ESTABLISHING AN ELECTRICITY DERIVATIVES MARKET IN THE PHILIPPINES

A LEGAL MEMORANDUM

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GATMAYTAN YAP PATACSIL GUTIERREZ & PROTACIO

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INTRODUCTION

The Philippines has declared state policies of ensuring "the quality, reliability, security and affordability of the supply of electric power" and "transparent and reasonable prices of electricity in a regime of free and fair competition and full public accountability to achieve greater operational and economic efficiency and enhance the competitiveness of Philippine products in the global market".

Among the measures pursued to implement such policies, a wholesale electricity spot market ("**WESM**") was established to provide a mechanism for identifying and settling prices of actual variations from the quantities transaction under contracts between sellers and purchasers of electricity. Over the past ten years, however, the market has experienced severe price volatility, with steep price hikes and dips. In 2013, in particular, regulatory authorities annulled unusually high WESM prices, posing concerns on the stability of the prices in the electricity market.

The Philippine Electricity Market Corporation ("**PEMC**"), the Market Operator of the WESM, commissioned this present study for the establishment of an electricity derivatives market ("**EDM**") in the Philippines, as a tool for stabilizing electricity prices.

This present study examines the legal feasibility of establishing an EDM in the Philippines. It provides an overview of the current legal framework governing the electric power industry and the derivatives market in country. It identifies gaps in the present laws and other legal challenges to the establishment of an EDM. It also proposes solutions to these challenges, recommending passage of key legislation and introduction of amendments to current administrative regulations.

Chapter I of this study shall give an overview of the legal framework governing the electric power industry, identifying the underlying policy considerations, the regulatory structure, and current market structure. *Chapter II* shall provide an overview of the legal framework of the derivatives market in the country, describing the developments in the market and its regulatory regime. *Chapter III* shall proceed with a review of the legal and regulatory frameworks of, and recent developments in, EDMs in other jurisdictions such as Norway, the European Union, Australia, New Zealand, the United States, and Singapore. *Chapter IV* shall discuss the legal basis and challenges in setting up an EDM, as well as potential solutions to these challenges. Finally, *Chapter V* shall lay down the regulatory framework of an EDM, identifying and describing the functions and responsibilities of regulatory bodies, as well as the market structure for the EDM.

CHAPTER I
ELECTRIC POWER INDUSTRY IN THE PHILIPPINES

A. HISTORY OF ELECTRIC POWER INDUSTRY

Electricity was known to have reached the Philippines in 1890.[1] The Philippine Government regulated the electric industry by requiring franchises to establish and operate generation plants and electric systems. In 1902, the Philippine Government passed Act No. 484[2] providing for the granting of such franchises in the City of Manila. A year later, the Philippine Government passed Act No. 667[3] providing for the granting of such franchises throughout the archipelago.

Thereafter, the Philippine Government issued franchises to various private entities to own, operate, and maintain generation plants, transmission facilities and distribution systems.[4] It created the Public Utility Commission[5] to regulate the generation, transmission, and distribution of electricity.

In 1972, the Philippine Government limited the right and privilege to own, construct, and operate generation plants and transmission facilities throughout the country (with the exception of certain then-existing privately-owned power plants and isolated grids in far-flung areas)[6] to the National Power Corporation ("**NPC**"), a government-owned and –controlled corporation ("**GOCC**") initially tasked with

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[1] *See* Epictetus E. Patalinghug, An Analysis of the Philippine Electric Power Industry, http://www.ombudsman.gov.ph/UNDP4/wp-content/uploads/2013/01/An-Analysis-of-the-Philippine-Electric_Patilinhug.pdf (last accessed May 9, 2017).

[2] An Act Providing for the Granting of a Franchise to Construct and Electric Street Railway on the Streets of Manila and its Suburbs and a Franchise to Construct, Maintain, and Operate an Electric Light, Heat and Power System in the City of Manila and its Suburbs, after Competitive Bidding, Act No. 484, (1902).

[3] An Act Prescribing the Method of Applying to Governments of Municipalities, Except the City of Manila, and of Provinces for Franchises to Construct and Operate Street Railway, Electric Light and Power and Telephone Lines, the Conditions upon which the Same May Be Granted, Certain Powers of the Grantees of Said Franchises and of Grantees of Similar Franchises under Special Act of the Commission and for Other Purposes, Act No. 667, (1903).

[4] *See* the following: *(a)* An Act to Create a Corporation to be Known as the Bohol Electric Light Company, and to Grant to the Same a Franchise to Install, Operate, and Maintain an Electric Light, Heat, and Power System in the Province of Bohol, and for Other Purposes, Act No. 2831, (1919); *(b)* An Act Granting a Franchise to Charles M. Swift to Construct, Maintain, and Operate a Hydroelectric Plant and Electric Lighting, Heating, and Power System and Electric Transmission Lines in the Island Of Luzon, Act No. 2361, (1914); *(c)* An Act Granting to B. A. Green a Franchise to Install, Operate, and Maintain an Electric Light, Heat, and Power System in the Municipality of Orion, Province of Bataan, Philippine Islands, Act No. 2847, (1919); and *(d)* An Act Granting to the Company "Magsasaka" a Franchise to Install, Operate, and Maintain an Electric Light, Heat, and Power System in the Municipality of Cabanatuan, Province of Nueva Ecija, Philippine Islands, Act No. 2486 (1919).

[5] *See* the following: *(a)* An Act Creating a Board of Public Utility Commissioners and Prescribing Its Duties and Powers, and for Other Purposes, Act No. 2307 (1913); *(b)* An Act Creating a Public Utility Commission and Prescribing Its Duties and Powers, and for Other Purposes, Act No. 3108 (1923); and *(c)* The Public Service Law, Commonwealth Act No. 146, as Amended (1936).

[6] *See* A Decree Establishing Basic Policies for the Electric Power Industry, Presidential Decree No. 40, as Amended (1972).

developing the country's hydroelectric resources.[7] The Philippine Government likewise fixed the prices of electricity that the NPC may charge to the public, pegging a maximum of 10% rate of return.[8]

The Philippine Government, through the NPC, thus maintained a virtual monopoly over the generation and transmission of electricity. It is said that this monopoly was one of the principal reasons which led to electricity supply shortages, poor services, and increasing electricity subsidy costs.[9]

In 1987, the Philippine Government passed Executive Order No. 215,[10] allowing private entities, through build-operate-transfer contracts with NPC, to own and operate generation facilities to augment electricity supply in the country. However, NPC continued to experience administrative difficulties and massive rising costs in providing generation and transmission services to the public.[11]

Thus, in 2001, the Philippine Government passed Republic Act No. ("**RA**") 9136, or the Electric Power Industry Reform Act of 2001 (the "**EPIRA**"), which overhauled and restructured the electric energy industry in the country.

The EPIRA, which is still in force today, aims to liberalize the electric power industry. It restructured the industry to achieve the policy objectives of, among others, accelerating the total electrification of the country; ensuring quality, reliability, security and supply of electricity, and transparent and reasonable electricity prices; fostering a regime of free and fair competition and full public accountability; and enhancing inflow of private capital and broadening the ownership base of the generation, transmission, and distribution sectors.

To achieve these policy objectives, the EPIRA *(a)* laid down the regulatory regime governing the industry, allocating functions among various regulatory agencies; *(b)* unbundled the industry into four sectors, namely, the generation, transmission, distribution, and supply sectors; *(c)* decreed the privatization of NPC's generation and transmission assets and the devolution of its generation and transmission functions to the private sector; and *(d)* liberalized the trading of electricity through, among others, the creation of the WESM.

B. REGULATORY STRUCTURE

The EPIRA sets out the regulatory regime governing the electric power industry. It recognizes four key government agencies regulating or overseeing the industry,

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[7] *See* An Act Creating the "National Power Corporation," Prescribing Its Powers and Activities, Appropriating the Necessary Funds Therefor, and Reserving the Unappropriated Public Waters for Its Use, Common Wealth Act No. 120, as Amended (1936).

[8] *See* An Act Revising the Charter of the National Power Corporation, Republic Act No. 6395, as Amended, Section 4 (1971).

[9] Ma. Rowena M. Cham, The Philippine power sector: issues and solutions, http://www.pre.econ.upd.edu.ph/index.php/pre/article/viewFile/218/631 (last accessed May 9, 2017).

[10] Office of the President, Amending Presidential Decree No. 40 and Allowing the Private Sector to Generate Electricity, Executive Order No. 215 (Jul. 10, 1987).

[11] Ma. Rowena M. Cham, *supra* note 9.

namely, the Department of Energy ("**DOE**"), the Energy Regulatory Commission ("**ERC**"), the Joint Congressional Power Commission (the "**Power Commission**"), and the National Electrification Administration ("**NEA**").

1. DOE

The DOE, a department of the executive branch of the Philippine Government, formulates policies and plans, and implements a comprehensive program for the efficient supply and use of energy in the country. It is tasked with preparing, integrating, coordinating, supervising, and controlling all plans, programs, projects, and activities of the Philippine Government relative to energy exploration, development, utilization, distribution, and conservation.[12]

Under the EPIRA, the DOE is mandated to supervise the restructuring of the electric power industry and to exercise, among others, the following powers and functions in relation to the electric power industry:

(a) To promulgate the implementing rules and regulations of the EPIRA (the "**EPIRA IRR**") in consultation with relevant government agencies, electric power industry participants, non-government organizations and end users;[13]
(b) To develop and update annually the Philippine Energy Plan[14] and the Power Development Program,[15] and thereafter, to integrate the latter into the former;
(c) To ensure reliability, quality, and security of supply of electric power;
(d) To exercise supervision and control over all government activities related to energy projects;
(e) To encourage private sector investments in the electricity sector and promote development of indigenous and renewable energy sources;
(f) To facilitate reforms in the structure and operations of distribution utilities for greater efficiency and lower costs;
(g) To promote a system of incentives to encourage industry participants, including new generating companies and end-users, to provide adequate and reliable electric supply;

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[12] An Act Creating the Department of Energy, Rationalizing the Organization and Functions of Government Agencies Related to the Energy and for Other Purposes, Republic Act No. 7638, as Amended, Chapter I, Section 4 (1992).
[13] An Act Ordaining Reforms in the Electric Power Industry, Amending for the Purpose Certain Laws and for Other Purposes [Electric Power Industry Reform Act], Republic Act No. 9136, Chapter IX, Section 77 (2001).
[14] The "Philippine Energy Plan" shall provide for an integrated and comprehensive exploration, development, utilization, distribution, and conversation of energy resources with a preferential bias for environment-friendly, indigenous and low-cost sources of energy and with a policy direction towards the privatization of government agencies related to energy, deregulation of the power and energy industry and reduction of dependency on oil-fired plants (*See* Electric Power Industry Reform Act, Chapter III, Section 37(b)).
[15] The "Power Development Plan" shall consider and integrate the individual or joint development plans of the transmission, generation and distribution sectors of the electric power industry (*See* Electric Power Industry Reform Act, Chapter III, Section 37(c)).

(h) To educate the public, in coordination with NPC, ERC, NEA and the Philippine Information Agency, on the restructuring of the industry and the privatization of NPC assets; and
(i) To establish WESM in cooperation with electric power industry participants, and to formulate detailed rules governing its operations.[16]

2. ERC

The ERC is an independent, quasi-judicial and quasi-legislative administrative body created by the ERC. It is tasked with promulgating rules governing the electric power industry and hearing certain cases concerning industry players. It is also responsible for promoting competition, encouraging market development, ensuring customer choice, and penalizing of abuses of market power in the restructured electric power industry. Its key functions include:

(a) To enforce the EPIRA IRR;
(b) To promulgate and enforce the Philippine Grid Code and Philippine Distribution Code, which shall include performance and minimum financial capability standards and other terms and conditions for operation and use of, and access to, transmission and distribution facilities;
(c) To enforce rules and regulations governing the operations of the WESM and the activities of the WESM market operator and other market participants for the purpose of ensuring greater supply and rational pricing of electricity;
(d) To amend and revoke, after due notice and hearing, the authority to operate of any entity which fails to comply with the EPIRA, the EPIRA IRR or any issuance of the ERC;
(e) To act on applications, revoke, review and modify certificates of public convenience/necessity, licenses or permits of franchised electric utilities;
(f) To review and approve any changes on terms and conditions of service of transmission and distribution utilities;
(g) To monitor activities in the generation and supply sectors with the end in view of promoting free market competition and ensuring transparent and non-discriminatory pass through of bulk purchase costs;
(h) To establish and enforce a methodology for setting transmission and distribution wheeling rates and retail rates for the captive market;
(i) To allow and set user fees for ancillary services and set a lifeline rate for marginalized end users;
(j) To act on all applications for costs recovery and return on demand side management projects;
(k) To exercise original and exclusive jurisdiction over all cases contesting rates, fees, fines and penalties imposed by it in the exercise of its powers, functions and responsibilities and over all cases involving disputes between and among participants in the power sector;
(l) In the exercise of its investigative and quasi-judicial powers, to act against participant in the power sector for violations of any law, rule or regulation governing the same;

[16] *See* Electric Power Industry Reform Act, Chapter III, Section 37.

(m) To inspect the premises, books of accounts and records of any entity for the purpose of determining the existence of anti-competitive behavior, abuse of market power, and any violations of the rules and regulations issued by the ERC;
(n) To monitor and take measures to penalize abuse of market power, cartelization, and anti-competitive and discriminatory behavior by any electric power industry participant;
(o) To impose fines and penalties for any non-compliance with or breach of the EPIRA, the EPIRA IRR, and the rules and regulations issued or administered by the ERC; and
(p) To perform such other regulatory functions as are appropriate and necessary to ensure the successful restructuring and modernization of the electric power industry.[17]

3. POWER COMMISSION

The Power Commission is a joint commission in the Philippine Congress composed of fourteen (14) members selected from the members of the Philippine Senate and House of Representatives. It is empowered, in aid of legislation, to perform the following functions:

(a) To set the guidelines and overall framework for monitoring and ensuring the proper implementation of the EPIRA;
(b) To endorse the initial privatization plan by the Power Sector Assets and Liabilities Management Corporation ("**PSALM**") for approval by the President of the Philippines;
(c) To ensure transparency, require the submission of reports from government agencies concerned on the conduct of public bidding procedures regarding privatization of NPC generation and transmission assets;
(d) To review and evaluate the performance of the industry participants in relation to the objectives and timelines set forth in the EPIRA;
(e) To require the DOE, ERC, NEA, National Transmission Corporation ("**TRANSCO**"), and electric power industry participants to submit reports and pertinent data relating to the performance of their functions in the industry;
(f) To submit periodic reports to the President of the Philippines and Congress;
(g) To determine inherent weaknesses in the law and recommend necessary remedial legislation or executive measures; and
(h) To perform such other duties and functions as may be necessary to attain its objectives.[18]

4. NEA

The NEA, a GOCC, is tasked with the supervision of the management and operations of all electric cooperatives to empower them to cope with the changes brought about

[17] *Id*., Chapter IV, Section 43.
[18] *Id*., Chapter VIII, Section 62.

by the restructuring of electric power industry pursuant to EPIRA.[19] Electric cooperatives are associations of persons organized to function as distribution utilities.[20]

Among the NEA's current functions are:

(a) To ensure the economic and financial viability and operation of all electric cooperatives;
(b) To restructure ailing electric cooperatives;
(c) To develop, set and enforce institutional and governance standards for the efficient operation of electric cooperatives, such as, but not limited to, the observance of appropriate procurement procedure, including transparent and competitive bidding, through a mechanism of incentives and disincentives;
(d) To formulate and impose administrative sanctions and penalties and when warranted, file criminal cases;
(e) To serve as guarantor to qualified electric cooperatives in their transactions with various parties, such as, but not limited to, co-signing in power supply contracts;
(f) To grant loans to electric cooperative for the construction, acquisition, operation and maintenance of sub-transmission and distribution facilities and all related properties, equipment, machinery, fixtures, and materials for the purpose of supplying area coverage service, and thereafter to grant loans for the restoration, improvement or enlargement of such facilities or for such other purposes as may be deemed necessary;
(g) To issue orders, rules and regulations, *motu proprio* or upon petition of third parties, to conduct investigations, referenda and other similar actions on all matters affecting the electric cooperatives;
(h) To issue preventive or disciplinary measures including, but not limited to, suspension or removal and replacement of any or all of the members of the board of directors and officers of the electric cooperative, as the NEA may deem fit and necessary, and to take any other remedial measures as the law or any agreement or arrangement with NEA may provide; and
(i) To appoint independent board of directors in the electric cooperative.[21]

In summary, the DOE sets the policies for the electric power industry in the country and is tasked with promulgating rules governing the WESM. The ERC passes rules and regulations governing the electric power industry and exercises quasi-judicial power over disputes involving electric power industry participants. It is also tasked with enforcing the rules governing the WESM. The Power Commission, in aid of

[19] *See* Creating the "National Electrification Administration" as a Corporation, Prescribing its Powers and Activities, Appropriating the Necessary Funds Therefore and Declaring a National Policy Objective for the Total Electrification of the Philippines on an Area Coverage Service Basis, the Organization, Promotion and Development of Electric Cooperatives to Attain the Said Objective, Prescribing Terms and Conditions for Their Operations, the Repeal of Republic Act No. 6038, and for Other Purposes [National Electrification Administration Decree], Presidential Decree No. 269, as Amended, Chapter I, Section 2(c) (1973).
[20] *Id*., Chapter I, Section 3(u).
[21] *Id*., Chapter II, Sections 4 and 4-A.

legislation, has oversight functions over the implementation of the EPIRA. Finally, NEA has authority to regulate the administrative operation of electric cooperatives.

C. INDUSTRY STRUCTURE

The EPIRA restructured the power industry. It transferred most of NPC's generation assets and functions[22] to PSALM, a GOCC created by the EPIRA, for the latter to bid out and eventually transfer to the public;[23] and NPC's transmissions assets and functions to TRANSCO, another GOCC, which the latter may also privatize.[24]

Moreover, the EPIRA unbundled the electric power industry into four main sectors, namely, *(a)* generation, *(b)* transmission, *(c)* distribution, and *(d)* supply.[25] Particular rules apply and govern these sectors.

