



**DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES
KAGAWARAN NG KAPALIGIRAN AT LIKAS NA YAMAN**



MEMORANDUM

FOR : **The Directors**
Legal Affairs Service
Policy and Planning Service
Climate Change Service

The Bureau Directors
Environmental Management Bureau
Biodiversity Management Bureau
Forest Management Bureau
Land Management Bureau
Ecosystems Research and Development Bureau

The Officer-In-Charge
Mines and Geosciences Bureau

FROM : **The Director**
Legislative Liaison Office

SUBJECT : **INVITATION TO TECHNICAL WORKING GROUP (TWG)
MEETING ON HOUSE BILL 9386 OR "AN ACT ESTABLISHING
A NATIONAL POLICY FOR THE DEVELOPMENT,
UTILIZATION, AND COMMERCIALIZATION OF ENERGY
STORAGE SYSTEMS, AND FOR OTHER PURPOSES" FROM THE
COMMITTEE ON ENERGY OF THE HOUSE OF
REPRESENTATIVES**

DATE : 02 May 2024

In reference to the electronic letter received by our Office, the Committee on Energy of the House of Representatives is inviting the Department to a **Technical Working Group (TWG) meeting on 07 May 2024, Tuesday, 10:00 AM at Conference Room 6, Ramon V. Mitra Bldg., House of Representatives, Quezon City** for the initial deliberation of House Bill No. 9836 or:

"AN ACT ESTABLISHING A NATIONAL POLICY FOR THE DEVELOPMENT, UTILIZATION, AND COMMERCIALIZATION OF ENERGY STORAGE SYSTEMS, AND FOR OTHER PURPOSES" by Rep. Jose Francisco B. Benitez

In this regard, may we request for **additional comments/recommendations, if any, on the abovementioned bill**, in anticipation of the TWG meeting, as requested by the Committee. Kindly send them on or before **06 May 2024, at 5 PM** via email at denrlo@denr.gov.ph. Further, kindly inform us of the name/s of the representative/s from your office who will participate in the meeting so we may include him/her/them as resource person/s.

Attached herewith are the Letter-Invitation, Agenda, House Bill, and Matrix of the Draft Substitute Bill for your reference.


ROMIROSE B. PADIN

cc: Undersecretary for Special Concerns and Legislative Affairs



Republic of the Philippines
HOUSE OF REPRESENTATIVES
Quezon City
19th Congress

COMMITTEE ON ENERGY

TWG MEETING INVITATION

29 April 2024

To the Concerned Stakeholders

Sir/Madam,

Please be informed that the Committee on Energy will hold a Technical Working Group (TWG) meeting on the date, time, and venue indicated hereunder:

| | |
|-----------------|---|
| DATE/TIME/VENUE | 07 May 2024 (Tuesday) 10:00 A.M. Conference Room 6, Ramon V. Mitra Bldg., House of Representatives, Quezon City |
| AGENDA | Initial TWG deliberation House Bill No. 9386, AN ACT ESTABLISHING A NATIONAL POLICY FOR THE DEVELOPMENT, UTILIZATION, AND COMMERCIALIZATION OF ENERGY STORAGE SYSTEMS, AND FOR OTHER PURPOSES, authored by Representative Francisco "Kiko" B. Benitez |

Your active participation on the said meeting will be highly appreciated.

May we request your good office to confirm your attendance on or before 06 May 2024, through email address: committee.energy@house.gov.ph or at telephone number 8931-3593. You may also contact our Committee Staff, Mr. Lorenzo Cortes at 0918-9193698.

In compliance with the new House protocol for visitors, may we request the attendee/s from your good office to submit the following information:

- Full Name and Designation
- Email Address
- Mobile Number
- Copy of ID

Thank you very much.

Very truly yours,

SERGIO C. DAGOOC
TWG Chairperson

For the TWG Chairperson:


MELANIE T. AÑAIN
Committee Secretary



COMMITTEE ON ENERGY

TECHNICAL WORKING GROUP MEETING

May 07, 2024 (Tuesday), 10:00 A.M.
Conference Room 6, Speaker RVM Building

A G E N D A

- I. Call to Order/Roll Call
- II. Remarks of TWG Chairperson Sergio C. Dagooc
- III. Acknowledgment of Committee Members and Resource Persons/Guests
- IV. Initial TWG deliberation on **House Bill No. 9386**, *AN ACT ESTABLISHING A NATIONAL POLICY FOR THE DEVELOPMENT, UTILIZATION, AND COMMERCIALIZATION OF ENERGY STORAGE SYSTEMS, AND FOR OTHER PURPOSES*, authored by Representative Francisco "Kiko" B. Benitez
- V. Other Matters
- VI. Adjournment

Invited Resource Persons/Guests:

1. Department of Energy (DOE)
2. Department of Trade and Industry (DTI)
3. Department of Environment and Natural Resources (DENR)
4. Department of Science and Technology (DOST)
5. DOST-Phil. Council for Industry, Energy, and Emerging Technology Research and Development (DOST-PCIEERD)
6. Energy Regulatory Commission (ERC)
7. NPC-Small Power Utilities Group (NPC-SPUG)
8. Philippine Electricity Market Corporation (PEMC)
9. Independent Electricity Market Operator (IEMOP)
10. SM Global Power Corporation (SMGP)
11. Developers of RE for Advancement, Inc. (DREAM)
12. PhilHydro
13. ACEN
14. Makati Business Club/Amber Kinetics
15. Energy Storage and Materials Conversion Lab, University of the Phils.



