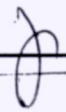


EIGHTEENTH CONGRESS OF THE)
REPUBLIC OF THE PHILIPPINES)
First Regular Session)

Office of the Secretary

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SENATE
S.B. No. 364

RECEIVED 

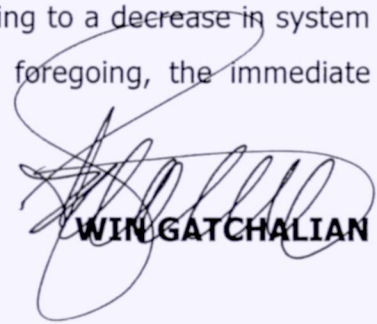
Introduced by SEN. WIN GATCHALIAN

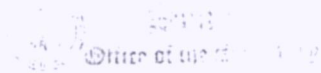
**AN ACT REDUCING THE RECOVERABLE SYSTEM LOSS RATE AND FOR
OTHER PURPOSES**

EXPLANATORY NOTE

System loss is the difference between the electric energy delivered to the distribution system and the energy delivered to the end-users and other entities connected to the system. Although it is energy that end-users do not consume, they are made to pay for it through the system loss charge. However, this charge is dependent on the system loss cap determined by the Energy Regulatory Commission (ERC). In 2018, the ERC, after ten years, revised the system loss cap from 8.5% to 6.5% for private distribution utilities and from 13% to a range of 8.25% to 12% for electric cooperatives. For an average 200 kilowatt hour (kWh) Meralco customer, the system loss charge comprises 4.78% of the electricity bill amount to 0.4774 per kWh or Php 95.48 per month.

This measure mandates the reduction of the system loss caps currently in place to 5% for private distribution utilities and 10% for electric cooperatives. It also requires the ERC to review, every three years, whether the caps should be decreased and to devise a performance incentive scheme to encourage system loss reduction. Failure of the ERC to do so would subject it to penalty. Through this bill, it is hoped that distribution utilities will be incentivized to improve their operations resulting to a decrease in system losses and savings for the Filipino household. Given the foregoing, the immediate passage of this measure is sought.


WIN GATCHALIAN



SENATE
S.B. No. 364

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Introduced by SEN. WIN GATCHALIAN

**AN ACT
REDUCING THE RECOVERABLE SYSTEM LOSS RATE AND FOR OTHER
PURPOSES**

Be it enacted by the Senate and the House of Representatives of the Philippines in Congress assembled:

1 SECTION 1. *Title.* – This Act shall be known as the “Recoverable System Loss
2 Act”.

3

4 Sec. 2. *Declaration of Policy.* – It is hereby declared the policy of the State to
5 ensure the quality, reliability, security, and affordability of supply of electric power
6 while taking into consideration the viability of all distribution utilities and the
7 protection of rights of every consumer. Towards this end, the State shall ensure
8 that the imposition of electricity charges to the public is justifiable, equitable, and
9 reflects the true cost of electricity.

10

11 Sec. 3. *Definition of Terms.* – For purposes of this Act, the following terms
12 shall be defined as stated below: *Provided,* That other terms used in this Act but not
13 defined herein shall be understood to mean the way they are defined in Republic Act
14 No. 9136 or the Electric Power Industry Reform Act of 2001 and its Implementing
15 Rules and Regulations:

16

17 a) *Distribution utility (DU)* refers to any electric cooperative, private distribution
18 utility, government-owned or existing local government unit-owned utility,

1 which has a franchise to operate a distribution system including those whose
2 franchise covers economic zones;

3
4 b) *Electric cooperative (EC)* refers to a distribution utility organized pursuant to
5 Presidential Decree No. 269, as amended, or as otherwise provided in
6 Republic Act No. 9136 otherwise known as the Electric Power Industry Reform
7 Act of 2001;

8
9 c) *Department of Energy (DOE)* refers to the government agency created
10 pursuant to Republic Act No. 7638 otherwise known as the Department of
11 Energy Act of 1992 whose expanded functions are provided in Republic Act
12 No. 9136 otherwise known as the Electric Power Industry Reform Act of 2001;