1. GENERATION SECTOR

Generation refers to the production of electricity. Under the EPIRA, the generation of electricity is a business affected with public interest and shall be competitive and open. The EPIRA specifically states that generation is not considered a public utility operation.[26] This means that the generation sector is open to the private sector and any person or entity engaged or which shall engage in power generation is not required to secure a national franchise.[27]

While the generation sector is competitive and open, the ERC retains regulatory authority over generation companies.[28] Prior to operation, generation companies must secure a certificate of compliance from the ERC pursuant to the standards set forth in the EPIRA.[29] The ERC also reviews power supply contracts executed by generation companies and distribution utilities for the provision of electricity to the captive market.[30]

The generation sector includes *(a)* NPC, which continues to own and operate generation facilities for providing electricity to far-flung areas;[31] *(b)* PSALM, which owns and operates generation facilities pending their privatization;[32] and *(c)* privately-owned generation companies.

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[22] *See* Electric Power Industry Reform Act, Chapter 5, Section 47 and Chapter VIII, Section 70.
[23] *Id*., Chapter VI, Sections 49 and 50.
[24] *Id*., Chapter II, Section 8.
[25] *Id*., Chapter II, Section 5.
[26] *Id*., Chapter II, Section 6.
[27] *Id*.
[28] *See* Electric Power Industry Reform Act, Chapter II, Section 6.
[29] *Id*.
[30] *Id*., Chapter IV, Section 45.
[31] *Id*., Chapter V, Section 47 and Chapter VI, Section 50.
[32] *Id*., Chapter VI, Section 49.

2. TRANSMISSION SECTOR

Transmission refers to the conveyance of electricity generated by the generation companies and facilities through the high voltage backbone system to the distribution utilities, electric cooperatives, or bulk power customers.[33] The transmission of electric power is a regulated common electricity carrier business requiring a legislative franchise, and is subject to the ratemaking powers of the ERC.[34]

The EPIRA transferred the ownership and operation of transmission facilities from NPC to TRANSCO, with the option for the latter, upon direction of the President of the Philippines, to cause the privatization of such transmission facilities through open competitive bidding.[35]

In June 2006, the Philippine Government commenced the bidding of a concession contract for the operation, maintenance, and improvement of TRANSCO transmission facilities. In 2008, the Philippine Government awarded the contract and issued a franchise to the National Grid Corporation of the Philippines ("**NGCP**") to operate, maintain and improve the transmission facilities for a period of twenty-five (25) years.[36]

To date, TRANSCO retains ownership of the transmission facilities and NGCP continues to operate and maintain them throughout the country.[37]

3. DISTRIBUTION SECTOR

Distribution of electricity refers to the conveyance of electric power by a distribution utility through its distribution system pursuant to the provisions of the EPIRA.[38] It is a regulated common carrier business requiring a national franchise[39] and is considered public utility operation.[40]

Distribution utilities have the obligation to provide distribution services and connections to its system for any user within its franchise area and shall provide open and non-discriminatory access to its systems to all users.[41] In exchange, they may

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[33] *Id*., Chapter I, Section 4(ccc).
[34] *See* Electric Power Industry Reform Act, Chapter II, Section 7.
[35] *Id*., Chapter II, Section 21.
[36] An Act Granting the National Grid Corporation of the Philippines a Franchise to Engage in the Business of Conveying or Transmitting Electricity through High Voltage Back-Bone System of Interconnected Transmission Lines, Substations and Related Facilities, and for Other Purposes, Republic Act No. 9511, Section 1 (2008).
[37] The National Transmission Corporation, http://www.transco.ph/about#22688 (last accessed May 9, 2017).
[38] Electric Power Industry Reform Act, Chapter I, Section 4(n).
[39] *Id*., Chapter II, Section 22.
[40] *See Republic of the Philippines v. Manila Electric Company*, G.R. Nos. 141314 & 141369, November 15, 2002.
[41] *See Electric* Power Industry Reform Act, Chapter II, Section 23.

charge distribution service fees, distribution wheeling rates, and connection fees, subject to the approval of the ERC.[42]

Distribution utilities include privately incorporated utilities, electric cooperatives, and local government units duly authorized by the ERC.[43]

4. SUPPLY SECTOR

Supply refers to the sale of electricity by a party other than a generator or a distributor in a franchise area of a distribution utility using the wires of the distribution utility concerned.[44] It is essentially the supply or sale of electricity to the contestable market or those end-users who have a choice of their supplier as may be determined by the ERC.[45]

Like generation, supply of electricity is a business affected with public interest but is not considered a public utility operation. Thus, it does not require a national franchise and is not subject to the rate-making powers of the ERC.[46] However, the ERC retains regulatory authority over the supply sector. All suppliers of electricity to the Contestable Market, except for distribution utilities and electric cooperatives with respect to their existing franchise areas, are required to secure a license from the ERC.[47] Moreover, the ERC has the authority to issues rules and regulations governing the supply sector, especially on abuse of market power, cartelization, and other anti-competitive or discriminatory behavior promulgated by the ERC.[48]

The ERC has implemented retail competition and open access ("**RCOA**"). Retail competition pertains to the provision of electricity by the suppliers at the retail level, *i.e.,* to the Contestable Market.[49] Retail competition can be achieved by giving to any qualified person open access to the use of transmission, and/or distribution system and associated facilities subject to the payment of transmission and/or distribution retail wheeling rates[50]. With the implementation of RCOA, prices charged by suppliers for the supply of electricity to the Contestable Market are no longer subject to regulation by the ERC, except in cases provided by EPIRA.[51]

Under Section 31 of the EPIRA, the implementation of the RCOA is subject to the following conditions:

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[42] *Id*., Chapter II, Section 23.
[43] *Id*., Chapter II, Section 22.
[44] *Id*., Chapter I, Section 4(zz).
[45] This is unlike the Captive Market which do not have a choice of their supplier and are thus constrained to source their electricity from the concerned franchised distribution utility (*See* Electric Power Industry Reform Act, Chapter I, Section 4(c)).
[46] Electric Power Industry Reform Act, Chapter II, Section 29.
[47] *Id*.
[48] *Id*.
[49] *See* Rules and Regulations Implementing the Electric Power Industry Reform Act of 2001, Republic Act No. 9136, Rule 4(vvv) (2002).
[50] *Id*., Rule 4(hhh).
[51] *See* Electric Power Industry Reform Act, Chapter II, Section 6.

(a) Establishment of the WESM;
(b) Approval of unbundled transmission and distribution wheeling charges;
(c) Initial implementation of the cross subsidy removal scheme;
(d) Privatization of at least seventy percent (70%) of the total capacity of generating assets of NPC in Luzon and Visayas; and
(e) Transfer of the management and control of at least seventy percent (70%) of the total energy output of power plants under contract with NPC to the IPP Administrators.[52]

In Resolution No. 10 series of 2011 dated June 6, 2011, the ERC certified that all the foregoing conditions have been met. Subsequently, or on June 10, 2013, the ERC issued Resolution No. 11 series of 2013, adopting the supplemental rules to the transitory rules for the initial implementation of RCOA thereby effectively implementing RCOA on June 26, 2013.

Upon implementation, all electricity end-users having a monthly average peak demand of at least one megawatt (1 MW) for the preceding twelve (12)-month period are considered as the contestable market.[53] As such, they can choose their supplier of electricity, as may be determined by the ERC in accordance with EPIRA.[54] This is in contrast with the captive market who do not have the choice of a supplier of electricity.[55] The EPIRA provides that two years after the initial implementation of open access, the threshold level for Contestable Market shall be reduced from one megawatt (1 MW) to seven hundred fifty kilowatts (750 kW).[56] At this level, the aggregator, which refers to a person or entity engaged in consolidating electric power demand of end-users in the contestable area for the purpose of purchasing and reselling electricity on a group basis, shall be allowed to supply electricity to end-users whose aggregate demand within a contiguous area is at least seven hundred fifty kilowatts (750 kW).[57] In 2016, the ERC issued resolutions reducing the threshold level for the Contestable Market from one megawatt (1 MW) to seven hundred fifty kilowatts (750 kW).[58] The implementation of these resolutions, however, are currently on hold.[59] It is intended, however, that the ERC shall gradually reduce the

[52] *Id*., Chapter II, Section 31.
[53] *Id*.
[54] *Id*., Chapter I, Section 4(h).
[55] *Id*., Chapter I, Section 4(c).
[56] *Id*., Chapter II, Section 31.
[57] *See* Electric Power Industry Reform Act, Chapter I, Section 4(a) and Chapter II, Section 31.
[58] *See* the following: *(i)* Energy Regulatory Commission Resolution No. 10, series of 2016 (May 12, 2016); *(ii)* Energy Regulatory Commission Resolution No. 11, series of 2016 (May 12, 2016); and *(iii)* Energy Regulatory Commission Resolution No. 28, series of 2016 (Nov. 15, 2016).
[59] *See* Temporary Restraining Order, February 21, 2017 (on file with Supreme Court, En Banc) *in* Philippine Chamber of Commerce and Industry, San Beda College Alabang, Inc., Ateneo de Manila University, and Riverbanks Development Corporation v. Department of Energy, Hon. Alfonso G. Cusi*, in his official capacity as Secretary of the Department of Energy,* Energy Regulatory Commission, Hon. Jose Vicente B. Salazar*, in his official capacity as Chairperson of the Energy Regulatory Commission,* and Hon. Alfredo J. Non, Hon. Gloria Victoria C. Yap-Taruc, Hon. Josefina Patricia M. Asirit, and Hon. Geronimo D. Sta. Ana, *in their official capacities as incumbent commissioners of the Energy Regulatory Commission*, G.R. No. 228588 (pending).

threshold level based on its evaluation of the market, until it reaches the household demand level.[60]

Recently, the DOE and the ERC gradually moved for mandatory contestability, requiring (rather than giving the option to) the Contestable Market to source their electricity requirements from suppliers rather than their franchised distribution utilities. In particular, the DOE issued Department Circular No. 2015-06-0010, while the ERC issued ERC Resolution Nos. 5, 10, 11 and 28, series of 2016, requiring end-users with an average demand of at least one megawatt (1 MW) for the preceding twelve (12) months to enter into retail supply contracts with Retail Electricity Supplier ("**RES**") by its mandatory contestability date of February 26, 2017; subsequently, those end-users with an average demand of at least seven hundred fifty kilowatts (750 Kw) for the preceding twelve (12) months were also required to enter into retail supply contracts with RES by its mandatory contestability date of June 26, 2017. However, certain private sector groups sought to enjoin the implementation of these issuances. In February 2017, the Supreme Court issued a temporary restraining order, effectively halting mandatory contestability.[61]

D. WESM

As part of the restructuring of the power industry, the EPIRA established the WESM. The WESM is a market or venue for trading electricity as a commodity. It serves as a clearing house to reflect the economic value of electricity for a particular period, as indicated by the 'spot price'.[62] It likewise provides a central scheduling and dispatch mechanism for the electricity.[63]

1. REGULATORY STRUCTURE AND MEMBERSHIP

The DOE and ERC[64] exercise authority over the WESM operations. The DOE, jointly with electric power industry participants, formulates the Wholesale Electricity Spot Market Rules ("**WESM Rules**"),[65] which sets out the basic rules, requirements and procedures that govern the operations of the WESM.[66] The ERC enforces the WESM

[60] *See* Electric Power Industry Reform Act, Chapter II, Section 31.
[61] *See* Kristine Joy V. Patag, *Supreme Court issues TRO against contestable-customer power scheme*, BUSINESS WORLD ONLINE, Feb. 22, 2017, http://www.bworldonline.com/content.php?section=Economy&title=supreme-court-issues-tro-against-contestable-customer-power-scheme&id=141024 (last accessed May 9, 2017).
[62] Wholesale Electricity Spot Market, WESM Frequently Asked Questions, http://www.wesm.ph/inner.php/about_us/faqs (last accessed May 9, 2017).
[63] Department of Energy, Wholesale Electricity Spot Market Rules, Chapter 3, cl. 3.8 (2002).
[64] PEMC is organized as a non-stock, non-profit private corporation.
[65] Electric Power Industry Reform Act, Chapter II, Section 30; and DOE, WESM Rules, Chapter 1, cl. 1.2.3.1.
[66] Wholesale Electricity Spot Market, WESM Frequently Asked Questions, http://www.wesm.ph/inner.php/about_us/faqs (last accessed May 9, 2017).

Rules.[67] The day-to-day operations of the WESM is administered by PEMC,[68] the Market Operator.[69]

All generation companies, distribution utilities, suppliers, bulk consumers/end-users and other similar entities authorized by the ERC are eligible to become WESM members.[70] These entities, upon compliance with certain requirements under the WESM Rules, can become WESM members with the ability to trade, sell, purchase, dispatch and receive electricity through the WESM.[71]

2. TRADING IN THE WESM

The WESM provides a venue for sellers and buyers to come together and trade electricity. The WESM subscribes to the gross pool concept.[72] This means that all generation companies are required to offer their entire capacity to the market, regardless of whether these capacities (or portions thereof) are covered by or sold under bilateral supply contracts. Under the gross pool concept, the WESM pools together the entire available capacity for central scheduling and dispatch.[73]

In the WESM, generation companies submit generation offers (quantity/price) for succeeding trading intervals.[74] PEMC, as Market Operator, prepares forecasts of load/demand for such intervals, based on forecasts submitted by customers or as determined under the Market Dispatch Optimization Model ("**MDOM**").[75] PEMC, using the MDOM, matches the offers and forecasted demand and prepares a Dispatch Schedule, indicating the target loading of each scheduled generation plant and scheduled load.[76] PEMC then forwards this schedule to NGCP, the System Operator. NGCP reviews and implements the Dispatch Schedule, subject to system security and other contingencies and constraints.[77]

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[67] *See* Electric Power Industry Reform Act, Section 43(c); and DOE, WESM Rules, Chapter 1, cl. 1.2.3.2.
[68] DOE, WESM Rules, Chapter 1, cl. 1.3.1.
[69] The Market Operator implements the WESM in accordance with the WESM Rules. The Market Operator shall be an autonomous group, constituted by DOE, with equitable representation from electric power industry participants, initially under the administrative supervision of the TRANSCO. (*See* Electric Power Industry Reform Act, Chapter II, Section 30.) The Market Operator is also responsible for coordinating all the commercial aspects of WESM transactions in coordination with the System Operator who takes care of the physical implementation of these market transactions. (*See* Philippine Electricity Market Corporation, About Us, http://www.wesm.ph/inner.php/about_us/pemc (last accessed May 9, 2017.)).
[70] DOE, WESM Rules, Chapter 2, cl. 2.2.4.
[71] *Id*., Chapter 2, cl. 2.2.
[72] Energy Regulatory Commission, The Price Determination Methodology for the Philippine Wholesale Electricity Spot Market (WESM), cl. 3.2 (2004).
[73] *Id*.), cl. 3.2 & 4.5.
[74] WESM Dispatch Protocol, Appendix A.1.
[75] The market dispatch optimization model simultaneously determines dispatch targets for the end of a trading interval, reserve allocations for the trading interval, associated energy prices at all trading nodes in the power system and when applicable reserve prices for all reserve regions. (*See* DOE, WESM Rules, Chapter 3, cl. 3.6.1.1.)
[76] WESM Dispatch Protocol, Appendix A.7
[77] DOE, WESM Rules, Chapter 3, cl. 3.8.2.

3. PRICING AND SETTLEMENT

As mentioned, the WESM adopts the gross pool concept, where all capacity – whether covered by bilateral supply contracts – is pooled together and dispatched through the WESM.[78] However, the quantities/capacity covered by bilateral supply contracts ("**BCQ**") are paid or settled at the contract price, while those not covered are paid using WESM rates.[79] For instance, a generation plant supplied 200 MW at a particular trading interval, 50 MW of which was covered by a BCQ. In this instance, the 50 MW shall be paid using the rates stipulated in the BCQ, while the remaining 150 MW shall be paid using the WESM rates.

The total price/unit of power traded in a particular trading interval is referred to as the Total Trading Amount ("**TTA**"). The TTA reflects the cost of producing and delivering a particular amount of electricity at a particular location at a particular interval.[80] It considers the locational marginal price before and after the trading interval and the quantity of electricity injected into the grid.[81]

a. LOCATIONAL PRICING

The WESM adopts locational marginal or nodal pricing, a method of computing the prices of electricity at a specific location and time, taking into account generation costs, systems losses, and transmission congestion.[82] It therefore represents the economic value of energy at each node considering three elements: *(a)* generation cost, *(b)* systems losses, and *(c)* transmission congestion cost.[83]

Generation cost at a particular interval is based on the market clearing price.[84] At each trading interval, PEMC prepares a WESM Merit Order Table.[85] Here, generation offers are stacked or arranged from cheapest to most expensive until the demand of electricity for the particular trading interval is met. The price of generation offer that meets the demand is the market clearing price.[86] For instance, the total demand for trading interval is 1,000 MW and five generation companies made the following generation offers:

GENERATION PLANT	OFFER	
	QUANTITY	PRICE
A	100 MW	₱ 500/MW
B	200 MW	₱ 400/MW
C	300 MW	₱ 300/MW
D	400 MW	₱ 200/MW

[78] ERC, The Price Determination Methodology for the Philippine WESM, cl. 3.2 & 4.5.
[79] DOE, WESM Rules, Chapter 3, cl. 3.13.7.
[80] ERC, The Price Determination Methodology for the Philippine WESM, cl. 4.6.
[81] DOE, WESM Rules, Chapter 3, cl. 3.13.9.
[82] ERC, The Price Determination Methodology for the Philippine WESM, cl. 4.6 & 4.7.
[83] *Id*., cl. 4.7.
[84] *Id*., cl. 4.5.
[85] WESM Dispatch Protocol, Appendix D.1.
[86] ERC, The Price Determination Methodology for the Philippine WESM, cl. 4.5.