Republic of the Philippines
HOUSE OF REPRESENTATIVES
Quezon City

NINETEENTH CONGRESS
Second Regular Session

HOUSE BILL NO. _____

Introduced by Representatives Jose Francisco "Kiko" B. Benitez, Lord Allan Jay Q. Velasco.
Sergio C. Dagoc

AN ACT
ESTABLISHING A NATIONAL POLICY FRAMEWORK FOR THE DEVELOPMENT,
UTILIZATION, AND COMMERCIALIZATION OF ENERGY STORAGE SYSTEMS [~~AND FOR~~
~~OTHER PURPOSES~~]

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

CHAPTER I
GENERAL PROVISIONS

SECTION 1. *Short Title.* – This Act shall be known as the "*Energy Storage Systems Act*". It shall hereinafter be referred to as the "*Act*".

SEC. 2. *Declaration of Policies.* – It is hereby declared the policy of the State to adopt a comprehensive energy storage framework which shall:

- a) ~~Ensure adequate supply of affordable, reliable, and sustainable [of] energy [to] that shall meet the country's growing demand [s of the Filipinos] and reduce reliance to heavily imported fossil fuels; (PROPOSED TO BE DELETED BY THE DOE)~~
- b) Improve the reliability and flexibility of the grid to accommodate the growing demand for cleaner and renewable energy sources of electricity such as, [~~but not limited to,~~] solar and wind, as part of the country's just transition plans; and
- c) Establish the necessary fiscal and non-fiscal mechanisms to encourage the development, utilization, and commercialization of energy storage systems in both on-grid and off-grid areas in the country.

SEC. 3. *Definition of Terms.* - As used in this Act [~~the following terms shall be defined as follows~~]:

- a) ~~Ancillary Services or AS refers to the [these] services [that are] necessary to support the transmission of capacity and energy from resources to load while maintaining reliable operation of the transmission system in accordance with good quality practice and the Grid Code;~~
- b) [~~"Department of Energy" or "DOE" refers to the government agency created pursuant to Republic Act No. 7638 whose functions are expanded under Republic Act No. 9136, Republic Act No. 9513, and further expanded under this Act;~~]

- ~~c) ["Department of Environment and Natural Resources" or "DENR" refers to the agency created under Executive Order No. 130, as amended by Executive Order No. 192;]~~
- d) ~~B) Distribution Utility or DU~~ refers to any electric cooperative, private corporation, government-owned utility, or existing local government unit, which has an exclusive franchise to operate a distribution system as defined in ~~[in accordance with its franchise and] Republic Act (RA) No. 9136;~~
- e) ~~["Energy Regulatory Commission" or "ERC" refers to the independent quasi-judicial regulatory agency created under Section 38 of Republic Act No. 9136;]~~
- f) ~~C) Energy Storage SystemS or ESS~~ refers to a facility capable of absorbing energy directly from the ~~[G]grid or distribution system, or from an RE or Non-RE Conventional (PIPPA) [P]plant connected to the [G]grid or [D]distribution [S]system and storing it for a time period, and injecting stored energy when prompted, needed to ensure reliability and balanced power system;~~
- g) ~~D) Grid~~ refers to the high voltage backbone system of interconnected transmission lines, substations, and related facilities, located in ~~[each of] Luzon, Visayas, and Mindanao, or as may be determined by the Energy Regulatory Commission [ERG] in accordance with Section 45 of [Republic Act No.] RA 9136;~~
- h) ~~E) Integrated Non-Renewable Energy (RE) Plant and ESS~~ refers to a combination of a Conventional ~~[RE] Plant/s and an ESS, where the ESS is [solely] charged by the [RE] Conventional Plant/s; (PIPPA)~~
- i) ~~—~~
- j) ~~F) Market Operator or MO~~ refers to the entity responsible for the operation of the Wholesale Electricity Spot Market or WESM in accordance with the WESM Rules;
- k) ~~G) Microgrid System~~ refers to a group of interconnected loads and a generation facility or Decentralized Power Generator with clearly defined electrical boundaries that acts as an integrated power generation and distribution system, whether or not connected to a distribution or transmission system;
- l) ~~National Power Corporation — Small Power Utility Group" or "NPC-SPUG" refers to the unit of NPC mandated to perform missionary electrification;]~~
- m) ~~H) Off-grid Systems~~ refers to electrical systems not connected to the wires and related facilities of the ~~[On-Grid Systems] on-grid systems of the Philippines;~~
- n) ~~I) On-Grid Systems~~ refers to electrical systems composed of interconnected transmission lines, distribution lines, substations, and related facilities for the purpose of conveyance of bulk power on the grid of the Philippines; and
- o) ~~J) System Operator or SO~~ refers to the entity responsible for generation dispatch, or the implementation of the generation dispatch schedule of the MO, the procurement of AS, and operation to ensure safety, power quality, stability, reliability, and security of the Grid~~;~~.

SEC. 4. Scope. – This Act shall establish a framework for the development, utilization, and commercialization of energy storage systems to provide uninterrupted supply of cleaner and more sustainable energy to both on-grid and off-grid areas in the country. The provisions of this Act shall be applicable to new and existing energy storage technologies as determined by the Department of Energy.

SEC. 5. Classification of ESS. – ESS technologies shall be classified based on their primary purpose, subject to the rules and regulations and to be (DOE) issued by the DOE in accordance with relevant laws.

