar photovoltaic system design from any institution that is recognized by the Commission

Made this 3 January 2024.

DATUK SERI PANGLIMA HAJI HAJI BIN HAJI NOOR,
Chief Minister of Sabah.