GENERATION PLANT	OFFER	
	QUANTITY	PRICE
E	500 MW	₱ 100/MW

In the WESM Merit Order Table, PEMC shall first stack the offers from the cheapest to the next cheapest until the demand is met. Thus, PEMC shall first stack Plant E at the cheapest price of ₱100/MW, followed by Plant D at ₱200/MW, followed by Plant C at ₱300/MW. At this point, the total demand of 1,000 MW is met (500 MW from Plant E + 400 MW from Plant D + 100 MW from Plant C). The market clearing price is ₱300/MW because it is offer of Plant C that meets the demand.[87]

Systems loss pertains to losses in transmitting electricity.[88] Electricity is consumed as it is created.[89] Thus, systems loss is greater when electricity travels greater distances.[90] Thus, systems loss varies depending on the location of the generation plants and the loads.[91] To compute for this, the MDOM assigns a reference node where systems loss is set at zero.[92] The MDOM likewise assigns each generation plant and loads nodes in the model.[93] The systems loss varies in reference to the reference node.[94]

Transmission congestion cost pertains to the additional cost resulting from transmitting electricity through heavily used or congested lines.[95] In the same way, travel fares increase when there is greater traffic, costs of transmitting electricity increase when transmission lines are congested.[96]

The sum of the generation cost, systems loss, and transmission congestion cost is the locational marginal price at a particular location or node at a particular time.[97] The locational marginal price at the start of an interval is the Ex-Ante Price and the locational marginal price at the end of an interval is the Ex-Post Price.[98]

b. EX-ANTE AND EX-POST SETTLEMENT

The WESM adopts ex-ante and ex-post settlement.[99] This means that the TTA for each interval considers *(a)* the nodal price and quantity of electricity intended for injection into the grid before the start of such interval, *(b)* price and quantity of electricity actually injected into the grid after such interval, and *(c)* the ramp-up of

[87] WESM Dispatch Protocol, Appendix D.1, cl. 5.
[88] ERC, The Price Determination Methodology for the Philippine WESM, cl. 4.6.
[89] *Id*., cl. 4.6 & 4.7.
[90] *Id*.
[91] *Id*.
[92] DOE, WESM Rules, Chapter 3, cl. 3.2.2.
[93] *Id*.
[94] ERC, The Price Determination Methodology for the Philippine WESM, cl. 4.7.
[95] *Id*.
[96] *Id*., cl. 4.6 & 4.7.
[97] *Id*., cl. 4.7.
[98] *Id*., Glossary of Terms.
[99] *Id*., cl. 3.5.

such quantities throughout that interval.[100] Thus, the TTA for a trading interval is equivalent to the sum of: *(a)* the locational marginal price at the start of such interval (the "**Ex-Ante Price**") multiplied by the quantity of electricity scheduled for injection into the grid (the "**Ex-Ante Quantity**") less quantities covered by BCQ, and *(b)* the locational marginal price at the end of such interval (the "**Ex-Post Price**") multiplied by the metered quantity actually injected into the grid ("**Ex-Post Quantity**") less the Ex-ante Quantity.[101] In equation:

$$\text{TTA} = \begin{array}{l}\text{Ex-Ante Price x (Ex-Ante Quantity – BCQ) +} \\ \text{Ex-Post Price x (Ex-Post Quantity – Ex-Ante Quantity)}\end{array}$$

The WESM uses ex-post and ex-ante settlement to account for the differences or imbalances in quantities and price throughout the trading interval.[102]

The WESM reflects the spot price or the current market price at which electricity is bought and sold for immediate payment and delivery.[103] (This is different from the forward or future prices, or prices at which electricity may be bought or sold for settlement in the future, subject of an EDM.[104])

[100] DOE, WESM Rules, Chapter 3, cl. 3.10.1.
[101] ERC, The Price Determination Methodology for the Philippine WESM, cl. 13.1.
[102] *Id*., cl. 3.5.
[103] *See* ERC, "WESM", www.erc.gov.ph/Files/Render/media/WESM2012.pdf (last accessed May 9, 2017).
[104] John C. Cox, et al., The Relation Between Forward Prices and Future Prices, http://faculty.som.yale.edu/jonathaningersoll/downloads/1981_ForwardFuturesPrices.pdf (last accessed May 9, 2017).

CHAPTER II
DERIVATIVES AND COMMODITY FUTURES IN THE PHILIPPINES

A. DERIVATIVES AND COMMODITY FUTURES, IN GENERAL

1. DERIVATIVES

A derivative is commonly defined as a contract or security that derives its value from an underlying asset or from the value of a rate or index of asset value.[105] It is "a financial security whose payoff depends on (or derives from) other more fundamental variables, such as stock price, an exchange rate, a commodity price, an interest rate – or even the price of another derivative security."[106]

There are several types of derivatives. The common types of derivatives are forward contracts, futures, options, swaps, and contracts for difference, described briefly as follows:

(a) A forward contract is "a contract between a buyer and seller whereby the buyer is obligated to take delivery and the seller is obliged to deliver a fixed amount of an underlying commodity at a pre-determined price and date. Payment is full at the time of delivery".[107]

(b) A future contract is "a contract providing for the making or taking delivery at a prescribed *(sic)* in the future of a specific quantity or quality of a commodity or cash value thereof, which is customarily offset prior to the delivery date, and includes standardized contracts having the indicia of commodities futures, commodity options and commodity options and commodity leverage, or margin contracts".[108]

(c) An option contract is a financial security that gives the buyer the right (but not the obligation) to buy or sell a specified asset at a specified price on or before a specified date.[109]

(d) A swap is a bilateral contract that calls for the periodic exchange of cash flows on specified dates and calculated using specified rules.[110]

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[105] *Derivative,* Merriam-Webster, https://www.merriam-webster.com/dictionary/derivative (last accessed May 9, 2017)
[106] RANGARAJAN K. SUNDARAM & SANJIV RANJAN DAS, DERIVATIVES: PRINCIPLES AND PRACTICE 2 (2011).
[107] Rules and Regulations Implementing the Securities Regulation Code, Republic Act No. 8799, Rule 11, Section 11.1.3 (2015).
[108] *Id.,* Rule 11, Section 11.1.1.
[109] SUNDARAM & DAS, *supra* note 106, at 9.
[110] *Id*., at 1.

(e) A contract for difference is an agreement between the buyer and seller to exchange the difference between the current value of an asset and the value of an asset when the contract was initiated.[111]

Philippine law has also defined derivatives. The Securities Regulation Code ("**SRC**"), the current law governing the registration, sale and trading of securities, broadly defines derivatives as a type of security "like options and warrants."[112] In turn, options are contracts that "give the buyer the right, but not the obligation, to buy or sell an underlying security at a predetermined price called the exercise or strike price, on or before a predetermined date, called the expiry,"[113] while warrants refer to "rights to subscribe or purchase new or existing shares in a company on or before a predetermined date."[114]

The SRC's current Implementing Rules and Regulations[115] ("**2015 SRC IRR**") also further defines derivatives as:

> [A] financial instrument whose value changes in response to changes in a specified interest rate, security price, commodity price, foreign exchange rate, index of prices or rates, credit rating or credit index, or similar variable or underlying factor. It is settled at a future date.[116]

The Bangko Sentral ng Pilipinas ("**BSP**"), tasked with regulating and monitoring banks and financial institutions and their activities (including transacting in derivatives), also provides a definition of derivatives. It defines a derivative as a "financial instrument that primarily derives its value from the performance of an underlying variable."[117] According to the BSP, a financial derivative is any financial instrument or contract with the following characteristics:[118]

(a) Its value changes in response to a change in a specified interest rate, financial instrument price, commodity price, foreign exchange ("**FX**") rate, index of prices or rates, credit spread, credit rating or credit index or other variables not prohibited under existing laws, rules and regulations;

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[111] Nasdaq Inc., Contract for Difference, http://www.nasdaq.com/investing/glossary/c/contract-for-difference (last accessed on May 9, 2017).
[112] Securities Regulation Code, Republic Act No. 8799, Section 3.1(d) (2000).
[113] Rules and Regulations Implementing the Securities Regulation Code, Rule 3, Section 3.1.9.1.
[114] *Id*., Rule 3, Section 3.1.9.2.
[115] Rules and Regulations Implementing the Securities Regulation Code.
[116] *Id*., Rule 3, Section 3.1.9.
[117] Bangko Sentral ng Pilipinas, Manual of Regulations for Banks [MORB], Volume 1, Section X611, (2016). *See* 2015 MORB, Volume 1, Section X611 (2015); *see also* 2014 MORB, Volume 1, Section X611 (2014); *see also* 2013 MORB, Volume 1, Section X611 (2013); *see also* 2012 MORB, Volume 1, Section X611 (2012); *see also* 2011 MORB, Volume 1, Section X611 (2011); *see also* 2010 MORB, Volume 1, Section X611 (2010); *see also* 2009 MORB, Volume 1, Section X611 (2009); *see also* 2008 MORB, Volume 1, Section X611 (2008); *see also* Bangko Sentral ng Pilipinas, Circular No. 594, Series of 2008, Paragraph 2 (Jan. 1, 2008).
[118] *Id*.

(b) It requires either no initial net investment or an initial net investment that is smaller than would be required for other types of contracts that would be expected to have a similar response to changes in market factors; and

(c) It is settled at a future date.

Under the Manual of Regulations for Banks ("**MORB**") issued by the BSP, the underlying assets in derivative contracts include specified interest rate, financial instrument price, commodity price, FX rate, index of prices or rates, credit spread, credit rating or credit index, and other variables that are not prohibited by laws, rules and regulations.

The Insurance Commission, which regulates insurance companies and their activities (including transacting in derivatives), adopts the BSP's broad definition of derivatives[119] and adds that a derivatives contract is a financial instrument that, "derives its value from the movement in commodity price, foreign exchange rate and interest rate of an underlying asset or financial instrument."[120]

Based on the foregoing, a derivative under Philippine law has the following elements: *(a)* it is a financial instrument (*i.e.*, a contract), *(b)* the value of the financial instrument changes in response to or is dependent on changes in a specified interest rate, security price, commodity price, foreign exchange rate, index of prices or rates, credit rating or credit index, or other variables, and *(c)* it is settled at a future date.

2. COMMODITY FUTURES

A commodity futures contract is a future contract that derives its value from an underlying commodity. It is, therefore, a type of derivative, and consequently, also a security.[121] (The SRC does not explicitly classify commodity futures contract as a security unlike its predecessor, the Revised Securities Act.[122] However, because derivatives are classified as securities under the SRC, commodity futures contracts, being derivatives, are likewise securities.)

The SRC does not define a commodity future contract. The 2015 SRC IRR (as well as the 2000 and 2003 Implementing Rules and Regulations of the SRC, respectively the "**2000 SRC IRR**" and the "**2003 SRC IRR**") does. It states:

> 11.1.1. Commodity future contract means a contract providing for the making or taking delivery at a prescribed *(sic)* in the future of a specific quantity or quality of a commodity or cash value thereof, which is customarily offset prior to the delivery date, and includes standardized contracts having the indicia of commodities futures, commodity options and commodity options and commodity leverage, or margin contracts.

[119] "A financial instrument that primarily derives its value from the performance of any underlying variable."
[120] Insurance Commission, Circular Letter No. 2015-56, Section 1(a) (Dec. 1, 2015).
[121] Securities Regulation Code, Section 3.1(d).
[122] Revised Securities Act, Batas Pambansa Blg. 178, Section 2(a) (1982).

> 11.1.2. Commodity means any goods, articles, agricultural and mineral products, services, rights and interests, and financial instruments, foreign currencies, including any group or index of any of the foregoing, in which commodity interest contracts are presently or in the future dealt in.[123]

Based on the foregoing, a commodity future contract is a contract that *(a)* prescribes the delivery of a particular commodity, *(b)* can be settled by the delivery of such commodity or payment of the cash value thereof, *(c)* usually offset before delivery date, and *(d)* usually has standardized terms.

The 2000, 2003, and 2015 SRC IRR all provide a similar definition for forward contracts. The 2015 SRC IRR states:

> 11.1.3. Forward means a contract between a buyer and seller whereby the buyer is obligated to take delivery and the seller is obliged to deliver a fixed amount of an underlying commodity at a pre-determined price and date. Payment is full at the time of delivery.[124]

Based on the foregoing, a forward is a contract for the delivery of a particular commodity that is settled by the actual delivery of the commodity and payment of the pre-determined price on the specified delivery date.

The SRC and the 2015 SRC IRR also provide that no person shall offer, sell or enter into commodity futures contracts except in accordance with rules, regulations and orders the Securities and Exchange Commission ("**SEC**") may prescribe in the public interest.[125] As will be explained further below, there are currently no rules prescribed by the SEC on commodity futures contracts. The latest rules on this matter have been suspended.[126] However, such suspension is "without prejudice to applicable [BSP] rules and circulars on commodity futures contracts of entities and persons under BSP's jurisdiction."[127]

B. HISTORY OF DERIVATIVES AND COMMODITY FUTURES IN THE PHILIPPINES

1. SECURITIES LAWS

The SRC and its predecessor laws appear to have always contemplated the trading of derivatives and commodity futures contracts.

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[123] Rules and Regulations Implementing the Securities Regulation Code, Rule 11, Sections 11.1.1 & 11.1.2.
[124] *Id*., Rule 11, Section 11.1.3.
[125] *See* Securities Regulation Code, Section 11 and Rules and Regulations Implementing the Securities Regulation Code, Rule 11, Section 11.1.
[126] *See* Rules and Regulations Implementing the Securities Regulation Code, Rule 11, Section 11.2; *see also* Securities Exchange Commission, Advisory on Foreign Exchange Trading (Nov. 12, 2013) and Securities Exchange Commission, Advisory on Foreign Exchange Trading (Oct. 20, 2016).
[127] Rules and Regulations Implementing the Securities Regulation Code, Rule 11, Section 11.2.

In 1936, the Philippine Congress passed the Securities Act[128] and introduced the concept of "speculative securities" that could be traded in the country under certain conditions.[129] It defined "speculative securities" to include *(a)* "all securities the value of which materially depends upon proposed or promised future promotion or development rather than on present tangible assets and conditions,"[130] and *(b)* "all securities into the value of which the elements of chance or hazard or speculative profit or possible loss equals or predominates over the elements of reasonable certainty or safety of investment."[131] This definition could include derivatives and commodity futures inasmuch as the value of derivatives and commodity futures has a future element and involves chance or hazard.

The Securities Act allowed the sale of speculative securities when *(a)* the issuer of the security is of good repute, *(b)* the sale would not be fraudulent and would not work or tend to work fraud upon the purchaser, and *(c)* the enterprise or business of the issuer is not based upon unsound business principles.[132]

In 1982, the Philippine Congress passed the Revised Securities Act. It defined "securities" to include derivatives such as commodity futures contracts, transferable stock options, warrants or right to subscribe and sell other securities.[133] The Revised Securities Act also provided that commodity futures contracts may be registered or otherwise regulated "in accordance with the rules and regulations that shall be promulgated in the public interest and for the protection of investors by the [SEC], with the approval of the Monetary Board of the [BSP]."[134]

In 2000, the SRC was passed. As discussed above, the SRC specifically defined derivatives as a security and which shall include options or warrants. It similarly provided that "no person shall offer, sell or enter into commodity futures contracts except in accordance with rules, regulations and orders the SEC may prescribe in the public interest"[135] and that the SEC "shall promulgate rules and regulations involving commodity futures contracts to protect investors to ensure the development of a fair and transparent commodities market."[136]

2. RULES ON COMMODITY FUTURES

The SEC has issued rules specifically governing transactions involving commodity futures contracts.

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[128] An Act to Regulate the Sale of Securities, to Create a Securities and Exchange Commission to Enforce the Provisions of the Same, and to Appropriate Funds Therefor, Commonwealth Act No. 83, (1936).
[129] *Id*., Section 2(b) and Section 9.
[130] *Id*., Section 2(b)(2).
[131] *Id*., Section 2(b)(4).
[132] *Id*., Section 9 (1936).
[133] *See* Revised Securities Act, Batas Pambansa Blg. 178, Section 2(a) (1982).
[134] *Id*., Section 7.
[135] Securities Regulation Code, Section 11.
[136] *Id*.

In 1980, pursuant to its general powers under Presidential Decree No. ("**PD**") 902-A,[137] the SEC promulgated the *Rules and Regulations Governing Commodity Futures Exchanges, Futures Commission Merchants, Floor Brokers, Commodity Futures Associations, Commodity Pool Operators and Commodity Advisors* (the "**1980 CFC Rules**").

The 1980 CFC Rules prohibited futures transactions and the solicitation and acceptance of futures orders except through "contract markets" designated by the SEC.[138] In this connection, the 1980 CFC Rules provided that a commodity futures exchange may be designated as a contract market when it complies with the following requirements: *(a)* where the exchange is located at a place or area where any commodity of the kind specified in the future contract is sold in sufficient volumes and under such conditions as to fairly reflect the general value of the commodity, and where there is available to such exchange commodity inspection service approved by the SEC, *(b)* where the governing board of the exchange provides for the making and filing by the exchange or any member thereof of reports as the SEC may direct, *(c)* where the governing board of the exchange provides for the prevention of dissemination by the exchange or any member thereof of false or misleading or knowingly inaccurate reports concerning marking information that affect or tend to affect the price any commodity traded nationally and for the prevention of price manipulation and the cornering of any commodity, and *(d)* when such exchange demonstrates that transactions for future delivery in the commodity for which designation as a contract is sought will promote public interest.[139]

The 1980 CFC Rules also required domestic contract markets to make provisions for the delivery of the underlying commodity by making it their responsibility to: *(a)* require the party making delivery of any commodity on any contract of sale of such commodity for future delivery[140] to furnish the party obligated under the contract to accept delivery, written notice of the date of delivery at least one business day prior to such date of delivery, and *(b)* require that all contracts of sales of any commodity for future delivery on such contract market shall provide for the delivery thereunder of commodities of grades conforming to Philippine or international standards, if such standards are officially promulgated and adopted by the SEC.[141]

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[137] Reorganization of the Securities and Exchange Commission with Additional Powers and Placing the Said Agency under the Administrative Supervision of the Office of the President, Presidential Decree No. 902-A, as Amended (1976).