CHAPTER II POWERS AND RESPONSIBILITIES OF GOVERNMENT AGENCIES

SEC. 6. Role of the Department of Energy (DOE). – The DOE, in addition to its powers and functions under existing laws, shall be the lead agency for the implementation and enforcement of this Act. Towards this end, the DOE shall perform the following powers and functions:

- a) Evaluate applications and issue permits for ESS facilities pursuant to RA [~~Republic Act No.~~] 9136, otherwise known as the “*Electric Power Industry Reform Act of 2001*”, [~~Republic Act No.~~] RA 9513, otherwise known as the “*Renewable Energy Act of 2008*”, [~~Republic Act No.~~] RA 11646, otherwise known as the “*Microgrid Systems Act*”, and other relevant laws, rules, and regulations;
- b) Include an ESS [~~strategy~~] framework in the Philippine Energy Plan and Power Development Plan;
- c) Include an ESS Strategy in the Missionary Electrification Development Plan; (DOE)
- d) Review and approve, in coordination with the MO, relevant market rules for the classification, registration, and offer submission of ESS in WESM;
- e) Promote research and development of ESS technologies, in coordination with the Department of Science and Technology, in state universities and colleges through appropriation of funds pursuant to relevant laws; [~~and~~]
- f) As the lead agency for the implementation of missionary electrification, the National Power Corporation-Small Power Utilities Group (NPC-SPUG) shall oversee the development and operation of ESS in off-grid areas, pursuant to the relevant rules and regulations issued by the [~~Department of Energy~~] DOE and other related government agencies. For microgrid systems operated in unserved and underserved areas, utilization and deployment of ESS shall be implemented pursuant to the provisions of [~~Republic Act No.~~] RA 11646 [~~, otherwise known as the “Microgrid Systems Act”~~], and other existing laws; and
- g) Perform all other acts [~~that are~~] as may be necessary and incidental to accomplish the objectives of this Act;

SEC. 7. Role of the Energy Regulatory Commission (ERC). – In addition to its regulatory functions under existing laws, the ERC shall:

- a) Issue the appropriate regulatory framework for the licensing, operating standards, and cost recovery mechanism and pricing structure for ESS;
- b) ~~Review and approve appropriate and applicable testing standards and procedures, accreditation process, and other necessary guidelines for ESS as generator or AS provider, [I] in coordination with the SO, DU, and/or MGSP; In coordination with the SO, DU, and/or MGSP, review and approve appropriate and applicable testing standards and procedures, accreditation process, other necessary guidelines for ESS as generator or AS provider a storage to spur new other sector besides Generation, Transmission, Distribution and Supply sectors; (DOE) and~~
- c) Perform all other acts [~~that are~~] as may be necessary and incidental to accomplish the objectives of this Act.

SEC. 8. Role of the Department of Environment and Natural Resources (DENR). – In addition to its functions under existing laws, the DENR shall:

- a) Determine and monitor the compliance of ESS owners and operators with environmental standards for the location, construction, operation, maintenance, and decommissioning of ESS and their components; and

- b) ~~[e]~~ Establish guidelines for the accurate recycling characterization, disposal, and handling of wastes involving ESS and related equipment, parts, and other components, ~~[f]~~ in coordination with the DOE.

SEC. 9. *Role of the Department of Trade and Industry - Bureau of Philippine Standards (DTI-BPS).* - In addition to its functions under existing laws, the DTI-BPS shall:

- a) Issue appropriate framework for the testing, licensing, and operating standards of the Batteries' components and as a whole structure (BESS) for safety purposes; and
b) In coordination with the DOE, establish guidelines for the certification on the proponent's conformity to the safety of the BESS. (DOE)

CHAPTER III OFF-GRID ESS DEVELOPMENT

~~SEC. 9. *Off-Grid Areas.* - As the lead agency for the implementation of missionary electrification, the National Power Corporation Small Power Utilities Group (NPC SPUG) shall oversee the development and operation of ESS in off-grid areas, pursuant to the relevant rules and regulations issued by the [Department of Energy] DOE and other related government agencies.~~

~~For microgrid systems operated in unserved and underserved areas, utilization and deployment of ESS shall be implemented pursuant to the provisions of [Republic Act No.] RA 11646 [, otherwise known as the "Microgrid Systems Act"], and other existing laws.~~

CHAPTER [IV] III GENERAL INCENTIVES

SEC. 10. *Application of Incentives for Integrated RE Plant and ESS.* - Energy stored and dispatched from Integrated RE Plant and ESS shall be considered renewable energy and shall be eligible of the following incentives:

- a) The RE developer may avail of the incentives under Chapter VII of ~~[Republic Act No.] RA 9513 [, otherwise known as the "Renewable Energy Act of 2008"]~~ for its Integrated RE Plant and ESS; and
b) The Integrated RE Plant and ESS, as applicable, shall have preferential dispatch, but it can choose to be registered as a scheduled generating unit.

CHAPTER IV LICENSING AND PERMITTING

SEC. 11. *Permits and Licenses.* - ~~The [procedure for the] issuance of permits and licenses for all types of ESS facilities shall be governed by [Republic Act No.] RA 11234, otherwise known as the "Energy Virtual One-Stop Shop Act", and [Republic Act No.] RA 11032, otherwise known as the "Ease of Doing Business and Efficient Government Service Delivery Act of 2018".~~

CHAPTER V[1] FINAL PROVISIONS

SEC. 12. *Fines and Penalties.* - Penal schemes provided under the Philippine Grid Code and Philippine Distribution Code shall be imposed upon any person, both natural and juridical, involved in the operation and business of ESS that was found, after due notice and hearing, to have violated this Act. (PIPPA)