13
14 d) *Energy Regulatory Commission (ERC)* refers to the regulatory body created
15 pursuant to Republic Act No. 9136 otherwise known as the Electric Power
16 Industry Reform Act of 2001;

17
18 e) *Energy input* refers to the energy, in kilowatt hour (kWh), delivered into the
19 distribution system by the transmission system, embedded generating plants,
20 other distribution systems, and user systems with generating facilities;

21
22 f) *Energy output* refers to the energy, in kWh, delivered by the DU to its
23 customers metering point, including energy for the DU's own use, and energy
24 sold by retail suppliers to their contestable customers that are connected to
25 the said DU;

26
27 g) *National Electrification Administration (NEA)* refers to government agency
28 created under Presidential Decree No. 269, as amended by Republic Act No.
29 10531 or the National Electrification Administration Reform Act of 2013, and
30 whose additional mandates are further set in Republic Act No. 9136 otherwise
31 known as the Electric Power Industry Reform Act of 2001;

1 h) *National Power Corporation (NPC)* refers to the government corporation
2 created under Republic Act No. 9136 otherwise known as the Electric Power
3 Industry Reform Act of 2001;

4
5 i) *Non-Technical Losses* refer to the component of System Loss that is not
6 related to the physical characteristics and functions of the electrical system,
7 and is caused primarily by human action, whether intentional or not. Non-
8 Technical Loss includes but shall not be limited to the energy lost due to
9 pilferage, tampering of meters, and erroneous meter reading. It shall be
10 calculated in accordance with Section 7 of this Act;

11
12 j) *Private Distribution Utility (PDU)* refers to a distribution utility organized as a
13 private corporation which has a franchise to operate a distribution system
14 including those whose franchise covers economic zones: *Provided*, That for
15 purposes of this Act, government-owned and local government owned utilities
16 as well as those operating within economic zones shall be classified as PDUs;

17
18 k) *Small Power Utilities Group (SPUG)* refers to the functional unit of the NPC
19 created to pursue missionary electrification function;

20
21 l) *System Loss* refers to the difference between the electric energy delivered to
22 the distribution system (Energy Input) and the energy delivered to the end-
23 users and other entities connected to the system (Energy Output): *Provided*,
24 That it shall be calculated in accordance with Section 5 of this Act;

25
26 m) *Technical Losses* refer to the component of System Loss that is inherent in
27 the physical delivery of electric energy. It includes conductor loss, transformer
28 core loss, and metering equipment. It shall be calculated in accordance with
29 Section 6 of this Act;

30
31 *Sec. 4. Recoverable System Loss Rate.* – For purposes of recoverable Systems
32 Loss rate, the following System Loss caps are set:

- 1 a) For PDUs, a maximum of five percent (5%); and
2 b) For ECs, a maximum of ten percent (10%).
3

4 The ERC shall determine, every three (3) years, whether the caps shall be
5 reduced further on the basis of load density, sales mix, cost of service, delivery
6 voltage, and other technical considerations, as well as international benchmarks,
7 taking into account the viability of PDUs and ECs and the interest of the consumers:
8 *Provided*, That the ERC shall establish a timeframe for the compliance of all the DUs
9 with the System Loss rate caps: *Provided further*, That such timeframe for
10 compliance shall coincide with the next regulatory period of PDUs and ECs: *Provided*
11 *finally*, That for ECs operating in SPUG areas, such timeframe shall concur with their
12 rate filing.
13

14 *Sec. 5. Systems Loss Calculation.* – For purposes of calculating the System
15 Loss as defined in this Act and for any regulation in relation thereto, the following
16 formula for System Loss shall be followed or as determined by the ERC:
17

$$\text{System Loss, \%} = \frac{\text{Input Energies} - \text{Output Energies}}{\text{Input Energies}} \times 100\%$$

18
19
20
21 *Sec. 6. Technical Loss Calculation.* – The Technical Loss shall be calculated
22 using the following formula or as determined by the ERC:
23

24 Technical Loss = Feeder Technical Loss + (Sub-transmission Line Loss + Substation
25 Technical Loss)

26 *Provided*, That the Technical Loss shall be calculated using the following
27 method or as determined by the ERC:

- 28 a) By conducting a power flow simulation to segregate the various components
29 of the Technical Loss using a reliable software application acceptable to the
30 ERC; and
31 b) By using the Coefficient and Network Parameters as well as the Sub-
32 transmission and Substation losses.