[138] *See* Securities and Exchange Commission, Rules and Regulations Governing Commodity Futures Exchanges, Futures Commission Merchants, Floor Brokers, Commodity Futures Associations, Commodity Pool Operators and Commodity Advisors, Rules 1 and 2 (June 3, 1980).

[139] *Id*., Rule 3.

[140] The 1980 CFC Rules defines the term "future delivery" to "not include any sale of any cash commodity for deferred shipment or delivery."

[141] *See* SEC, Rules and Regulations Governing Commodity Futures Exchanges, Futures Commission Merchants, Floor Brokers, Commodity Futures Associations, Commodity Pool Operators and Commodity Advisors, Rule 4.

Furthermore, the 1980 CFC Rules provided for the rules on registration of and set the qualifications for futures associations,[142] futures commission merchants or brokers, floor brokers, pool operators and advisors.[143] It also prohibited excessive speculation or transactions that are not bona fide hedging transactions,[144] fraudulent transactions,[145] those of the character of, or is commonly known to the trade as "wash sale," "cross trade," or "accommodation trade," or is a "fictitious sale", an "option," "privilege," "indemnity," "bid," "offer," "put," "call," "advance guaranty" or "decline guaranty", and those used to cause any price to be reported which is not a true and bona fide price.[146]

In 1983, pursuant to Section 7 of the Revised Securities Act, the SEC promulgated the *Revised Rules on Commodity Futures* (the "**1983 CFC Rules**"). The 1983 CFC Rules prohibited similar acts (transacting commodity futures outside of a contract market, excess speculation, etc.),[147] required similar qualifications for a contract market,[148] and imposed the same responsibilities on contract markets with respect to making provision for proper delivery of the underlying commodity.[149] It also provided for the registration, qualifications and margin requirements of various participants in the commodities futures market.[150]

In 1999, the SEC again revised the rules on commodity futures and issued the *New Rules and Regulations on Future Trading* (the "**1999 CFC Rules**").[151] The 1999 CFC Rules similarly prohibited engaging in futures transaction without being duly authorized by the SEC and declared that transactions entered into or traded by unlicensed or unauthorized persons are null void.[152] It also prohibited fraudulent transactions,[153] transactions of a character of "wash sale," "cross sale," "accommodation trade" or a "fictitious sale" and those used to cause any price to be reported which not a true and bona fide price.[154]

The 1999 CFC Rules also provided new qualifications and requirements before a futures exchange may be authorized to act as such.[155] It required exchanges to meet

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[142] *Id*., Rule 10.
[143] *Id.*, Title III.
[144] *Id*., Rule 25.
[145] *Id*., Rules 27 and 28.
[146] *Id*., Rule 29.
[147] *See* Securities and Exchange Commission, Revised Rules on Commodity Futures, Rules 2, 3, 29 to 33 (Jan. 1, 1983).
[148] *Id*., Rule 4.
[149] *Id*., Rule 5.
[150] *Id*., Titles III and IV.
[151] Unlike the 1980 and 1983 CFC Rules, the 1999 CFC Rules specifically provided that the rules issued by the BSP with respect to futures contracts shall apply primarily to institutions supervised by the BSP.
[152] *See* Securities and Exchange Commission, New Rules and Regulations on Future Trading, Section 30 (July 9, 1999).
[153] *Id*., Section 32.
[154] *Id*., Section 34.
[155] *Id*., Section 2.

the requirements of a self-regulatory organization[156] ("**SRO**").[157] Nevertheless, it still required exchanges to make provisions for delivery of the underlying commodity, making it their responsibility to *(a)* require the party making the delivery of any commodity to furnish a written notice of the delivery date at least three business days prior to such delivery date to the party obligated under the contract to accept delivery, and *(b)* require that all commodity exchange contracts shall include a provision for the delivery of commodities of grades conforming to standards promulgated by the exchange and approved by the SEC.[158]

The 1999 CFC Rules, however, were and remains suspended. The 2003 SRC IRR stated that "[w]ithout prejudice to applicable [BSP] rules and circulars, the public trading of commodities futures contracts and pertinent [SEC] rules shall remain suspended until further ordered otherwise by the [SEC]."[159] In 2013 and 2016, the SEC issued advisories reiterating the suspension of the rules on commodity futures.[160]

3. MANILA INTERNATIONAL FUTURES EXCHANGE

In October 1984, the Manila International Futures Exchange ("**MIFE**"), a derivatives exchange, was established in the Philippines.[161] In January 1986, the SEC licensed MIFE to operate as derivatives exchange, and in October 1986, MIFE commenced derivatives trading.[162] MIFE was operated by an independent organization authorized by the SEC, Moncom Management Services, and trades therein were cleared by an independent clearinghouse, Manila International Futures Clearing House.[163]

There were five kinds of members in the MIFE, namely: *(a)* founding members, who have access to the trading floor and full voting rights, and may deal for their own accounts or client accounts, *(b)* full members, who also have access to the trading floor and full voting rights, and may deal for their own or client accounts but must be registered and licensed as commodity futures brokers, *(c)* trade affiliate members, who have no access to the trading floor nor voting rights but can deal for their own or client accounts through a full member, *(d)* associate members, who have no prior affiliation with MIFE and who may only deal for their own accounts through a floor

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[156] *Id*., Section 2.
[157] An SRO refers to *(a)* an organized Exchange under Section 33 of the SRC, *(b)* a registered clearing agency under Section 42 of the SRC, *(c)* a registered securities association under Section 39 of the SRC, and *(d)* other SROs under Section 40 of the SRC. SROs have been authorized by the SEC to: *(a)* enforce compliance with relevant provisions of the SRC and rules and regulations adopted thereunder, *(b)* promulgate and enforce its own rules which have been approved by the SEC, by their members and/or participants, and *(c)* enforce fair, ethical and efficient practices in the securities and commodity futures industries including securities and commodities exchanges. *(See* Rules and Regulations Implementing the Securities Regulation Code, Rule 3, Section 3.1.22; *see also* Securities Regulation Code, Chapter 10).
[158] *See* SEC, New Rules and Regulations on Future Trading, Section 3.
[159] Rules and Regulations Implementing the Securities Regulation Code, Rule 11, Section 11.4.
[160] *See* Securities Exchange Commission, Advisory on Foreign Exchange Trading (Nov. 12, 2013) and Securities Exchange Commission, Advisory on Foreign Exchange Trading (Oct. 20, 2016).
[161] ERIK BANKS, ASIA PACIFIC DERIVATIVES MARKETS, 477 (1996).
[162] *Id*.
[163] *Id*. at 477 to 478.

member, and *(e)* individual market members, who have access to the trading floor and can deal for their own accounts only.[164]

Various derivatives were traded in the MIFE. These included financial derivatives such as short-term interest rate futures based on domestic treasury bill rates were traded in 1990[165] and currency futures on PHP/US$, JPY/US$, US$/GBP, and CHF/US$.[166] These also included commodity futures such as robusta coffee futures, copra futures, sugar futures, soybean futures and dried cocoon futures.[167] In 1994, MIFE transacted over 7,000 treasury bill futures, 380,000 currency futures, and 2.5 million commodities futures.[168] These commodity futures were all settled through physical delivery of the underlying commodity.[169]

In the mid-1990s, the SEC ordered the closure of MIFE following widespread complaints of fraud and irregularities by commodities brokers.[170] To date, there is no licensed domestic exchange where commodities futures may be traded.

4. CURRENT DERIVATIVES MARKET: BANKS AND INSURANCE COMPANIES

Presently, banks and insurance companies (through or with banks) are authorized to deal in derivatives in over-the-counter ("**OTC**") markets.[171]

The General Banking Law of 2000 ("**GBL**") and issuances of the BSP, mainly, the MORB, primarily govern the activities of banks. The MORB authorizes banks to engage in derivative activities provided that it *(a)* understands, measures monitors and controls the risks assumed from its derivatives activities, *(b)* adopts effective risk management practices whose sophistication are commensurate to the risks being monitored and controlled, and *(c)* maintains capital commensurate with the risk exposures assumed.[172]

The MORB also lays down the generally authorized activities of banks which it may engage in without need of prior BSP approval. These are limited to derivatives traded in an organized market, which refers to an exchange or BSP-recognized OTC market governed by transparent and binding market conventions on price transparency, trade reporting, market surveillance and orderly conduct/operations of the market.[173] Further, in case of derivatives instruments involving foreign currencies and/or other

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[164] *Id*. at 478.
[165] *Id*. at 479.
[166] *Id*. at 481.
[167] BANKS, *supra* note 161, at 485 to 490.
[168] *Id*. at 498.
[169] *Id*. at 485 to 490.
[170] Philippine Star, *SEC to push futures exchange market*, Feb. 7, 2001, http://www.philstar.com/business/96951/sec-push-futures-exchange-market (last accessed May 9, 2017).
[171] An OTC market is a market created by the buying and selling of a security on a bilateral basis between parties that takes place outside of an exchange or an alternative trading system. *See* Chapter II,(D)(2)(c) of this report.
[172] 2016 MORB, Section X611.
[173] *Id*., Section X611.1.

foreign currency denominated assets, the transacting bank shall observe the pertinent FX rules and regulations.[174]

The generally allowed derivative activities depend on the bank's classification and the capacity in which the bank will act.[175] For example, a universal bank or commercial bank can deal with currency swaps, interest rate swaps, forward rate agreements and analogous financial futures with longer tenors.[176] Generally, a bank can be *(a)* an end-user, *(b)* a dealer, or *(c)* a broker which are differentiated as follows:

(a) An end-user is defined as a financial market participant that enters, for its own account, in a derivatives transaction for legitimate economic purposes. These purposes may include, but are not limited to, the following: hedging proprietary trading, managing capital or funding costs, obtaining indirect exposures to desired market factors, investment, yield enhancement, and/or altering the risk-reward profile of a particular item or an entire balance sheet. End-users are further classified according to their financial sophistication;

(b) A broker is a financial market participant that facilitates a derivatives transaction between a dealer and its client, for a fee or commission. The counterparties to the derivatives contract are the client and an authorized dealer;

(c) A dealer is defined as a financial market participant that engages in a derivatives activity as an originator of derivatives products or as market-maker in derivatives products. A dealer can distribute its own derivatives products, including those of others. A dealer can also act as broker and/or end-user of derivatives instruments.[177]

While the GBL only allows banks to deal with derivatives by order of and for the account of their customers, the MORB implies that banks, by acting as end-users, can also transact for their own account. Should the bank intend to engage in other activities, it must apply for additional derivatives authority from the BSP.[178]

Contracts typically follow the form developed by the International Swap Dealers Association ("**ISDA**") Master Agreement, the most commonly used standard for OTC

[174] *Id*., Section X611.
[175] *Id*., Section X611.1.
[176] *Id*., Section X611.1.
[177] *Id*., Section X611.
[178] 2016 MORB, Section X611.2.

derivative transactions internationally.[179] ISDA is an international trade organization of participants in the market for OTC derivatives.[180]

Insurance companies are likewise allowed to engage in derivative transactions under certain conditions for purposes of managing financing risks through hedging and promoting investment diversification.[181] The Insurance Commission issued Insurance Circular No. 056-15 permitting insurance and reinsurance companies with a net worth of at least ₱550 million to engage in derivative activities provided that: *(a)* the derivative activity is with a universal or commercial bank authorized by the BSP and only with respect to instruments for which the bank is authorized to engage in as dealer, *(b)* the company understands, measures and is able to prudently manage the risk associated with derivative activities, *(c)* the company clearly defines its objectives, ensuring that such transaction is in accordance with Philippine Accounting Standards (PAS) and with the applicable provisions of the Amended Insurance Code, and *(d)* the company has adequate risk management system and internal controls to cover the risks is already in place.[182]

The circular also provided that derivative activities of qualified companies shall be limited to forward and swap agreements as defined therein and that any given time, the aggregate placements in derivatives must not exceed ten percent (10%) of the total admitted assets of the life insurance company or twenty percent (20%) of the net worth of a non-life insurance/reinsurance company.[183]

Among the documents which an insurance company must submit when applying for the prior approval of the Insurance Commission is a bilateral agreement in the form of the ISDA Master Agreement.[184]

C. REGULATORY STRUCTURE

The derivatives market is primarily regulated by the SEC, and the BSP and Insurance Commission in relation to derivative activities of banks and insurance companies, respectively. The Philippine Competition Commission ("**PCC**") is also relevant here inasmuch as it has general jurisdiction over market competition concerns across various industries, including the securities or derivatives markets.

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[179] Insurance Commission, Circular Letter No. 2015-56, Section 1(g) (Dec. 1, 2015); Philippine Star, *Rolando F. Del Castillo, A brief introduction to derivatives and swaps*, Jul. 15, 2003, http://www.philstar.com:8080/business/213724/brief-introduction-derivatives-and-swaps (last accessed May 9, 2017); and Natalia W. Santos, Challenging in Developing a Market for New Financial Products, p. 222, http://www.seacen.org/GUI/pdf/publications/research_proj/2011/rp86/Chap7-NFP.pdf (last accessed May 9, 2017).
[180] Insurance Commission, Circular Letter No. 2015-56, Section 1(e).
[181] *See* Insurance Commission, Circular Letter No. 2015-56.
[182] *Id*., Section 2.
[183] *Id*., Section 3.
[184] *Id*., Section 4(c).

1. SEC

As mentioned, the primary legislation governing the regulation of capital markets in the Philippines is the SRC. The SEC is the main administrative agency in charge of the implementation of the SRC. Among others, the SRC confers the SEC with the following powers:

(a) Have jurisdiction and supervision over all corporations, partnerships or associations who are the grantees of primary franchises and/or a license or permit issued by the Government;

(b) Formulate policies and recommendations on issues concerning the securities market, advise Congress and other government agencies on all aspects of the securities market and propose legislation and amendments thereto;

(c) Approve, reject, suspend, revoke or require amendments to registration statements, and registration and licensing applications;

(d) Regulate, investigate or supervise the activities of persons to ensure compliance;

(e) Supervise, monitor, suspend or take over the activities of exchanges, clearing agencies and other SROs;

(f) Impose sanctions for the violation of laws and the rules, regulations and orders issued pursuant thereto;

(g) Prepare, approve, amend or repeal rules, regulations and orders, and issue opinions and provide guidance on and supervise compliance with such rules, regulations and orders;

(h) Issue cease and desist orders to prevent fraud or injury to the investing public;

(i) Suspend, or revoke, after proper notice and hearing the franchise or certificate of registration of corporations, partnerships or associations, upon any of the grounds provided by law;

(j) Exercise such other powers as may be provided by law as well as those which may be implied from, or which are necessary or incidental to the carrying out of, its express powers to achieve the objectives and purposes of these laws;[185] and

(k) Promulgate rules and regulations involving commodity futures contracts to protect investors to ensure the development of a fair and transparent commodities market.[186]

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[185] *See* Securities Regulation Code, Section 3.
[186] *Id*., Section 11.

Pursuant to its powers, the SEC recently issued the 2015 SRC IRR. The regulatory framework laid down by the SRC and 2015 SRC IRR demonstrates the SEC's supervisory functions in relation to all aspects of the market. As will be discussed further below, the SEC regulates the securities that may be sold in the market, the qualifications and licensing requirements of market participants, the types and requirements for organized marketplaces, and the clearing and settlement processes. (For specific administrative and adjudicative actions involving these matters, the SEC's Market and Securities Regulation Department (MSRD) has primary jurisdiction.[187])

2. BSP

The BSP is the country's central monetary authority tasked to provide policy directions in the areas of money, banking, and credit. It also exercises supervision over the operations of banks and finance companies and non-bank financial institutions performing quasi-banking functions, and institutions performing similar functions,[188] including issuing rules of conduct or establish standards of operation to be uniformly applied to the covered institutions.[189] The BSP promulgated the MORB and the Manual of Regulations for Non-Bank Financial Institutions ("**MORNBFI**") for this purpose.

The BSP retains regulatory authority over derivative transactions of banks. As discussed above,[190] the BSP, through the MORB, lays down the derivative activities banks may engage in, their qualifications, the degree and type of participation they may engage in such derivative activities, and the kinds of derivatives they may transact in. The BSP may also suspend, modify, downgrade, limit or revoke any bank's derivatives authority (including any or all of those generally authorized activities) for prudential reasons.[191]

3. INSURANCE COMMISSION

The Insurance Commission is tasked to implement and execute all Philippine laws relating to insurance and insurance companies.[192] For this purpose, the Insurance Commission may, among others: *(a)* issue rulings, circulars, and orders necessary

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[187] Securities Exchange Commission, 2016 Rules of Procedure of the Securities and Exchange Commission, Rule II, Section 2-2(e) (Oct. 4, 2016).
[188] The New Central Bank Act, Republic Act No. 7653, Sections 1 and 3 (1993).
[189] An Act Providing for the Regulation of the Organization and Operations of Banks, Quasi-Banks, Trust Entities and for Other Purposes [The General Banking Law of 2000], Republic Act No. 8791, Section 4.1 (2000).
[190] *See* Chapter II, (B)(4) of this report.
[191] 2016 MORB, Section X611.6.
[192] An Act Strengthening the Insurance Industry, Further Amending Presidential Decree No. 612, Otherwise Known as "The Insurance Code", as Amended by Presidential Decree Nos. 1141, 1280, 1455, 1460, 1814, and 1981, and Batas Pambansa Blg. 874, and for Other Purposes [The Insurance Code], Republic Act No. 10607, Section 437 (2012).

for the enforcement of insurance laws,[193] *(b)* inquire into the solvency and liquidity of insurance companies,[194] and *(c)* determine the assets of insurance companies which can be allowed and admitted for purposes of ascertaining their financial condition.[195]

As mentioned previously, the Insurance Commission, in exercise of these functions, promulgated Insurance Circular No. 056-15 to establish the framework for the derivatives activities of insurance companies.[196]

4. PCC

Pursuant to the Philippines Competition Act[197] (the "**PCA**"), the PCC was established in 2015 to act as the independent quasi-judicial body responsible for development and enforcement of competition law in the Philippines.