SEC. 13. *Congressional Oversight.* - ~~[Upon effectivity of this Act.] [t]The Joint Congressional Energy Commission, [established under Republic Act No. 9136 and renamed under Republic Act No. 11285, otherwise known as the "Energy Efficiency and Conservation Act"], shall exercise oversight powers over the implementation of this Act. The DOE and ERC~~

~~[shall annually submit a report on the implementation of this Act to the JCEC not later than [insert period].]~~ shall submit to the JCEC annual reports, which shall include the implementation review and reports, and policy and regulatory issues no later than 15 March of every year. (PIPPA)

SEC. 14. **Implementing Rules and Regulations.** – Within sixty (60) days from the effectivity of this Act, the [Department of Energy] DOE shall, in coordination with concerned government agencies, ~~[shall promulgate the necessary rules and regulations for the proper implementation of this Act.]~~ promulgate and issue the rules and regulations to effectively implement the provisions of this Act.

SEC. 15. **Separability Clause.** – ~~[If any provision of this Act is held invalid or unconstitutional, the remainder of the Act or any provision not otherwise affected shall remain valid and subsisting.]~~ If for any reason, any part or provision of this Act is declared unconstitutional or invalid, the other parts or provisions hereof, which are not affected thereby, shall continue to be in full force and effect.

SEC. 16. **Repealing Clause.** – ~~[All laws, decrees, orders, rules and regulations, or parts thereof inconsistent with the provisions of this Act are hereby repealed, amended, or modified accordingly.]~~ All laws, presidential decrees, executive orders, letters of instruction, administrative rules and regulations or parts thereof, which are contrary to or inconsistent with the provisions of this Act, are hereby repealed or modified accordingly.

SEC. 17. **Effectivity.** – This Act shall take effect fifteen (15) days after its publication in the *Official Gazette* or in a newspaper of [national] general circulation.

Approved,

**Tracked Version of the Draft Substitute Bill
to House Bill Numbered 9386, On the Energy Storage Systems
(for presentation in the TWG Meeting on 08 May 2024)**

| Draft Substitute Bill | Remarks on the Draft Substitute Bill | Comments/Positions for Discussion and Consideration |
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| <p style="text-align: center;">AN ACT ESTABLISHING A NATIONAL POLICY FRAMEWORK FOR THE DEVELOPMENT, UTILIZATION, AND COMMERCIALIZATION OF ENERGY STORAGE SYSTEMS [AND FOR OTHER PURPOSES]</p> | <ul style="list-style-type: none"> • With styling edits. | |
| <p><i>Be it enacted by the Senate and House of Representatives of the Philippines in Congress assembled:</i></p> | | |
| <p style="text-align: center;">CHAPTER I GENERAL PROVISIONS</p> | | |
| <p>SECTION 1. <i>Short Title.</i> – This Act shall be known as the “<i>Energy Storage Systems Act</i>”. It shall hereinafter be referred to as the “Act”.</p> | | |
| <p>SEC. 2. <i>Declaration of Policies.</i> – It is hereby declared the policy of the State to adopt a comprehensive energy storage framework which shall:</p> <p>a) Ensure adequate supply of affordable, reliable, and sustainable [of] energy [to] that shall meet the country’s growing demand [s of the Filipinos] and reduce reliance to heavily imported fossil fuels;</p> <p>b) Improve the reliability and flexibility of the grid to accommodate the growing demand for cleaner and renewable energy sources of electricity such as, [but not limited to,] solar and wind, as part of the country’s just transition plans; and</p> <p>c) Establish the necessary fiscal and non-fiscal mechanisms to encourage the development,</p> | <ul style="list-style-type: none"> • With styling edits. | <p>DOE comments: Delete item "a)" in this provision as the integration of an ESS alone cannot provide adequacy and affordability of power supply and should be done in conjunction with RE generating plants. The primary role of ESS in the Electric Power Industry is to ensure the reliability of the grid addressing the variability of the continuous and massive development of Variable Renewable Energy thus increasing the efficiency.</p> |

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| <p>utilization, and commercialization of energy storage systems in both on-grid and off-grid areas in the country.</p> | | |
| <p>SEC. 3. <i>Definition of Terms.</i> - As used in this Act [the following terms shall be defined as follows]:</p> <p>a) Ancillary Services or AS refers to the [these] services [that are] necessary to support the transmission of capacity and energy from resources to load while maintaining reliable operation of the transmission system in accordance with good quality practice and the Grid Code;</p> <p>b) ["Department of Energy" or "DOE" refers to the government agency created pursuant to Republic Act No. 7638 whose functions are expanded under Republic Act No. 9136, Republic Act No. 9513, and further expanded under this Act;]</p> <p>c) ["Department of Environment and Natural Resources" or "DENR" refers to the agency created under Executive Order No. 130, as amended by Executive Order No. 192;]</p> <p>d) B) Distribution Utility or DU refers to any electric cooperative, private corporation, government-owned utility, or existing local government unit, which has an exclusive franchise to operate a distribution system as defined in [in accordance with its franchise and] Republic Act (RA) No. 9136;</p> <p>e) ["Energy Regulatory Commission" or "ERC" refers to the independent quasi-judicial regulatory agency created under Section 38 of Republic Act No. 9136;]</p> <p>f) C) Energy Storage Systems or ESS refers to a</p> | <ul style="list-style-type: none"> • With styling edits. • With styling edits. • Deleted. No need to define. • Deleted. • With styling edits. • Deleted. | <ul style="list-style-type: none"> • For consideration/approval of the TWG. • For consideration/approval of the TWG. • For consideration/approval of the TWG. |