1
2 Sec. 7. *Non-Technical Loss Calculation.* – The Non-Technical Loss shall be
3 calculated using the following formula or as determined by the ERC:

$$4 \qquad \text{Non-Technical Loss} = \text{Total System Loss} - \text{Technical Loss}$$

5

6 Sec. 8. *Annual Review of System Loss Charges.* – DUs shall quarterly submit
7 to the ERC a sworn statement containing their segregated System Losses indicating
8 their Technical and Non-Technical Losses, and all documents pertinent to System
9 Loss Charges. The ERC shall annually review and strictly verify the System Loss
10 Charges to ensure that only allowable costs within the System Loss caps are
11 recovered. Failure to comply with this Section shall subject the DUs to administrative
12 penalties, including but not limited to suspension or revocation of licenses or permits
13 to operate, to be determined by the ERC.

14
15 Sec. 9. *Performance Incentive Scheme (PIS).* – The ERC shall devise a
16 Performance Incentive Scheme for DUs to encourage System Loss reduction in
17 furtherance of the objectives stated in this Act.

18
19 Sec. 10. *Individualized System Loss Cap.* – A DU, in exceptional
20 circumstances, may be allowed to use an an individualized System Loss cap:
21 *Provided,* That the details and procedures on the individualized System Loss cap
22 such as but not limited to rules and guidelines to qualify for its use, the method for
23 determination of the cap, and the data requirements to be submitted shall be
24 determined by the ERC: *Provided further,* That in determining the reasonable level
25 of an individualized System Loss cap, a cost and benefit analysis must be provided
26 and analyzed from the viewpoint of the consumer: *Provided finally,* That the no
27 individualized System Loss cap shall be higher than the existing System Loss cap at
28 the time of the effectivity of this Act.

29
30 Sec. 11. *Timeline on Individualized System Loss Cap.* – The ERC shall issue a
31 final decision on a DU's application for the use of an individualized System Loss cap
32 within one hundred and twenty calendar days (120) from submission of such

1 application: *Provided*, That failure of ERC to comply with the time stated herein shall
2 subject the persons concerned to the administrative penalties stated in Section 12 of
3 this Act.

4
5 Sec. 12. *Administrative Offenses and Penalties.* – The following acts shall be
6 considered administrative offenses:

7 a) Failure to discharge the responsibilities stated in Sections 4, 8, 9, 10, and 11
8 of this Act; and

9 b) Failure to comply with the mandated timeframes in Sections 4, 8, and 11 of
10 this Act.

11 Any person found guilty of the offenses mentioned above shall be penalized as
12 follows:

13 a) First offense – Thirty days suspension without pay and mandatory attendance
14 in Values Orientation Program;

15 b) Second offense – Six (6) months suspension without pay; and

16 c) Third offense – Dismissal that shall carry with it perpetual disqualification
17 from holding public office, and forfeiture of retirement benefits.

18
19 Sec. 13. *Implementing Rules and Regulations.* – Within ninety (90) days from
20 the effectivity of this Act, the ERC, in coordination with the Department of Energy
21 and the National Electrification Administration and in consultation with stakeholders,
22 shall promulgate the necessary rules and regulations to implement the provisions of
23 this Act.

24
25 Sec. 14. *Separability Clause.* – If any portion or provision of this Act is
26 declared unconstitutional, the remainder of this Act or any provisions not affected
27 thereby shall remain in force and effect.

28
29 Sec. 15. *Repealing Clause.* – Any law, presidential decree or issuance,
30 executive order, letter of instruction, rule or regulation inconsistent with the
31 provisions of this Act is hereby repealed or modified accordingly.

1 Sec. 16. *Effectivity.* – This Act shall take effect fifteen (15) days following its
2 complete publication in the Official Gazette or a newspaper of general circulation.

Approved,