Specifically, under Section 12 of the PCA, the PCC has the original and primary jurisdiction over the enforcement of the PCA and its implementing rules and regulations. To illustrate, the PCC is empowered to exercise amongst others, the following functions:

(a) Investigate breaches of the provisions under the PCA;

(b) Review proposed mergers and acquisitions, and determine thresholds, requirements and procedures for its notifications;

(c) Determine the proper remedies in case an entity has entered into an anti-competitive agreement or has abused its dominant position;

(d) Inspect businesses and assets where it reasonably suspects that relevant books, tax records, or other documents which relate to any matter relevant to the investigation are kept, in order to prevent the removal, concealment, tampering with, or destruction of the books, records, or other documents;

(e) Issue administrative sanctions, fines and penalties;

(f) Monitor compliance; and

(g) Lead in policy-making initiatives in the field of competition law.[198]

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[193] *Id*.
[194] *Id*., Section 437(m) (2012).
[195] *Id*., Section 202(k) (2012).
[196] *See* Chapter II, (B)(4) of this report.
[197] An Act Providing for a National Competition Policy Prohibiting Anti-Competitive Agreements, Abuse of Dominant Position and Anti-Competitive Mergers and Acquisitions, Establishing the Philippine Competition Commission and Appropriating Funds Therefor [Philippine Competition Act], Republic Act No. 10667 (2014).
[198] *Id*., Section 12.

The scope of the PCA is virtually unlimited as it is applicable to all activities in the Philippines, including transactions in or relating to the financial markets. It may even have extraterritorial application. Specifically, Section 3 of the PCA states that the PCA is enforceable against "any person or entity engaged in *any* trade, industry and commerce" in the Philippines; and is also applicable to "international trade having direct, substantial, and reasonably foreseeable effects in trade, industry, or commerce" in the Philippines, including effects which result from acts done outside the Philippines.

In addition to the foregoing, parties to derivatives transactions must also consider compliance with the Philippine Financial Reporting Standards and the Philippine Accounting Standards. These provide for the criteria which must be satisfied for hedge accounting to apply.[199]

D. MARKET STRUCTURE

1. DERIVATIVES IN THE MARKET

Securities, including derivatives, which will be sold or offered for sale, or distributed by any person or entity within the Philippines must be duly registered with the SEC. The exceptions to this requirement are those considered exempt securities under Section 9 of the SRC[200] and exempt transactions under Section 10 of the SRC.[201]

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[199] *See* IASPlus, IFRS 9 – Financial Instruments, https://www.iasplus.com/en/standards/ifrs/ifrs9 (last accessed May 9, 2017); and SGV, Derivatives and Hedge Accounting (2016), http://www.sgv.ph/wp-content/uploads/2016/08/Invitation-Flyer_Derivatives-and-Hedge-Accounting.pdf (last accessed May 9, 2017).

[200] SECTION 9. *Exempt Securities*. — 9.1. The requirement of registration under Subsection 8.1 shall not as a general rule apply to any of the following classes of securities:
(a) Any security issued or guaranteed by the Government of the Philippines, or by any political subdivision or agency thereof, or by any person controlled or supervised by, and acting as an instrumentality of said Government.
(b) Any security issued or guaranteed by the government of any country with which the Philippines maintains diplomatic relations, or by any state, province or political subdivision thereof on the basis of reciprocity: Provided, That the Commission may require compliance with the form and content of disclosures the Commission may prescribe.
(c) Certificates issued by a receiver or by a trustee in bankruptcy duly approved by the proper adjudicatory body.
(d) Any security or its derivatives the sale or transfer of which, by law, is under the supervision and regulation of the Office of the Insurance Commission, Housing and Land Use Regulatory Board, or the Bureau of Internal Revenue.
(e) Any security issued by a bank except its own shares of stock. xxx

[201] SECTION 10. *Exempt Transactions*. — 10.1. The requirement of registration under Subsection 8.1 shall not apply to the sale of any security in any of the following transactions:
(a) At any judicial sale, or sale by an executor, administrator, guardian or receiver or trustee in insolvency or bankruptcy.
(b) By or for the account of a pledge holder, or mortgagee or any other similar lien holder selling or offering for sale or delivery in the ordinary course of business and not for the purpose of avoiding the provisions of this Code, to liquidate a bona fide debt, a security pledged in good faith as security for such debt.
(c) An isolated transaction in which any security is sold, offered for sale, subscription or delivery by the owner thereof, or by his representative for the owner's account, such sale or offer for sale, subscription

The 2015 SRC IRR provides specific rules for the registration and sale of stock options and warrants.[202] As for all other types of derivatives, the 2015 SRC IRR requires that all companies that plan to offer to sell derivatives to the public must file a registration statement which shall include financial statements prepared in accordance with applicable accounting standards, an enumeration of attendant risks, and a description of the company's financial risk management policies, including its policies for hedging.[203]

The derivatives currently available in the market include those based on equity/shares of stock, interest rate, and FX. In particular:

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or delivery not being made in the course of repeated and successive transactions of a like character by such owner, or on his account by such representative and such owner or representative not being the underwriter of such security.
(d) The distribution by a corporation, actively engaged in the business authorized by its articles of incorporation, of securities to its stockholders or other security holders as a stock dividend or other distribution out of surplus.
(e) The sale of capital stock of a corporation to its own stockholders exclusively, where no commission or other remuneration is paid or given directly or indirectly in connection with the sale of such capital stock.
(f) The issuance of bonds or notes secured by mortgage upon real estate or tangible personal property, where the entire mortgage together with all the bonds or notes secured thereby are sold to a single purchaser at a single sale.
(g) The issue and delivery of any security in exchange for any other security of the same issuer pursuant to a right of conversion entitling the holder of the security surrendered in exchange to make such conversion: Provided, That the security so surrendered has been registered under this Code or was, when sold, exempt from the provisions of this Code, and that the security issued and delivered in exchange, if sold at the conversion price, would at the time of such conversion fall within the class of securities entitled to registration under this Code. Upon such conversion the par value of the security surrendered in such exchange shall be deemed the price at which the securities issued and delivered in such exchange are sold.
(h) Broker's transactions, executed upon customer's orders, on any registered Exchange or other trading market.
(i) Subscriptions for shares of the capital stock of a corporation prior to the incorporation thereof or in pursuance of an increase in its authorized capital stock under the Corporation Code, when no expense is incurred, or no commission, compensation or remuneration is paid or given in connection with the sale or disposition of such securities and only when the purpose for soliciting, giving or taking of such subscriptions is to comply with the requirements of such law as to the percentage of the capital stock of a corporation which should be subscribed before it can be registered and duly incorporated, or its authorized capital increased.
(j) The exchange of securities by the issuer with its existing security holders exclusively, where no commission or other remuneration is paid or given directly or indirectly for soliciting such exchange.
(k) The sale of securities by an issuer to fewer than twenty (20) persons in the
Philippines during any twelve-month period.
(l) The sale of securities to any number of the following qualified buyers:(i) Bank; (ii) Registered investment house; (iii) Insurance company; (iv) Pension fund or retirement plan maintained by the Government of the Philippines or any political subdivision thereof or managed by a bank or other persons authorized by the Bangko Sentral to engage in trust functions; (v) Investment company; or (vi) Such other person as the Commission may by rule determine as qualified buyers, on the basis of such factors as financial sophistication, net worth, knowledge, and experience in financial and business matters, or amount of assets under management. xxx

[202] *See* Rules and Regulations Implementing the Securities Regulation Code, Rule 12, Section 12.1.3.1 and Section 12.1.3.2.

[203] *Id*., Section12.1.3.3.

(a) Equity/shares derivatives

(i) Stock options – contracts that give the buyer the right, but not the obligation, to buy or sell an underlying security at a predetermined price called the exercise or strike price, on or before a predetermined date, called the expiry date.[204]

(ii) Stock warrants – rights to subscribe or purchase new or existing shares in a company on or before a predetermined date.[205]

(b) Interest rate derivatives

(i) Forward rate agreement (FRA) – refers to an agreement fixing the interest rates for a specified period whereby the buyer receives (or pays) and the seller pays (or receives) the interest rate differential if the reference rate rises above (or falls below) the contract rate, respectively.[206]

(ii) Interest rate swaps (IRS) – refers to an agreement in which the parties agree to exchange interest cash flows on a principal amount at certain times in the future according to an agreed upon formula.[207]

(c) Foreign exchange derivatives

(i) Currency swaps – refers to an arrangement in which two parties exchange a series of cash flows in one currency for a series of cash flows in another currency, at specified exchange and/or interest rates and at agreed intervals over an agreed period.[208]

(ii) Forward FX contracts – refers to an agreement for delayed delivery of a foreign currency in which the buyer agrees to purchase and the seller agrees to deliver at a specified future date a specified amount at a specified exchange rate.[209]

(iii) FX options – refers to option contracts which convey the right or the obligation, depending upon whether the bank is the purchaser or the writer, respectively, to buy or sell at a specified price by a specified future date, for a fee or a premium, two (2) different currencies at a specified exchange rate.[210]

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[204] *Id*., Rule 3, Section 3.1.9.1.
[205] *Id*., Rule 3, Section 3.1.9.2.
[206] 2016 MORB, Section X625.2.e.
[207] *Id*., Section X625.2.j.
[208] *Id*., Section X625.2.c.
[209] *Id*., Section X625.2.d.
[210] *Id*., Section X625.2.h.

(iv) FX swaps – refers to an agreement involving an initial exchange of two (2) currencies, usually at the prevailing spot rate, and a simultaneous commitment to reverse the exchange of the same two (2) currencies at a date further in the future at a rate (different from the rate applied to the initial exchange) agreed on deal date.[211]

(v) Non-deliverable forward (NDF) – refers to a forward FX contract where only the net difference between the contracted forward rate and the market rate shall be settled at maturity.[212]

Financial derivatives activities of banks shall also include transactions in cash instruments with embedded derivatives that reshape the risk-return profile of the host instrument.[213] These include:

(1) Credit linked notes (CLN) – refers to a pre-funded credit derivative instrument under which the note holder effectively accepts the transfer of credit risk pertaining to a reference asset or basket of assets issued by reference entity/ies. The repayment of the principal to the note holder is contingent upon the occurrence of a defined credit event. In consideration thereof, the note holder receives an economic return reflecting the underlying credit risk of the reference assets.[214]

(2) Structured products (SP) – refers to a financial instrument where the total return is a function of one or more underlying indices, such as interest rates, equities and exchange rates. These exclude asset-backed securities.[215]

To recall, banks and insurance companies are expressly authorized to engage in derivative activities. While the BSP and the Insurance Commission limit the types of derivatives banks and insurance companies may deal with, derivatives, in general, must be registered with the SEC under Section 8 of the SRC inasmuch as these are securities. It is noted however, that securities (excluding their own shares of stock) issued by banks are exempt securities under Section 9 of the SRC,[216] and securities sold to banks and insurance companies are exempt transactions under Section 10 of the SRC.[217] As such, derivatives being securities issued by banks or sold to banks and insurance companies need not be registered with the SEC.

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[211] *Id*., Section X625.2.i.
[212] 2016 MORB, Section X625.2.k.
[213] *Id*., Section X611.
[214] *Id*., Section X625.2.b.
[215] *Id*., Section X625.2.n.
[216] *See* Securities Regulation Code, Section 9(e).
[217] *Id*., Section 10(e).

2. TRADING MARKETS

The SEC has regulatory powers over "organized marketplaces or organized markets" where securities, including derivatives, may be traded. These organized marketplaces refer to an exchange, an OTC market, and an alternative trading system ("**ATS**"), or otherwise recognized as such by the SEC, and governed by, among others, transparent and binding rules and market conventions on membership, trading, price transparency, trade reporting, market monitoring and orderly conduct or operation of the market which are enforceable on the members and participants.[218]

With respect to regulating exchanges and other securities trading markets, the SRC provides for the following general rules:

(a) Trading is limited to registered securities and registered exchanges with the SEC;[219]

(b) Brokers, dealers, salesmen or associated persons of a broker or dealer may not make, create or operate any trading market, otherwise than on a registered exchange, for the buying and selling of any security, except in accordance with rules which the SEC may prescribe;[220]

(c) No broker or dealer shall participate in any trading market unless he is a member of a SRO which has been registered with the SEC to regulate and supervise the activities of the broker or dealer in such market.[221]

In addition to overseeing registration, the SRC also gives the SEC certain powers with respect to exchanges and other trading markets such as:

(a) The SEC may suspend trading on any exchange or other trading markets if necessary for the protection of investors and public interest;

(b) Whenever two (2) or more exchanges or other trading markets exist, the SEC may require and enforce uniformity of trading regulations in and/or between or among said exchanges or other trading markets;

(c) The SEC may determine the number, size and location of stock exchanges, other trading markets or other commodity exchanges and other similar organizations;

(d) Rules on clearance and settlement of securities transactions may also be promulgated; and

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[218] Rules and Regulations Implementing the Securities Regulation Code, Rule 3, Section 3.1.14.
[219] *Id*., Rule 32, Section 32.1.
[220] *See* Securities Regulation Code, Section 32.2.
[221] Rules and Regulations Implementing the Securities Regulation Code, Rule 32, Section 32.2.2.

(e) The SEC may also require the establishment of trust funds which shall be contributed by exchanges, brokers, dealers, underwriters, transfer agents, salesmen and other persons transacting in securities for the purpose of compensating investors for the extraordinary losses or damage they may suffer due to business failure or fraud or mismanagement of the persons with whom they transact.[222]

a. EXCHANGES

An "exchange" is an organized marketplace or facility that brings together buyers and sellers and executes trades of securities and/or commodities.[223] For this purpose, the SRC and the 2015 SRC IRR enumerate the substantive and documentary requirements for the registration of a proposed exchange. The salient requirements are as follows:

(a) Simultaneous application of the exchange as an SRO;[224]

(b) An undertaking to comply and enforce compliance by its members with the provisions of the SRC, the 2015 SRC IRR and rules of the exchange;[225]

(c) The organizational charts of the exchange, rules of procedure, and a list of its officers and members;[226]

(d) Copies of the rules of the exchange;[227]

(e) An undertaking that in the event a member firm becomes insolvent or when the Exchange shall have found that the financial condition of its member firm has so deteriorated that it cannot readily meet the demands of its customers for the delivery of securities and/or payment of sales proceeds, the exchange shall, upon order of the SEC, take over the operation of the insolvent member firm and immediately proceed to settle the member firm's liabilities to its customers;[228]

(f) Organization of the exchange as a stock corporation;[229]

(g) Observance of the guidelines on the ownership of the exchange;[230] and

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[222] *Id*., Rule 36, Section 36.5.
[223] *See* Securities Regulation Code, Section 3.7 and Rules and Regulations Implementing the Securities Regulation Code, Rule 3, Section 3.1.10.
[224] *See* Securities Regulation Code, Section 33.1 and Rules and Regulations Implementing the Securities Regulation Code, Rule 33, Section 33.1.1.
[225] *See* Securities Regulation Code, Section 33.1(a).
[226] *Id*., Section 33.1(b).
[227] *Id*., Section 33.1(c).
[228] *Id*., Section 33.1(d).
[229] *Id*., Section 32.2(a).
[230] *See* Securities Regulation Code, Section 32.2(b) and Section 32.2(c) (2000); and Rules and Regulations Implementing the Securities Regulation Code, Rule 32, Section 32.2(c).

(h) Compliance with the rules on the segregation and limitation of functions of members, brokers and dealers.[231]

There are currently two registered exchanges with the SEC: *(i)* Philippine Stock Exchange ("**PSE**") for equities market, and *(ii)* Philippine Dealing and Exchange Corp. ("**PDEx**") for the fixed-income market.[232] Except for stock warrants being traded in the PSE, derivatives do not appear to be transacted in these exchanges.[233]

b. ATS

Under Section 37 of the SRC, the SEC has the power to promulgate rules for the registration of innovative and other trading markets or Exchanges covering innovative securities of small, medium, growth and venture enterprises, and technology-based ventures. Pursuant to this power, the SEC issued the 2004 Rules and Regulations for ATS where ATS was defined as follows:[234]

> Refers to any organization, association, person, group of persons, or system:
> 1. That constitutes, operates, maintains, or provides an electronic market place or facility for bringing together:
> i. Primary market issuers of securities of SEC-registered small, medium, growth, venture enterprises, and technology-based ventures, and the investors who wish to purchase these securities;
> ii. Primary market issuers of innovative registered securities of any kind or SEC-registered enterprise and the buyers of those securities;
> iii. Secondary market sellers and buyers of securities of SEC-registered small, medium, growth, venture enterprises, and technology-based ventures;
> iv. Secondary market sellers and buyers of innovative registered securities of any kind of SEC-registered enterprise;
> v. Primary issuers and buyers, and secondary sellers and buyers of other securities as may be approved by the Commission;
>
> Or otherwise performing, with respect to securities, the functions commonly performed by a recognized exchange or clearing house; and
>
> 2. That does not:
> i. Set rules governing the conduct of subscribers other than the conduct of such subscribers' trading on such organization, association, person, group of persons, or system; or
> ii. Discipline subscribers other than by exclusion from trading.[235]

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[231] *See* Securities Regulation Code, Section 34 and Rules and Regulations Implementing the Securities Regulation Code, Rule 34.
[232] *See* SEC, Exchange, Self Regulatory Organization, Clearing Agency, Depository (As of December 2015), http://www.sec.gov.ph/wp-content/uploads/2015/10/exchange-sro-clearing-and-depository-directory_for-sending.pdf (last accessed May 9, 2017).
[233] Philippine Stock Exchange, FAQs, http://www.pse.com.ph/stockMarket/content.html?sec=FAQ_HEADER (last accessed May 9, 2017).
[234] Securities Exchange Commission, 2004 Rules and Regulations on Alternative Trading System (Mar. 4, 2004).
[235] *Id*., Section 1(A).