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| <p>facility capable of absorbing energy directly from the [G]grid or distribution system, or from an RE or Non-RE/Conventional [P]plant connected to the [G]grid or [D]distribution [S]system and storing it for a time period, and injecting stored energy when prompted, needed to ensure reliability and balanced power system;</p> <p>g) D) <i>Grid</i> refers to the high voltage backbone system of interconnected transmission lines, substations, and related facilities, located in [each of] Luzon, Visayas, and Mindanao, or as may be determined by the Energy Regulatory Commission [ERG] in accordance with Section 45 of [Republic Act No.] RA 9136;</p> <p>h) E) <i>Integrated Non-Renewable Energy (RE) Plant and ESS</i> refers to a combination of a Conventional [RE] Plant/s and an ESS, where the ESS is [solely] charged by the [RE] Conventional Plant/s;</p> <p>i) F) <i>Market Operator or MO</i> refers to the entity responsible for the operation of the Wholesale Electricity Spot Market or WESM in accordance with the WESM Rules;</p> <p>j) G) <i>Microgrid System</i> refers to a group of interconnected loads and a generation facility or Decentralized Power Generator with clearly defined electrical boundaries that acts as an integrated power generation and distribution system, whether or not connected to a distribution or transmission system;</p> | <ul style="list-style-type: none"> • With styling edits. • PIPPA proposed amendment: “Energy Storage System” or “ESS” refers to a facility capable of absorbing energy directly from the Grid or distribution system, or from an RE or Non-RE/Conventional Plant connected to the Grid or Distribution System and storing it for a time period, and injecting stored energy when prompted, needed to ensure reliability and balanced power system; • With styling edits. • With styling edits. • PIPPA proposed amendments: “Integrated Non-RE Plant and ESS” refers to a combination of a Conventional Plant/s and an ESS, where the ESS is charged by the Conventional Plant/s; | <p>PIPPA explanation: The ESS definition should be extended to ESS facilities that absorb/store energy from non-renewables.</p> |
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| <p>k) National Power Corporation – Small Power Utility Group” or “NPC-SPUG” refers to the unit of NPC mandated to perform missionary electrification;]</p> <p>l)–H) Off-grid Systems refers to electrical systems not connected to the wires and related facilities of the [On-Grid Systems] on-grid systems of the Philippines;</p> <p>m)–I) On-Grid Systems refers to electrical systems composed of interconnected transmission lines, distribution lines, substations, and related facilities for the purpose of conveyance of bulk power on the grid of the Philippines; and</p> <p>n)–J) System Operator or SO refers to the entity responsible for generation dispatch, or the implementation of the generation dispatch schedule of the MO, the procurement of AS, and operation to ensure safety, power quality, stability, reliability, and security of the Grid[;].</p> | <ul style="list-style-type: none"> • Deleted. • With styling edits. | <ul style="list-style-type: none"> • For consideration/approval of the TWG. |
| <p>SEC. 4. Scope. – This Act shall establish a framework for the development, utilization, and commercialization of energy storage systems to provide uninterrupted supply of cleaner and more sustainable energy to both on-grid and off-grid areas in the country. The provisions of this Act shall be applicable to new and existing energy storage technologies as determined by the Department of Energy.</p> | | <p>DOE comment: Add the provision for safety standards and the end the life processing of ESS (particularly BESS)</p> |
| <p>SEC. 5. Classification of ESS. – ESS technologies shall be classified based on their primary purpose, subject to the rules and regulations and to be issued by the DOE in accordance with relevant laws.</p> | <p>DOE proposed amendment: Reword as follows- ESS technologies shall be classified based on their primary purpose, subject to the rules and regulations and to be issued by the DOE in accordance with relevant laws.</p> | <p>PIPPA comments: ESS should still be classified as generation assets, based on the EPIRA sectoral categories – generation, supply, transmission and distribution.</p> |

Any reclassification on the nature of energy storage will run counter to the established sectoral categories of the EPIRA.

DOE has already issued a Department Circular on ESS, and based on this Department Circular, ESS should be part of the generation sector. However, this was modified with another DC issued by the same department allowing System Operator to own an energy storage system. Despite the modification, we note that any policy allowing the SO to own ESS creates several contentious issues, such as:

1. There is a possibility of intentionally influencing the AS contracting for the benefit of transmission-owned ESS. Allowing the transmission sector to own ESS would make it prone to the abuse of market power and anti-competitive behavior.

2. There is discrepancy on how assets are treated for each sector. The generation sector is a competitive sector while the transmission sector is a monopoly. Having ESS facilities owned by the SO, would transfer ESS from competitive to monopoly type of structure. The SO, upon owning an ESS, will include it under its Regulatory Asset Base (RAB) and the ESS will automatically earn WACC,

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| | | <p>similar to their other assets.</p> <p>3. Is it the intent that the result is a competition between the SO and the generators if both entities are allowed to provide similar services? It would seem that it will be an uneven playing field if it is.</p> |
| <p align="center">CHAPTER II POWERS AND RESPONSIBILITIES OF GOVERNMENT AGENCIES</p> | | |
| <p>SEC. 6. <i>Role of the Department of Energy (DOE).</i> – The DOE, in addition to its powers and functions under existing laws, shall be the lead agency for the implementation and enforcement of this Act. Towards this end, the DOE shall perform the following powers and functions:</p> <p>a) Evaluate applications and issue permits for ESS facilities pursuant to RA [Republic Act No.] 9136, otherwise known as the “<i>Electric Power Industry Reform Act of 2001</i>”, [Republic Act No.] RA 9513, otherwise known as the “<i>Renewable Energy Act of 2008</i>”, [Republic Act No.] RA 11646, otherwise known as the “<i>Microgrid Systems Act</i>”, and other relevant laws, rules, and regulations;</p> <p>b) Include an ESS [strategy] framework in the Philippine Energy Plan and Power Development Plan;</p> <p>c) Include an ESS Strategy in the Missionary Electrification Development Plan; (DOE)</p> <p>d) Review and approve, in coordination with the MO, relevant market rules for the classification, registration, and offer submission of ESS in WESM;</p> <p>e) Promote research and development of ESS technologies, in coordination with the Department of</p> | <ul style="list-style-type: none"> • With styling edits. • DOE proposed amendments: Add the provision for off-grid areas and reword as follows - <p>Section 6. Role of the Department of Energy (DOE). - The DOE, in addition to its powers and functions under existing laws, shall be the lead agency for the implementation and enforcement of this Act. Towards this end, the DOE shall perform the following powers and functions:</p> <p>a) x x x</p> <p>b) x x x</p> <p>c) Include an ESS Strategy in the Missionary Electrification Development Plan:</p> <p align="center">X X X</p> | <p>DOST recommendations:</p> <p>(1) Establish a centralized facility for failure analysis of ESS and battery abuse testing to help ensuring the safety and reliability of deployed ESS in the country;</p> <p>(2) Enhance the sustainability of the supply chain by exploring local sources of raw materials (such as but not limited to nickel, copper, zinc, cobalt, manganese, and aluminum) for batteries. This will discourage excessive reliance on imported materials;</p> <p>(3) Strengthen (R&D) initiatives that will focus on leveraging local raw materials; and</p> <p>(4) Include a provision regarding the mechanisms and criteria for appropriating R&D funds. Its details can be written in the Implementing Rules and Regulations (IRR).</p> <p>ESS-RELATED CENTERS SUPPORTED BY DOST</p> |

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| <p>Science and Technology, in state universities and colleges through appropriation of funds pursuant to relevant laws; and</p> <p>f) As the lead agency for the implementation of missionary electrification, the National Power Corporation-Small Power Utilities Group (NPC-SPUG) shall oversee the development and operation of ESS in off-grid areas, pursuant to the relevant rules and regulations issued by the Department of Energy DOE and other related government agencies. For microgrid systems operated in unserved and underserved areas, utilization and deployment of ESS shall be implemented pursuant to the provisions of Republic Act No. RA 11646 [, otherwise known as the "Microgrid Systems Act"], and other existing laws; and</p> <p>g) Perform all other acts [that are] as may be necessary and incidental to accomplish the objectives of this Act;</p> | <p>Section 9, Off-grid Areas provisions were added to Section 6 as proposed by the DOE, thereby deleting Chapter III, Off-grid ESS Development, Section 9.</p> | <ol style="list-style-type: none"> 1. Advanced Battery Center at the University of the Philippines (UP) Diliman and Technological Institute of the Philippines (TIP) 2. Center for Advanced Materials for Clean Energy Technologies (CAMCET) at the University of Santo Tomas (UST) and Mapua University 3. Hydrogen Fuel Cell Research Center at DOST-Industrial Technology Development Institute (ITDI) <p>NPC clarifications on the following concerns:</p> <ol style="list-style-type: none"> 1. As NPC spearheads the development of the ESS in the off-grid/missionary areas, who will take lead for the on-grid advancements? 2. While the draft HB concentrates on ESS, specifically emphasizing battery ESS and pumped storage hydropower, will it be possible for hydrogen technology to be incorporated into the draft bill? <p>NPC strongly supports the passage of the proposed bill. NPC is undertaking renewable energy projects with ESS following the DOE Department Circular DOE DC2023-04-0008 entitled "<i>Prescribing the Policy for Energy Storage System in the Electric Power Industry.</i>"</p> <p>PEMC comments:</p> |
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PEMC concurs with the enumeration of the powers and responsibilities of the government agencies stated in Chapter II, with emphasis on the role given to the Department of Energy (DOE) to be the lead agency tasked to implement and enforce the provisions in the proposed measure. Specifically, PEMC supports the inclusion of the DOE's function to review and approve relevant market rules for the classification, registration, and offer submission of ESS to the WESM. This function given to the DOE as stated in HB 9386 shall also serve as basis for the participation of PEMC during the implementation phase and shall eventually highlight PEMC's role as the governance arm of the WESM with the task to facilitate the rules change process under the WESM Rules including the development of a compliance framework for ESS.

IEMOP comments:

The Department of Energy (DOE) has existing policy on Energy Storage Systems (ESS), DC2023-04-0008, titled *"Prescribing the Policy for Energy Storage System in the Electric Power Industry"* which provides the framework for the operation of ESS and their participation in the WESM.