The Rules also outline the registration and operational requirements for an ATS. Further, it provides that all securities proposed to be offered and/or traded on the ATS must first be registered with the SEC following existing procedures for equivalent securities.[236] No specific clearing and settlement process is provided since the ATS must submit their proposals for approval to the SEC.[237]

c. OTC

In 2006, the SEC promulgated its rules governing OTC markets[238] or the market created by the buying and selling of a security on a bilateral basis between parties that takes place outside of an exchange or ATS.[239] No person is allowed to make, create or operate an OTC market unless he is a registered broker, dealer or salesman or a broker or dealer in an OTC market.[240]

A person shall be viewed to be making, creating, or operating an OTC market when:

1. If in the ordinary course of his business, he buys, sells or publishes or submits for publication a quotation to a quotation system, or holds himself before the public that he is ready or his act is perceived that he is ready to buy or sell or to publish or submit for publication a quotation to a quotation system, for any security, other than an Exchange or ATS. In this case, he shall be construed to be acting as dealer in an OTC market and shall be registered accordingly.

2. If he searches for a counterparty to buy or sell order that is left with him by another person for his disposal or holds himself before the public that he is ready or he is perceived that the he is ready to search for a counterparty to a buy or sell order that is left with him for his disposal, either by direct search or participation in a quotation system, for any security, other than in an Exchange or ATS. In this case, he shall be construed to be acting as broker in an OTC market and shall be registered accordingly.

3. If he represents himself as agent or salesman of or affiliated with a dealer or broker as construed in this section and buys, sells or publishes or submits for publication a quotation, for and on behalf of the principal or customer account of such dealer or broker, for any security, other than in an Exchange or ATS. In this case, he shall be construed to acting as a salesman of broker or dealer in an OTC market and shall be registered accordingly.[241]

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[236] *Id*., Section II(D) (Mar. 4, 2004). An exception is shelf registration for which separate policies will be set by the SEC.
[237] SEC, 2004 Rules and Regulations on Alternative Trading System, Section II(G).
[238] Securities Exchange Commission, Rules Governing the Over-the-Counter (OTC) Market, Memorandum Circular No. 14, Series of 2006 [SEC Memo. Circ. No. 14, s. 2006] (Oct. 1, 2006).
[239] SEC Memo. Circ. No. 14, s. 2006, Section 2(F).
[240] *Id*., Section 4(A)(2).
[241] *Id*., Section 3(B).

A group of persons may operate an OTC market by forming an association of brokers and/or dealers pursuant to Section 39 of the SRC which shall act as a SRO or unless the persons are currently members of an SRO.[242]

A broker or dealer may participate in an OTC market only if he is a member of an SRO that has been registered with the SEC for the purpose of regulating and supervising the activities of a broker or dealer in an OTC market. If the broker or dealer is a member of an existing SRO which currently regulates a market other than the OTC market, he will be allowed to participate in the OTC market, subject to proof that his current SRO can and has committed to regulate his activities in the OTC market. The current SRO must also file an amendment to its registration with the SEC for this purpose.[243]

The Rules Governing the OTC Market (the "**OTC Rules**") also provide for the qualifications of an investor in the market. A qualified investor is a qualified buyer under Section 10.1 (L) of the SRC and any of the institutional accounts defined under the SRC IRR or such other person declared qualified by the SEC.[244] When deemed qualified, the investor may directly participate in the OTC market subject to certain conditions. Otherwise, a non-qualified investor may participate only through a broker or by participating in a registered or chartered collective investment scheme.[245]

The OTC Rules also provide for the eligible securities in an OTC market which are: *(a)* those registered under Section 8 of the SRC, *(b)* those exempt from registration under Sections 9 and 10 of the SRC, and *(c)* those of a public company. For securities already traded in an Exchange or an ATS, they cannot be quoted or traded in an OTC market unless specifically allowed by the SEC. Government securities may also be traded in an OTC market.

It may be recalled that banks and insurance companies currently trade derivatives in an OTC market. Under the OTC Rules, banks and insurance companies, while primarily under the regulatory authority of the BSP and the Insurance Commission, are nevertheless subject to SEC regulation. For instance, under Section 18 of the OTC Rules, SEC can require banks to submit reports on minimum capitalization maintenance, examine the books and financial records of banks relative to their securities business, and impose sanctions in case of violations of SEC-issued rules.

3. CLEARING AND SETTLEMENT

Clearing and settlement of transactions in organized markets must be coursed through a licensed clearing agency.[246] A clearing agency is any entity that provides a facility for the performance of the following activities:

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[242] *Id*., Section 5.
[243] *Id*., Section 8.
[244] *Id*., Section 2(J).
[245] SEC Memo. Circ. No. 14, s. 2006, Section 7.
[246] *See* Securities Regulation Code, Section 41.

> 3.1.4.1. Make deliveries of securities and/or payments in connection with transactions in securities;
>
> 3.1.4.2. Reduce the number of settlements of securities transactions or allocate settlement responsibilities in accordance with the rules issued by the [SEC] or the Exchange; and/or
>
> 3.1.4.3. Provide the means for the central handling of securities so that transfers, loans, pledges and similar transactions can be made by bookkeeping entry; or otherwise facilitate the settlement of securities transactions without physical delivery of securities certificates.
>
> As used in this Rule, "facility" includes a clearing agency's systems, processes or services and all the properties necessary to operate such systems, processes or services, whether within or outside its specific physical location, for the performance of any or all the activities enumerated in the immediately preceding SRC Rule, as may be authorized by the [SEC].[247]

A clearing agency, before it may act as such, must be registered with and licensed by the SEC.[248]

Clearance and settlement of securities transactions in organized markets go through three key steps:

> *First*, the confirmation of the terms of the trade by the market participants. *Second*, the calculation of the obligations of the counterparties resulting from the confirmation process which is known as clearance. *Third*, the final transfer of securities (delivery) in exchange for the final transfer of funds (payment) in order to settle the obligations.[249]

Exchanges and other trading markets shall subscribe to the delivery versus payment ("**DVP**") scheme for their clearing and settlement arrangements.[250] Proposed DVP systems are subject to SEC approval.[251]

In basic terms, the DVP scheme requires the delivery of securities if and only if payment occurs.[252] In one opinion dealing with OTC markets, the SEC described the scheme as follows:

> A DVP system is a securities settlement system that provides a mechanism that ensures that delivery occurs if and only if payment occurs. It is a procedure by which the buyer's payment for securities is due at the time of the delivery. The purpose of DVP system is to ensure that counterparties are not exposed to principal risk, that is, the risk that the seller of a security could deliver but not

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[247] Rules and Regulations Implementing the Securities Regulation Code, Rule 3, Section 3.1.4.
[248] *Id*., Rules 41 and 42.
[249] Securities Exchange Commission Market Regulation Department, Delivery Versus Payment (DVP), Opinion No. 1, Series of 2008 [SEC-MRD Opinion No. 1, s. 2008] (Jul. 28, 2008).
[250] Rules and Regulations Implementing the Securities Regulation Code, Rule 36, Section 36.4.4.1.
[251] *Id*., Rule 36, Section 36.4.4.2.
[252] *Id*., Rule 36, Section 36.4.4.1.

> receive payment or that the buyer of a security could make payment but not receive delivery.
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> There are several approaches to achieve DVP but the three most common models are as follows: **[1]** A system that settles transfer instruction for both securities and funds on a trade-by-trade (gross) basis, with final (unconditional) transfer of securities from the seller to the buyer (delivery) occurring at the same time as final transfer of funds from the buyer to the seller (payment); **[2]** A system that settles securities transfer instruction on a gross basis with final transfer of securities from the seller to the buyer (delivery) occurring throughout the processing cycle; **[3]** A system that settles transfer instructions for both securities and funds on a net basis, with final transfers of both securities and funds occurring at the end of the processing cycle.
>
> Strictly speaking, DVP does not require simultaneous final transfers of funds and securities. When a central securities depository does not itself provide cash accounts for settlement, it first blocks the underlying securities in the account of the seller or his custodian. It then requests transfer of funds from the buyer to the seller in the settlement bank. The securities are delivered to the buyer or his custodian if and only if the central securities depository receives confirmation of settlement of the cash leg from the settlement bank.[253]

Specifically to OTC markets, brokers or dealers must secure an agreement from the counterparty as to how a transaction shall be cleared and settled. The broker or dealer shall ensure that the clearing and settlement arrangement shall be prompt and accurate and shall define among others: *(a)* due date as to settlement, *(b)* due date as to delivery of the security, and *(c)* due date as to payment of cash.[254]

PSE trades for equities are cleared and settled through the facility of the Securities Clearing Corporation of the Philippines ("**SCCP**") which is a registered clearing house. Following Model 3 of the DVP scheme:

> [A]ll transactions that will settle on the same day are netted in a multilateral netting fashion to arrive at either a long or short positon for either the security or cash element or both. And to eliminate the uncertainty in the clearing and settlement process, SCCP acts as the central counterparty to all trades that are eligible for settlement. In the netting process, the identity of the original parties disappears and the original contract is replaced by two new contracts, and SCCP becomes the buyer to every seller and seller to every buyer in all exchange trades.[255]

On the other hand, PDEx makes use of its own Expanded DVP system or eDVP developed by the Philippine Securities Settlement Corporation (PSSC). This follows the Model 1 scheme where there is trade-for-trade settlement or gross settlement.[256]

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[253] SEC-MRD Opinion No. 1, Series of 2008.
[254] Rules and Regulations Implementing the Securities Regulation Code, Rule 36, Section 36.4.4.3.
[255] SEC-MRD Opinion No. 1, s. 2008.
[256] *Id*.

4. MARKET PARTICIPANTS

No person shall engage in the business of buying or selling securities (including derivatives) in the Philippines as a broker or dealer, or act as a salesman, or an associated person of any broker or dealer unless registered as such with the SEC.[257]

For this purpose: *(a)* a Broker Dealer is any entity that buys or sells securities for its own and customers' account,[258] *(b)* a Salesman shall refer to a natural person hired to buy and sell securities on a salary or commission basis properly endorsed to the SEC by the employing Broker Dealer and shall also include any employee of an issuer company whose compensation is determined directly or indirectly on sales of the issuer's securities,[259] and *(c)* an Associated Person shall mean any person employed full time by the Broker Dealer whose responsibilities include internal control supervision of other employees, agents, salesmen, officers, directors, clerks and stockholders of such Broker Dealer for compliance with the SRC and rules and regulations adopted thereunder.[260]

In the application, the Broker Dealer must indicate whether it will, among others: *(a)* act as a broker or dealer, *(b)* trade, directly or indirectly, in an Exchange or in other securities trading markets, and *(c)* deal with Equity Securities, Fixed Income/Debt Securities, Proprietary Shares, Non-Proprietary Shares, Government Securities, Derivatives or other instruments which must be specified in the application form.[261] Specific requirements for registration may vary depending on these factors.

The prohibition under Section 28.1 of the SRC against engaging in the business of buying and selling securities as broker, dealer, salesman or as their associated person without prior SEC registration applies to banks and insurance companies as well. This prohibition is couched in general terms and does not provide for exceptions. Thus, banks and insurance companies to date, procure a secondary license from the SEC to act as broker or dealer for their derivative activities.

[257] Securities Regulation Code, Section 28.1.
[258] Rules and Regulations Implementing the Securities Regulation Code, Rule 28, Section 28.1.1.
[259] *Id*., Rule 28, Section 28.1.5.2.1.
[260] *Id*., Rule 28, Section 28.1.5.2.2.
[261] *Id*., Rule 28, Section 28.1.2.1.

CHAPTER III
ELECTRICITY DERIVATIVES MARKETS IN OTHER JURISDICTIONS

There is a global trend towards the use of electricity derivatives as a means of hedging price volatility risks in the electricity markets.[262] Many developed nations such Norway and the rest of Scandinavia, members of the European Union, Australia, New Zealand, the United States, and Singapore, have allowed the establishment of EDMs, where organized trading of electricity derivatives may be facilitated, and to a certain degree, regulated.

A. NORWAY

Norway was one of the first European countries to facilitate a liberalized electricity market.[263] In 1990, the Norwegian Government passed Act No. 50 of June 29 1990: Act Relating to the Generation, Conversion, Transmission, Trading, Distribution and Use of Energy, Etc. (the "**Energy Act**"), which laid the foundation for the liberalization and deregulation of the electric power industry in the country.[264] The Energy Act is the core of the legal framework for the Norwegian physical electricity business,[265] particularly for the generation, distribution, transmission and trade of electricity.[266] The main purpose of the Energy Act is to "ensure that the generation, conversion, transmission, trading, distribution and use of energy are conducted in a way that efficiently promotes the interest of society, which includes taking into consideration any public and private interests that will be affected."[267]

1. PHYSICAL MARKET

Pursuant to the Energy Act, and as part of Norway's energy industry liberalization, a power market was formally established in 1993 by Statnett Marked AS, a fully-owned subsidiary of Statnett, the Norwegian transmission system operator ("**TSO**").[268] On

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[262] Rafal Weron, Energy Price Risk Management (2001), http://citeseerx.ist.psu.edu/viewdoc/download;jsessionid=A852B29A0A9FA7AD74D0FE6E0ABA8CAA?doi=10.1.1.242.4610&rep=rep1&type=pdf (last accessed May 9, 2017).

[263] Dr. Martha M. Roggenkamp & Dr. Francois Boisseleau, The Regulation of Power Exchanges in Europe (2005), https://books.google.com.ph/books?id=XmYzGz57qHkC&printsec=frontcover#v=onepage&q&f=false (last accessed May 9, 2017).

[264] Torstein Bye & Einar Hope, Deregulation of Electricity Markets—The Norwegian Experience (2005), http://www.ssb.no/a/publikasjoner/pdf/DP/dp433.pdf (last accessed May 9, 2017).

[265] Dr. Martha M. Roggenkamp & Dr. Francois Boisseleau, *supra* note 263.

[266] Norwegian Ministry of Petroleum and Energy, Facts 2015 – Energy and Water Resources in Norway (2015), https://www.regjeringen.no/contentassets/fd89d9e2c39a4ac2b9c9a95bf156089a/facts_2015_energy_and_water_web.pdf (last accessed May 9, 2017) ("**Facts 2015 – Energy and Water Resources in Norway**").

[267] Lov om Produksjon, Omforming, Overføring, Omsetning, Fordeling og Bruk av Energi m.m. [Energiloven], 29 June 1990 No. 50, Section 1-2 (Norway).

[268] Statnett, Brief History, http://www.statnett.no/en/About-Statnett/Brief-history/ (last accessed May 9, 2017).

Even prior to the formal establishment of the Norwegian electricity market, Norwegian power generators took part in a pooling system known as "Samkjoringen", an association of generators not regulated by

January 1, 1996, Sweden joined the Norwegian power market[269] and on that same year, Svenska Kraftnat, Sweden's TSO, entered into co-ownership with Statnett. As a result, Statnett Marked AS was renamed to Nord Pool ASA.[270] In 2002, Nord Pool ASA's spot market activities were organized in a separate company, Nord Pool Spot AS, which was thereafter rebranded to Nord Pool in 2016.[271]

The Norwegian electricity power market was integrated with the Swedish, Finnish, and Danish markets to become the Nordic electricity market, the first common, integrated, intercountry electric power market in the world.[272] Currently, the power market is composed of three markets where energy participants can submit bids and where prices are determined: *(a)* Elspot, *(b)* Elbas, and *(c)* the balancing power market. Elspot and Elbas are operated by Nord Pool, while Statnett operates the regulating power market.[273]

Elspot refers to day-ahead market consisting of power contracts for physical delivery the next day.[274] It is the primary market for power trading in the Nordic region, and is where the largest volumes are traded on Nord Pool.[275] Trading in the Elspot takes place through an auction-based trading system. The spot concept is based on bids for the purchase and sale of power contracts of one-hour duration that cover all twenty-four (24) hours of the next day and bidding may be made in three different forms: hourly bids, block bids, and flexible hourly bids.[276] Prices in the Elspot are determined on the basis of the balance between bids and offers from all market participants.[277] As will be discussed below, the spot market price or the system price in the Elspot serves as the reference for contracts in the financial power market of Norway.[278]

Elbas, on the other hand, refers to an hour-ahead power balancing market, which supplements the Elspot and enables traders to balance their portfolios closer to the

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law. The previous state utility, Statkraftverkene, likewise participated in this pool and carried out both system/grid coordination and power pooling activities. Samkjoringen continued and developed the physical electricity market in the early phase of the liberalized Norwegian electricity market until it was shut down in 1993 and its operations were continued by Statnett Marked AS.

[269] Statnett, Brief History, http://www.statnett.no/en/About-Statnett/Brief-history/ (last accessed April 23, 2017).

[270] Dr. Martha M. Roggenkamp & Dr. Francois Boisseleau, *supra* note 263.

[271] Nordpool, History, http://www.nordpoolspot.com/About-us/History/ (last accessed May 9, 2017).

[272] Torstein Bye & Einar Hope, *supra* note 264.

[273] Facts 2015 – Energy and Water Resources in Norway.

[274] Dr. Martha M. Roggenkamp & Dr. Francois Boisseleau, *supra* note 263.

[275] Facts 2015 – Energy and Water Resources in Norway.

[276] Nord Pool ASA, The Nordic Power Market – Electricity Power Exchange Across National Borders (2004), http://www.fer.unizg.hr/_download/repository/Nord%20Pool%20-%20The%20Nordic%20Power%20Market.pdf (last accessed May 9, 2017) ("**The Nordic Power Market – Electricity Power Exchange Across National Borders**").

[277] Ministry of Petroleum and Energy, Facts 2008 – Energy and Water Resources in Norway (2008), https://www.regjeringen.no/globalassets/upload/oed/pdf_filer/faktaheftet/evfakta08/evfacts08_kap07_eng.pdf (last accessed May 9, 2017) ("**Facts 2008 – Energy and Water Resources in Norway***")*.