It is suggested for the proposed bill to consider DC2023-04-0008 and include provisions on the following:

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| | | <p>1. Expressly provide the category of ESS. If it treated in the Philippines as a generator or other specific type category.</p> <p>2. Who or what entities in the electric power sector may own ESS; We note that under DC2023-08-0004, the System Operator is authorized to own ESS. We note however that under the same policy, the System Operator is allowed to source energy from its ESS only if there is no available contracted ancillary services capacity and reserves in the Reserve Market. As such, it may not be financially viable since its use is limited while acquisition and maintenance of ESS requires significant costs.</p> <p>3. Respective purposes of owning ESS;</p> <p>4. Permits for ownership and operation of ESS and issuing authorities;</p> <p>5. Treatment to ESS with respect to the following:</p> <ul style="list-style-type: none">a. Type of technology – renewable, conventional, etc.b. In connection with item a, the dispatch category of ESS should be clear – must-dispatch, priority dispatch, preferential dispatch, or other type. <p>If ESS, whatever type it is, will be treated under preferential category, however, it must be considered that geothermal and hydropower plants are granted already preferential</p> |
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| | | treatment in the WESM under DOE Department Circular No. DC2022-10-0031. As such, the competition in the WESM may be further diluted if ESS is considered under preferential category as well. |
| <p>SEC. 7. Role of the Energy Regulatory Commission (ERC). – In addition to its regulatory functions under existing laws, the ERC shall:</p> <p>a) Issue the appropriate regulatory framework for the licensing, operating standards, and cost recovery mechanism and pricing structure for ESS;</p> <p>b) Review and approve appropriate and applicable testing standards and procedures, accreditation process, and other necessary guidelines for ESS as generator or AS provider, [I] in coordination with the SO, DU, and/or MGSP; and</p> <p>c) Perform all other acts [that are] as may be necessary and incidental to accomplish the objectives of this Act.</p> | <p>• With styling edits.</p> <p>• DOE proposed amendments: In coordination with the SO, DU, and/or MGSP, review and approve appropriate and applicable testing standards and procedures, accreditation process, other necessary guidelines for ESS as generator or AS provider a storage to spur new other sector besides Generation, Transmission, Distribution and Supply sectors.</p> | <p>DOE comments: The DOE suggests the creation of another category for ESS, as storage (neither Generation nor Distribution) for clarity in the purpose it will serve, as well as the resolution on the permitting and licensing concerns brought about by its classification.</p> <p>ERC comments: The ERC is tasked with the issuance of Certificates of Compliance (COCs) for entities owning and/or operating Energy Storage Systems (ESS). To date, the ERC is still waiting for the integration of the COC process in the EVOSS. The ERC has already submitted to the EVOSS technical committee the complete list of requirements, fees, procedures and process flow diagram for this.</p> <p>Following the issuance by the Department of Energy (DOE) of its policy on ESS, the Commission is</p> |

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| | | <p>also currently in the process of developing the draft regulatory framework for ESS. The finalization of the draft regulatory framework is subject to clarification from DOE on some items, as requested in the letter addressed to the DOE (as attached) including the system operator's ownership of ESS units.</p> <p>The draft regulatory framework aims to provide the implementing guidelines, requirements and standards for the following in respect of ESS:</p> <ol style="list-style-type: none"> 1. Licensing; 2. Cost recovery and pricing methodologies; 3. Interconnection standards; 4. Reportorial requirements; 5. Fees and charges; and 6. Monitoring. |
| <p>SEC. 8. <i>Role of the Department of Environment and Natural Resources (DENR).</i> – In addition to its functions under existing laws, the DENR shall:</p> <ol style="list-style-type: none"> a) Determine and monitor the compliance of ESS owners and operators with environmental standards for the location, construction, operation, maintenance, and decommissioning of ESS and their components; and b) [e]Establish guidelines for the accurate recycling characterization, disposal, and handling of wastes involving ESS and related equipment, parts, and other components, [f] in coordination with the DOE. | <ul style="list-style-type: none"> • With styling edits. | |
| <p>Sec. 9. <i>Role of the Department of Trade and</i></p> | <ul style="list-style-type: none"> • DOE proposed additional section: | |

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| <p>Industry- Bureau of Philippine Standards (DTI-BPS). - In addition to its functions under existing laws, the DTI-BPS shall:</p> <ul style="list-style-type: none"> a. Issue appropriate framework for the testing, licensing, and operating standards of the Batteries' components and as a whole structure (BESS) for safety purposes; and b. In coordination with the DOE, establish guidelines for the certification on the proponent's conformity to the safety of the BESS. | <p>Add the following provisions in Chapter 2: Section 9: Role of the Department of Trade and Industry- Bureau of Philippine Standards (DTI-BPS) - In addition to its functions under existing laws, the DTI-BPS shall:</p> <ul style="list-style-type: none"> a. Issue appropriate framework for the testing, licensing, and operating standards of the Batteries' components and as a whole structure (BESS) for safety purposes; and b. In coordination with the DOE, establish guidelines for the certification on the proponent's conformity to the safety of the BESS. | |
| <p>CHAPTER III OFF-GRID ESS DEVELOPMENT</p> | | |
| <p>SEC. 9. <i>Off-Grid Areas.</i> — As the lead agency for the implementation of missionary electrification, the National Power Corporation Small Power Utilities Group (NPC-SPUG) shall oversee the development and operation of ESS in off-grid areas, pursuant to the relevant rules and regulations issued by the [Department of Energy] DOE and other related government agencies.</p> <p>For microgrid systems operated in unserved and underserved areas, utilization and deployment of ESS shall be implemented pursuant to the provisions of [Republic Act No.] RA 11646 [, otherwise known as the "Microgrid Systems Act"], and other existing laws.</p> | <ul style="list-style-type: none"> • Deleted as proposed by the DOE. | <p>DOE comment: Delete this provision as this shall be Chapter 2. Sec. 6 as an additional provision therein.</p> <p>DOE general comments:</p> <ul style="list-style-type: none"> • The DOE supports the intent of the bill to have another sector on "Storage" to spur investments on grid scale and behind the meter storage. • This Bill should entice localization of the supply chain, where earth mineral can be processed into battery materials, to bring down cost of BESS. Neither circular nor resolution, by both DOE and/or ERG, cannot cover the supply chain. • The Philippine Grid Code to |