[278] Torstein Bye & Einar Hope, *supra* note 264.

respective operating hours after Elspot trading has been closed.[279] The contracts traded in the Elbas cover the time span from when the Elspot market for the following day has been concluded, and up to an hour before the time of delivery.[280]

Meanwhile, the balancing power market or regulating power market, is a tool which Statnett, Norway's TSO, uses to maintain a stable frequency and balance between generation and consumption in Norway.[281] The balancing power market opens after prices and quantities have been determined in the electricity spot market.[282]

The market participants in the spot market may generally fall into the categories of generators, retailers, traders, or end-users.[283] To be able to trade in the spot market as well as to be able to operate a marketplace, a license must first be obtained from the Norges Vassdrags og Energidirektorat or Norwegian Water Resources And Energy Administration ("**NVE**"),[284] a government agency charged with promoting efficient energy markets and cost-effective energy systems for efficient energy use.[285] Nord Pool, as the operator of the spot market, has been granted by the NVE with a marketplace license pursuant to Section 4-5 of the Energy Act.[286] The license covers organizing and operating a marketplace for trade in electric power contracts for physical delivery.[287]

2. FINANCIAL MARKET

The electricity financial market of Norway has evolved together with the development of the physical market and the overall operating environment of the marketplace.[288] Trading in financial electricity contracts commenced in the OTC markets of Norway as early as 1992, primarily related to forward contracts with rights and obligations to physical delivery.[289] In 1993, Statnett Marked AS introduced organized trading in forward contracts with rights and obligations to physical delivery, in addition to the physical day-ahead market.[290] This forward market originally comprised three

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[279] Dr. Martha M. Roggenkamp & Dr. Francois Boisseleau, *supra* note 263.
[280] Facts 2008 – Energy and Water Resources in Norway.
[281] *Id*.
[282] *Id*.
[283] The Nordic Power Market – Electricity Power Exchange Across National Borders.
[284] Dr. Martha M. Roggenkamp & Dr. Francois Boisseleau, *supra* note 263.
[285] The Norwegian Water Resources and Energy Directorate, https://www.nve.no/english/ (last accessed May 9, 2017).
[286] Energiloven, Section 4-5 (1990) (Norway) provides:

> No one but the State can engage in the organization or operation of a marketplace for trade in electrical energy without a license. In case of doubt, the Ministry decides whether a license is mandatory.
>
> Conditions may be specified in the license if public considerations so require. The Ministry may issue regulations governing the players' duty to disclose information.

[287] The Nordic Power Market – Electricity Power Exchange Across National Borders.
[288] Janne Peljo, Futures Pricing in the Nordic Electricity Market (2013), http://epub.lib.aalto.fi/en/ethesis/pdf/13203/hse_ethesis_13203.pdf (last accessed May 9, 2017).
[289] Dr. Martha M. Roggenkamp & Dr. Francois Boisseleau, *supra* note 263.
[290] Torstein Bye & Einar Hope, *supra* note 264.

products: *(a)* base load contracts, *(b)* peak load contracts, and *(c)* off-peak load contracts, all with a time horizon of up to six months and all with physical delivery upon maturity.[291] In 1994, the forward market was replaced by a continuous trading system, and standardized financial futures contracts were introduced.[292]

The structure of the financial market as well as the products traded on the exchange has developed substantially over the years. Norwegian experience showed that the financial electricity contracts which were physically settled were not very liquid and at the same time, trade in these contracts drained liquidity from the spot market.[293] Thus, to promote trading and stimulate greater liquidity in the market, the financial contracts were changed from physical delivery contracts to financial electricity contracts with cash settlement only at maturity.[294] As noted above, the reference price for all financial contracts is the system price at Nord Pool's physical spot market.

The Norwegian financial electricity market was originally operated by Nord Pool ASA pursuant to its exchange license under the Stock Exchange Act.[295] In 2010, however, the National Association of Securities Dealers Automated Quotations ("**NASDAQ**") OMX acquired Nord Pool ASA and assumed the exchange and clearing house functions of Nord Pool ASA for trading electricity derivatives.[296] Thus, at present, NASDAQ OMX operates the NASDAQ OMX Commodities AS exchange, where electricity derivatives are traded.[297]

NASDAS OMX offers trading in electricity derivatives contracts and settlement for market players in the financial market as a means to hedge price volatility risks and for risk management.[298] The NASDAQ OMX Commodities AS exchange facilitates the trade of the following types of derivatives: *(a)* base and peak load futures, *(b)* monthly average rate futures, *(c)* deferred settlement futures ("**DS Futures**"), *(d)* monthly DS Futures, *(e)* options and *(f)* electricity price area differentials.[299] These contract types are purely financial contracts, which mean that there is no physical delivery of electricity on these contracts.[300] As mentioned above, these contracts are settled using the system price in the physical spot market as reference.

The transactions and trades in the NASDAQ OMX Commodities AS exchange are cleared and settled through NASDAQ Clearing AB ("**NASDAQ Clearing**"), which is a multi-asset clearing house approved by Sweden's Financial Supervisory Authority,

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[291] Dr. Martha M. Roggenkamp & Dr. Francois Boisseleau, *supra* note 263.
[292] Torstein Bye & Einar Hope, *supra* note 264.
[293] Dr. Martha M. Roggenkamp & Dr. Francois Boisseleau, *supra* note 263.
[294] *Id*.
[295] The Nordic Power Market – Electricity Power Exchange Across National Borders.
[296] Nasdaq, Inc., Our History, http://www.nasdaqomx.com/commodities/whoweare/ourhistory (last accessed May 9, 2017).
[297] Facts 2015 – Energy and Water Resources in Norway.
[298] Torstein Bye & Einar Hope, *supra* note 264.
[299] Nasdaq, Inc., Power Derivatives, http://www.nasdaqomx.com/commodities/markets/power (last accessed May 9, 2017).
[300] Facts 2008 – Energy and Water Resources in Norway.

Finansinspektionen.[301] NASDAQ Clearing enters into financial derivatives contracts as a contractual counterparty and assumes liability for covering the future settlement of these contracts, thereby reducing the risk for both buyer and seller in the derivatives market.[302]

To be able to trade in electricity derivatives in NASDAQ OMX Commodities AS exchange, interested parties must qualify as, or trade through, "exchange members" and "clearing members."[303] In this connection, Section 26 of the Stock Exchange Act stipulates that an exchange may only admit trading members with sufficient capital, reasonable organization and adequate technical systems, which are deemed to be suitable in relation to the requirements of the membership. Exchange members may include energy producers, energy intensive industries, large consumers, distributors, funds, investment companies, banks, brokers, utility companies and financial institutions.[304]

Financial electricity contracts (as well as other commodity derivatives) have been included in the scope of the term "financial instruments" in the Norwegian Securities Trading Act 1997 ("**Securities Trading Act**").[305] Accordingly, all entities trading in the NASDAQ OMX Commodities AS exchange are subject to the provisions of the Securities Trading Act prohibiting misuse of inside information,[306] unreasonable business methods,[307] and market manipulation,[308] as well as to the rules relating to the underlying commodity, electricity, inasmuch as the transactions therein have a direct impact on the underlying commodity.[309]

3. REGULATORY AUTHORITY

The Ministry of Petroleum and Energy ("**MPE**") has the overall responsibility for managing the energy and water resources in Norway.[310] The MPE's main responsibilities with respect to electricity are to establish guidelines for transmission tariffs and to act for the Government as owner of the state-owned enterprises.[311]

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[301] Nasdaq, Inc., Clearing, http://www.nasdaqomx.com/commodities/clearing (last accessed May 9, 2017).
[302] *Id*.
[303] The Nordic Power Market – Electricity Power Exchange Across National Borders.
[304] Nasdag, Inc., Member List, http://www.nasdaqomx.com/commodities/Marketaccess/memberlist (last accessed May 9, 2017).
[305] Lov om verdipapirhandel [Verdipapirhandelloven], 29 June 1997 No. 75, Section 2-1 (1997) (Norway).
[306] *Id.*, Section 3-3.
[307] *Id*., Section 3-9.
[308] *Id*., Section 3-8.
[309] NordREG Nordic Energy Regulators, The Nordic Financial Electricity Market (2010), http://www.nordicenergyregulators.org/wp-content/uploads/2013/02/Nordic_financial_market_NordREG_Report_8_2010.pdf (last accessed May 9, 2017).
[310] Facts 2015 – Energy and Water Resources in Norway.
[311] World Trade Organization, Trade Policy Review – Report by the Secretariat: Norway (2008), https://www.wto.org/english/tratop_e/tpr_e/s205-04_e.doc (last accessed May 9, 2017).

Most of the MPE's other administrative responsibilities have been delegated to its subordinate agency, the NVE.

The NVE is essentially the national independent regulatory authority for the physical electricity market in Norway.[312] The NVE is a directorate within the MPE and operates as an autonomous and independent economic regulator of monopoly network services within the framework of the MPE. As an independent regulator, NVE has no ownership or economic interests in the electricity industry.[313] It is an independent legal entity with its own budget set by the government and has the authority to act in the scope of its competences.[314]

The powers of the NVE are primarily derived from the Energy Act. The main statutory objectives for NVE concerning energy, and which the regulatory functions is a part of, are to promote social and economic development through efficient and environmentally sound energy production, and promote efficient and reliable transmission, distribution, trade and efficient use of energy.[315] Accordingly, the NVE has the authority to issue regulations on economic and technical reporting, network revenues, market access and network tariffs, non-discriminatory behavior, customer information, metering, settlement and billing as well as the organised physical power exchange.[316] In addition, NVE issues regulations on system responsibility and quality of supply.[317] NVE may also take necessary actions to fulfill the delegated powers according to the Energy Act.[318]

The financial market, on the other hand, is supervised by the Financial Supervisory Authority of Norway,[319] the government agency tasked with supervising the securities market.[320]

The Financial Supervisory Authority of Norway is a subordinate agency of the Ministry of Finance of Norway. It supervises banks, insurers, finance companies, investment firms, markets for financial instruments, securities depositories, estate agents, e-money institutions, auditors and accountants, among other.[321] It is tasked to promote financial stability and well-functioning markets through its supervision of institutions and markets.[322]

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312 Norwegian Water Resources and Energy Directorate, Energy Market and Regulation, https://www.nve.no/energy-market-and-regulation/ (last accessed May 9, 2017).
313 Daniel Kerr, Norway (2013), https://www.reeep.org/norway-2013 (last accessed May 9, 2017).
314 *Id*.
315 *Id*.
316 Norwegian Water Resources and Energy Directorate, *supra* note 312.
317 Kerr, *supra* note 313.
318 *Id*.
319 Verdipapirhandelloven, Chapter 15.
320 NordREG Nordic Energy Regulatorys, *supra* note 309.
321 The Government of Norway, The Financial Supervisory Authority, https://www.regjeringen.no/en/dep/fin/about-the-ministry/etater-og-virksomheter-under-finansdepartementet/subordinateagencies/the-financial-supervisory-authority/id270404/ (last accessed May 9, 2017).
322 *Id*.

Given the close correlation between the financial market and the physical market, NVE has a cooperation agreement with the Financial Supervisory Authority of Norway on the financial markets for electricity derivatives.[323] Aside from this, it also has a cooperation agreement with the Competition Authority on market surveillance.[324]

B. EUROPEAN UNION

Up until the 1990s, electricity markets across the European Union ("**EU**") were organized as regulated monopolies where one or more vertically integrated companies were responsible for the generation, transmission, distribution and supply of electricity.[325] However, these markets were gradually liberalized and deregulated,[326] introducing competition in the generation and supply chains through the creation of electricity spot markets, where electricity could be traded as a commodity. As a result, various EU member-states established their respective spot markets/power exchanges.

The liberalization of the EU electricity markets was carried out through three legislative packages. These are: *(a)* Directive 96/92/EC,[327] which laid down the common rules for the internal market in electricity, *(b)* Directive 2003/54/EC[328] and Regulation (EC) 1228/2003,[329] which enabled new electricity suppliers to enter the markets of EU member states and allowed consumers to choose their own electricity suppliers, and *(c)* Directive 2009/72/EC[330] and Regulation (EC) 714/ 2009,[331] which further liberalized the EU electricity markets. These directives are all aimed towards the creation of an internal and fully integrated European electricity market.[332] As of 2015, however, the envisaged EU internal energy market has not yet been fully completed by the Member States, as noted in the European Commission's State of the Energy Union 2015 report.

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[323] Norwegian Water Resources and Energy Directorate, *supra* note 312.
[324] *Id*.
[325] KU Leuven Energy Institute, EI Fact Sheet: The Current Electricity Market Design in Europe (2015), https://set.kuleuven.be/ei/images/EI_factsheet8_eng.pdf/at_download/file (last accessed May 9, 2017).
[326] Koen Rademaekers, Allister Slingenberg & Salim Morsy, Review and Analysis of the EU Wholesale Energy Market (2008), https://ec.europa.eu/energy/sites/ener/files/documents/2008_eu_wholesale_energy_market_historical.pdf (last accessed May 9, 2017).
[327] Council Directive 96/92/EC Concerning Common Rules for the Internal Market in Electricity.
[328] Council Directive 2003/54/EC Concerning Common Rules for the Internal Market in Electricity and Repealing Directive 96/929EC.
[329] Council Regulation (EC) No. 1228/2003 on Conditions for Access to the Network for Cross-border Exchanges in Electricity.
[330] Council Directive 2009/72/EC Concerning Common Rules for the Internal Market in Electricity and Repealing Directive 2003/54/EC.
[331] Council Regulation (EC) No. 714/2009 on Conditions for Access to the Network for Cross-border Exchanges in Electricity and Repealing Council Regulation (EC) No. 1228/2003.
[332] KU Leuven Energy Institute, *supra* note 325.

1. PHYSICAL MARKET

The European power market is a conglomerate of seven regional energy markets, which are more or less physically connected.[333] These regions form part of an initiative launched in 2006 by the European Regulators' Group for Electricity and Gas ("**ERGEG**"),[334] an advisory group to the European Commission on internal energy market issues in Europe, with the objective of moving the EU closer to an integrated electricity market.

The regional energy markets in the EU are as follows:

(a) Baltic region, consisting of Estonia, Latvia, and Lithuania and monitored by the Latvian energy regulator;[335]

(b) Central East region, consisting of Austria, Czech Republic, Germany, Hungary, Poland, Slovakia, and Slovenia and monitored by the Austrian energy regulator;[336]

(c) Central South Region, consisting of Austria, France, German, Italy, and Slovenia and monitored by the Italian energy regulator;[337]

(d) Central West Region, consisting of Belgium, France, the Netherlands, Germany, and Luxemburg and monitored by the Belgian energy regulator;[338]

(e) Northern Region, consisting of Denmark, Finland, Germany, Norway, Poland and Sweden;[339]

(f) Southwest Region, consisting of France, Spain, and Portugal and monitored by the Spanish energy regulator;[340] and

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[333] Koen Rademaekers, Allister Slingenberg & Salim Morsy, *supra* note 326.
[334] Commission Decision No. 2003/796/EC, 2003 O.J. L 196/34.
[335] Council of European Energy Regulators, Baltic, http://www.ceer.eu/portal/page/portal/EER_HOME/EER_ACTIVITIES/EER_INITIATIVES/ERI/Baltic (last accessed May 9, 2017).
[336] Council of European Energy Regulators, Central-East, http://www.ceer.eu/portal/page/portal/EER_HOME/EER_ACTIVITIES/EER_INITIATIVES/ERI/Central-East (last accessed May 9, 2017).
[337] Council of European Energy Regulators, Central-South, http://www.ceer.eu/portal/page/portal/EER_HOME/EER_ACTIVITIES/EER_INITIATIVES/ERI/Central-South (last accessed May 9, 2017).
[338] Council of European Energy Regulators, Central-West, http://www.ceer.eu/portal/page/portal/EER_HOME/EER_ACTIVITIES/EER_INITIATIVES/ERI/Central-West (last accessed May 9, 2017).
[339] Council of European Energy Regulators, Northern, http://www.ceer.eu/portal/page/portal/EER_HOME/EER_ACTIVITIES/EER_INITIATIVES/ERI/Northern (last accessed May 9, 2017).
[340] Council of European Energy Regulators, South-West, http://www.ceer.eu/portal/page/portal/EER_HOME/EER_ACTIVITIES/EER_INITIATIVES/ERI/South-West (last accessed May 9, 2017).