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| | | include planning, operations, and performance standards of ESS to ensuring the safety and security together with the reliability of the grid. |
| CHAPTER [IV] III GENERAL INCENTIVES | | |
| <p>SEC. 10. <i>Application of Incentives for Integrated RE Plant and ESS.</i> – Energy stored and dispatched from Integrated RE Plant and ESS shall be considered renewable energy and shall be eligible of the following incentives:</p> <p>a) The RE developer may avail of the incentives under Chapter VII of [Republic Act No.] RA 9513 [, otherwise known as the “Renewable Energy Act of 2008”] for its Integrated RE Plant and ESS; and</p> <p>b) The Integrated RE Plant and ESS, as applicable, shall have preferential dispatch, but it can choose to be registered as a scheduled generating unit.</p> | With styling edits. | <p>PIPPA comments:</p> <p>Energy storage is useful even if it is not integrated into an RE plant. We would recommend they include incentives even for non-RE energy storage but maybe not at the same level as RE+ESS.</p> <p>The problem for ESS (example Pump Storage Hydro) when charging from the Grid is that it is treated as an end-user customer and as such it gets charged with transmission charges (especially PDS charges) during charging/pumping mode. Then, when it releases the electricity back to the Grid, the customer of the ESS (example the DU) will again be charged transmission charges (including PDS charges). So, for the same electricity, it is twice charged transmission charges. This makes power coming from the Pump Storage Hydro expensive and is a disadvantage in a CSP setting. We suggest that ESS should not be treated as an end-user customer during charging/pumping mode and</p> |

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| | | should not be charged transmission charges. |
| CHAPTER IV LICENSING AND PERMITTING | | |
| SEC. 11. <i>Permits and Licenses.</i> – The [procedure for the] issuance of permits and licenses for all types of ESS facilities shall be governed by [Republic Act No.] RA 11234, otherwise known as the “Energy Virtual One-Stop Shop Act”, and [Republic Act No.] RA 11032, otherwise known as the “Ease of Doing Business and Efficient Government Service Delivery Act of 2018”. | • With styling edits. | |
| CHAPTER V[!] FINAL PROVISIONS | | |
| SEC. 12. <i>Fines and Penalties.</i> – Penal schemes provided under the Philippine Grid Code and Philippine Distribution Code shall be imposed upon any person, both natural and juridical, involved in the operation and business of ESS that was found, after due notice and hearing, to have violated this Act. | PIPPA proposed amendment: SEC. 12. Fines and Penalties. – Penal schemes provided under the Philippine Grid Code and Philippine Distribution Code shall be imposed upon any person, both natural and juridical, involved in the operation and business of ESS that was found, after due notice and hearing, to have violated this Act. | PIPPA explanation: We suggest to clarify that penal provisions will apply only when the said persons were found, after due notice and hearing, to have committed a violation of this Act. |
| SEC. 13. <i>Congressional Oversight.</i> – [Upon effectivity of this Act,] [t]The Joint Congressional Energy Commission, [established under Republic Act No. 9136 and renamed under Republic Act No. 11285, otherwise known as the “Energy Efficiency and Conservation Act”,] shall exercise oversight powers over the implementation of this Act. The DOE and ERC [shall annually submit a report on the implementation of this Act to the JCEC not later than [insert period].] shall submit to the JCEC annual reports, which shall include the implementation review and reports, and | • With styling edits. • PIPPA proposed amendment: SEC. 13. Congressional Oversight. – Upon effectivity of this Act, the Joint Congressional Energy Commission established under Republic Act No. 9136 and renamed under Republic Act No. 11285, otherwise known as the “Energy Efficiency and Conservation Act”, shall exercise oversight powers over the implementation of this Act. The DOE and ERC shall annually submit a report on | |

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| <p>policy and regulatory issues no later than 15 March of every year.</p> | <p>the implementation of this Act to the JCEC no later than <u>15 March of every year.</u></p> | |
| <p>SEC. 14. <i>Implementing Rules and Regulations.</i> – Within sixty (60) days from the effectivity of this Act, the [Department of Energy] DOE shall, in coordination with concerned government agencies, [shall promulgate the necessary rules and regulations for the proper implementation of this Act.] promulgate and issue the rules and regulations to effectively implement the provisions of this Act.</p> | <ul style="list-style-type: none"> • With styling edits. | |
| <p>SEC. 15. <i>Separability Clause.</i> – [If any provision of this Act is held invalid or unconstitutional, the remainder of the Act or any provision not otherwise affected shall remain valid and subsisting.] If for any reason, any part or provision of this Act is declared unconstitutional or invalid, the other parts or provisions hereof, which are not affected thereby, shall continue to be in full force and effect.</p> | <ul style="list-style-type: none"> • With styling edits. | |
| <p>SEC. 16. <i>Repealing Clause.</i> – [All laws, decrees, orders, rules and regulations, or parts thereof inconsistent with the provisions of this Act are hereby repealed, amended, or modified accordingly.] All laws, presidential decrees, executive orders, letters of instruction, administrative rules and regulations or parts thereof, which are contrary to or inconsistent with the provisions of this Act, are hereby repealed or modified accordingly.</p> | <ul style="list-style-type: none"> • With styling edits. | |
| <p>SEC. 17. <i>Effectivity.</i> – This Act shall take effect fifteen (15) days after its publication in the <i>Official Gazette</i> or in a newspaper of [national] general circulation.</p> <p><i>Approved,</i></p> | <ul style="list-style-type: none"> • With styling edits. | |