(g) France, Ireland, and UK regional energy market which is monitored by the British energy regulator.[341]

These organized markets in the EU typically comprise one or more of the following markets: *(a)* day-ahead market, *(b)* intra-day/ adjustment/ hour-ahead market, and *(c)* balancing services/real-time market.[342] For example, the Amsterdam Power Exchange (the Netherlands), Borzen (Slovenia), Energy Exchange Austria (Austria), Gestore Mercato Elettrico (Italy), Nord Pool (Nordic and Baltic regions), and Spanish Power Exchange (Spain) all provide for a day-ahead market, where the bids are submitted and the market is cleared on the day before the actual dispatch.[343] The Amsterdam Power Exchange (the Netherland), Gestore Mercato Elettrico (Italy), Nord Pool (Nordic and Baltic regions), and Spanish Power Exchange (Spain) also offer an intra-day market, sometimes also referred to as hour-ahead or adjustment market, which closes a few hours before delivery and enables the participants to improve their balance of physical contracts in the short term.[344] To balance power generation to load at any time during real-time operations, some system operators in the EU market also use a balancing or real-time market wherein participants can submit bids that specify the prices they require (offer) to increase their generation or decrease their consumption (decrease their generation or increase their consumption) for a specific volume, even after the closure of the spot market.[345]

The market players and stakeholders in these different energy markets vary from one region to another. However, these market participants are generally generators, electricity suppliers and large industrial consumers.[346]

2. FINANCIAL MARKET

As the physical spot markets of member-states of the EU develop, so do the financial markets, with the growth of a variety of derivative instruments being offered in these financial markets. These financial marketplaces for energy have developed to provide for an avenue where producers, suppliers, and consumers may manage and mitigate the price volatility risks in the physical spot market.[347]

The financial products sold in these markets include different power derivatives such as options, contracts for differences, and futures, which are based on the underlying

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[341] Council of European Energy Regulators, France-UK-Ireland, http://www.ceer.eu/portal/page/portal/EER_HOME/EER_ACTIVITIES/EER_INITIATIVES/ERI/France-UK-Ireland (last accessed May 9, 2017).
[342] Reinhard Madlener & Markus Kaufmann, Power Exchange Spot Trading in Europe: Theoretical Considerations and Empirical Evidence (2002), http://www.oscogen.ethz.ch/reports/oscogen_d5_1b_010702.pdf (last accessed May 9, 2017).
[343] *Id*.
[344] *Id*.
[345] *Id*.
[346] Gregor Erbach, Understanding Electricity Markets in the EU, http://www.europarl.europa.eu/RegData/etudes/BRIE/2016/593519/EPRS_BRI(2016)593519_EN.pdf (last accessed May 9, 2017).
[347] Koen Rademaekers, Allister Slingenberg & Salim Morsy, *supra* note 326.

spot market price, and which are widely used to manage the risks of price fluctuations.[348] Most of the financial products offered in the EU do not necessarily lead to physical delivery of electricity, as they are mostly settled financially between the involved parties, although there are also products which combine both physical and financial elements.[349] The instruments traded in the EU markets include *(a)* electricity forwards; *(b)* electricity futures; *(c)* electricity swaps; *(d)* contract for differences; *(e)* electricity price area differentials; *(f)* spreads; and *(g)* electricity options.[350] These are traded both in OTC markets and exchanges.[351]

Among these exchanges where financial instruments are traded is the European Energy Exchange ("**EEX**"), which is one of the leading energy trading platform in Europe.[352] It was established in 2002 through a merger between the German power exchanges in Frankfurt and Leipzig.[353] The EEX was created under the German Exchange Act[354] and is supervised by the Saxon State Ministry for Economic Affairs, Labour and Transport.[355] The products that EEX offers include futures, options, and spreads, among others.[356] Clearing and settlement of trading transactions are provided by the clearing house European Commodity Clearing.[357]

3. REGULATORY AUTHORITY

The operations of the electricity markets within the EU are regulated and monitored by the independent national regulators of its member-states.[358] However, in order to help the different national regulators cooperate and ensure the smooth functioning of the internal energy market, the EU established the Agency for the Cooperation of

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[348] Union of the Electricity Industry – EURELECTRIC Working Group Trading, Regulatory Aspects of Electricity Trading in Europe (2000), http://www.eurelectric.org/Download/Download.aspx?DocumentID=12373 (last accessed May 9, 2017).
[349] *Id*.
[350] Economic Consulting Associates, European Electricity Forward Markets and Hedging Products – State of Play and Elements for Monitoring Final Report, http://www.acer.europa.eu/en/electricity/market%20monitoring/documents_public/eca%20report%20on%20european%20electricity%20forward%20markets.pdf (last accessed May 9, 2017).
[351] *Id*.
[352] Association of European Energy Exchanges, EEX – European Energy Exchange, http://www.europex.org/members/eex-european-energy-exchange-germany/ (last accessed May 9, 2017).
[353] European Energy Exchange, EEX AG, https://www.eex.com/en/about/eex/eex-ag (last accessed May 9, 2017).
[354] European Energy Exchange, Exchange, https://www.eex.com/en/about/eex/exchange (last accessed May 9, 2017).
[355] European Energy Exchange, Exchange Supervisory Authority, https://www.eex.com/en/about/eex/exchange/exchange-supervisory-authority-/30534 (last accessed May 9, 2017).
[356] European Energy Exchange, Power Derivatives Market, https://www.eex.com/en/products/power/power-derivatives-market (last accessed May 9, 2017).
[357] European Energy Exchange, *supra* note 353.
[358] Gregor Erbach, Understanding Electricity Markets in the EU, http://www.europarl.europa.eu/RegData/etudes/BRIE/2016/593519/EPRS_BRI(2016)593519_EN.pdf (last accessed May 9, 2017).

Energy Regulators ("**ACER**"),[359] which is an entity independent from the European Commission, national governments, and energy companies. ACER took over the activities of the ERGEG, which was dissolved on July 1, 2011.[360] As a supervisory body with an advisory role, ACER makes recommendations to the European Commission regarding market regulation and priorities for transmission infrastructure.[361]

Among the functions of the ACER are: *(a)* drafting guidelines for the operation of cross-border gas pipelines and electricity networks, *(b)* reviewing the implementation of EU-wide network development plans, *(c)* deciding on cross-border issues if national regulators cannot agree or if they ask it to intervene, and *(d)* monitoring the functioning of the internal market including retail prices, network access for electricity produced from renewables, and consumer rights.[362]

C. AUSTRALIA

1. PHYSICAL MARKET

Wholesale electricity is traded through the National Electricity Market ("**NEM**"), an interconnected grid with an installed capacity of 47,641MW, and covers five state-based networks (Queensland, New South Wales (NSW), Victoria, South Australia and Tasmania and six cross-border interconnectors (Queensland, New South Wales, Victoria, South Australia, Tasmania and the Australian Capital Territory).[363] It commenced operation in December 1998.[364] Currently, there are around 336 generators serving 9.8 million customers, majority of which are energy retailers.[365] For the period of 2014-2015, $7.7 billion was traded in the NEM.[366]

The Australian Energy Market Operator ("**AEMO**") operates the NEM under the regime of the National Electricity Law and the National Electricity Rules ("**NER**").[367] Generators offer to supply electricity across ten (10) price bands for each five minute

[359] Council Regulation (EC) No. 713/2009 Establishing an Agency for the Cooperation of Energy Regulators.
[360] Commission Decision No. 2011/280/EU, 2011 O.J. L 129/14.
[361] Dagmara Stoerring, Fact Sheets on the European Union – 2017 (2016), http://www.europarl.europa.eu/ftu/pdf/en/FTU_5.7.2.pdf (last accessed May 9, 2017).
[362] European Commission, Press Release – Question and Answers on the Third Legislative Package for an Internal EU Gas and Electricity Market, http://europa.eu/rapid/press-release_MEMO-11-125_en.htm?locale=en (last accessed May 9, 2017).
[363] Australian Energy Regulator, State of the Energy Market 2015 (2015), https://www.aer.gov.au/system/files/State%20of%20the%20energy%20market%202015%20%28A4%20format%29%20%E2%80%93%20last%20updated%204%20February%202016.pdf (last accessed May 9, 2017) ("**2015 State of the Energy Market**").
[364] Australian Energy Market Operator, National Electricity Market Fact Sheet, https://www.aemo.com.au/-/media/Files/PDF/National-Electricity-Market-Fact-Sheet.pdf (last accessed May 9, 2017) ("**NEM Fact Sheet**").
[365] 2015 State of the Energy Market.
[366] Australian Energy Market Operator, National Electricity Market, https://www.aemo.com.au/Electricity/National-Electricity-Market-NEM (last accessed May 9, 2017).
[367] *Id*.

dispatch interval in a day.[368] The AEMO matches these offers against real time demand by stacking generator bids from lowest to highest, selecting the cheapest first, and then progressively choosing the more expensive offers until enough electricity is dispatched to meet demand for each dispatch interval.[369] The highest priced offer sets the dispatch price.[370] All successful bidders, regardless of how they bid, are paid the spot price which is the average dispatch over the trading interval or the half-hour period.[371]

The NER set the maximum (or the Market Price Cap) and minimum spot price (or the Market Floor Price) at $13,800 per MW hour and -$1,000 per MW hour, respectively, on January 2015.[372] These prices are reviewed every four years by the Australian Energy Market Commission's ("**AEMC's**") Reliability Panel.[373]

Financial liabilities and credits are calculated daily and trades are settled weekly by the AEMO.[374]

In addition to the AEMO, governance of the NEM is shared among the following institutions:[375]

(a) Council of Australian Governments Energy Council is the national policy-making body for the Australian energy market;

(b) AEMC is in charge of the rule-making (including the NER[376]) and market development;

(c) Australian Energy Regulator ("**AER**") is responsible for enforcing the rules for the NEM and regulates the electricity transmission distribution networks and retail markets; and

(d) Energy Consumers Australia is the body advocating the long-term consumer interests with respect to price, quality, safety, reliability and security of supply of energy services.

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[368] 2015 State of the Energy Market.
[369] *Id*.
[370] *Id*.
[371] *Id*.
[372] NEM Fact Sheet.
[373] *Id*.
[374] Australian Energy Market Operator, Settlements and Payments, https://www.aemo.com.au/Electricity/National-Electricity-Market-NEM/Settlements-and-payments (last accessed May 9, 2017).
[375] Australian Department of the Environment and Energy, Energy Market Institutions, http://www.environment.gov.au/energy/markets/energy-market-institutions (last accessed May 9, 2017).
[376] Australian Energy Market Commission, National Electricity Market, http://www.aemc.gov.au/Australias-Energy-Market/Markets-Overview/National-electricity-market (last accessed May 9, 2017).

Western Australia and the Northern Territory are not connected to the NEM.[377] There exists a separate market for the South West Interconnected System, the Wholesale Electricity Market, which commenced operation on September 21, 2006.[378] There are about more than one million customers in the WEM which is also operated by the AEMO.[379]

2. FINANCIAL MARKET

The Corporations Act 2001 and the Financial Services Reform Act 2001 govern the financial markets and market participants under the regulation of the Australian Securities and Investments Commission ("**ASIC**").[380] Under amendments to the Corporations Act, insider trading and disclosure principles are extended to electricity derivative contracts.[381] Rules set by Australian Accounting Standards Board must also be considered by market participants.[382]

There are two electricity financial markets in Australia: *(a)* OTC markets, and *(b)* the Australian Securities Exchange ("**ASX**"). Unlike in the spot market, these markets involve purely financial transactions where no physical supply of electricity is required.[383] The common electricity derivatives traded in both markets are:[384]

(a) Forward contracts – agreements to exchange the NEM spot price in the future for an agreed fixed price. Forwards are called swaps in the OTC markets and futures on the ASX;

(b) Options; and

(c) Caps (which set an upper limit on the price that the holder will pay for electricity in the future) and floors (which set a lower price limit) are traded as both futures and options.

The most heavily traded ASX products in 2014 to 2015 were options (71%). In the OTC market, swaps accounted for almost 74% of trade, followed by caps at 20%.[385]

The OTC markets in Australia started in the 1990s due to developments in financial regulation, technology and risk management practices.[386] OTC contracts come in the

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[377] NEM Fact Sheet.
[378] Australian Energy Market Operator, Wholesale Electricity Market (WA), https://www.aemo.com.au/Electricity/Wholesale-Electricity-Market-WEM (last accessed May 9, 2017).
[379] *Id*.
[380] 2015 State of the Energy Market.
[381] Australian Energy Regulator, State of the Energy Market 2009, https://www.aer.gov.au/system/files/Chapter%203%20%20Electricity%20financial%20markets%202009.pdf (last accessed May 9, 2017) ("**2009 State of the Energy Market**").
[382] *Id*.
[383] Australian Energy Market Commission 2015, *NEM Financial Market Resilience, Final Report* (2015).
[384] 2015 State of the Energy Market.
[385] *Id*.
[386] Australian Prudential Regulation Authority, Australian Securities and Investments Commission & Reserve Bank of Australia, Survey of the OTC Derivatives Market in Australia (2009),

form of either bilateral agreements between generators and retailers, or those arranged through brokers that post bid (buy) and ask (sell) prices on behalf of their clients.[387] While the ISDA Master Agreement may provide a template, market participants usually modify contract terms according to their needs, providing flexibility.[388]

On the other hand, the Australian Stock Exchange (where electricity derivatives are traded) was first formed in 1987 as a result of national legislation enabling the amalgamation of six independent state-based stock exchanges. In July 2006, the Australian Stock Exchange and the Sydney Futures Exchange merged and operated under the name ASX.[389]

Exchange trades are settled through a clearing house, which is the counterparty to all transactions and requires daily mark-to-market cash margining to manage credit default risk.[390] ASX Clear (Futures) ("**ASX Clear**") is the central counterparty for all futures and options products traded on ASX. Through novation, ASX Clear becomes the seller to every buyer and the buyer to every seller, making it liable for completing all cleared transactions.[391]

In terms of product offerings in respect of electricity derivatives, those traded through the ASX are more structured and standardized that those traded OTC as follows:[392] *(i)* monthly base load futures, *(ii)* quarterly base load futures, *(iii)* quarterly peak load futures, *(iv)* quarterly base load $300 cap futures, *(v)* calendar year base load strip options, (vi) financial year base load strip options, and (vii) average rate base load quarterly options for 1 MW of electrical energy per hour on a base load profile for the respective states over the duration of a calendar quarter.

D. NEW ZEALAND

1. PHYSICAL MARKET

The Electricity Authority, the regulator of the electricity industry, was established as an independent Crown entity under the Electricity Industry Act 2010 ("**EIA**").[393] Its main function is to promote competition in, reliable supply by, and the efficient operation of, the electricity industry for the long-term benefit of consumers.[394] It is

http://www.apra.gov.au/MediaReleases/Documents/Survey-of-the-OTC-Derivatives-Market-in-Australia-report.pdf (last accessed May 9, 2017).

[387] 2009 State of the Energy Market.

[388] *Id*.

[389] Australian Securities Exchange, History, http://www.asx.com.au/about/history.htm (last accessed May 9, 2017).

[390] 2009 State of the Energy Market.

[391] Australian Securities Exchange, Clearing, http://www.asx.com.au/services/clearing.htm (last accessed May 9, 2017).

[392] Australian Securities Exchange, Australian Electricity Futures and Options Contract Specifications, http://www.asx.com.au/documents/products/ASX_AustralianElectricityFuturesandOptions_ContractSpecifications_July2015.pdf (last accessed May 9, 2017).

[393] Electricity Industry Act 2010, Public Act 2010 No 116, Section 12 (2010) (New Zealand).

[394] *Id*., Section 15.

also responsible for making and administering the Electricity Industry Participation Code 2010 ("**EIPC**"), which regulates generation, transmission, system operation, supply, distribution and retail.[395]

Wholesale electricity is bought and sold in the wholesale market at spot prices. Industry participants upload their bids and offers in the wholesale information and trading system ("**WITS**").[396] New Zealand Exchange ("**NZX**") Limited is the manager contracted by the Electricity Manager to run WITS.[397] Bids and offers can be submitted 24/7 and information is published at least every five minutes and can be revised up to the start of the next half-hour trading period.[398]

Once validated in WITS, these are sent to the system operator for use in their scheduling and dispatch process. When the resulting electricity prices (forecast prices) and quantities have been calculated, the system operator sends these back to WITS for publication.[399] Forecast prices are calculated every two hours for every node for each half hour trading period up to 36 hours ahead of time.[400] Generators make offers at 52 grid injection points or where their power stations are connected to the national grid while retailers make bids at 196 grid exit points or where the national grid is connected to a local network.[401]

Market operation service providers and their respective roles include the following:

(a) The Pricing Manager sends provisional, interim and final prices to WITS for publication.[402]

(b) The Clearing Manager is responsible for *(i)* ensuring that the prudential requirements are met by payers before and all times that they purchase electricity,[403] *(ii)* establish cash deposit and operating accounts,[404] *(iii)* require information from payers as necessary,[405] *(iv)* issue invoices to participants,[406] *(v)* make payments to payees by direct payment to bank account designated by the payees,[407] and *(vi)* exercise remedies when payees default.[408]

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[395] *Id*., Section 16(1)(b).
[396] Electricity Authority, WITS Manager, https://www.ea.govt.nz/operations/market-operation-service-providers/wits-manager/ (last accessed May 9, 2017) ("**EA WITS Manager**").
[397] *See* Electricity Industry Act 2010, Section 16(1)(h); *see also* Wholesale Information and Trading System Manager Market Operator Service Provider Agreement (2015), https://www.ea.govt.nz/dmsdocument/20636 (last accessed May 9, 2017).
[398] EA WITS Manager.
[399] *Id*.
[400] Electricity Authority, How Spot Prices Work, https://www.ea.govt.nz/operations/wholesale/spot-pricing/how-spot-prices-work/ (last accessed May 9, 2017).
[401] *Id*.
[402] EA WITS Manager.
[403] Electricity Industry Participation Code 2010, cl. 14.2 & 14.3 (2010) (New Zealand).
[404] *Id*., cl. 14.7 & 14.43.
[405] *Id*., cl. 14.23 & 14.24.
[406] *Id*., cl. 14.36 & 14.44.
[407] *Id*., cl. 14.46 & 14.48.
[408] *Id*., cl. 14.58.

(c) The Reconciliation Manager is in charge of allocation of energy among electricity generators or buyers based on the metering data received on a monthly basis. These data are compared against the register of contracts and passed on to industry participants.[409] The Reconciliation Manager also processes information which the Clearing Manager uses to invoice electricity purchasers.[410]

NSX Limited is also the Pricing Manager,[411] Clearing Manager[412] and Reconciliation Manager[413] of the spot market contracted by the Electricity Authority.

(d) Transpower New Zealand Limited is the appointed System Operator which has the responsibility of balancing supply and demand in the market and ensuring the appropriate reserves are available.[414]

2. FINANCIAL MARKET

Financial products and markets in New Zealand are governed by the Financial Markets Conduct Act 2013 ("**FMCA**"), the enforcement of which is the main responsibility of the Financial Markets Authority ("**FMA**"). Under the FMCA, a financial product includes a derivative,[415] which is defined as an agreement subject to the following conditions: *(a)* a party is required to provide at some future time consideration of a particular kind to another person, *(b)* the future time is not less than the time, prescribed under the FMCA, after the time at which the agreement is entered into, and *(c)* the amount of the consideration or value of the agreement is determined by reference to the value or amount of something else such as an asset, rate, index or commodity.[416] These include futures contract or forward, options (other than an option to acquire by way of issue an equity security, a debt security, or a managed investment product), swaps, contracts for differences and caps.[417] The definition excludes, among others, an agreement that does not permit the seller's obligations to be wholly settled in cash or by set-off between the parties, rather than by delivery

[409] Electricity Authority, Reconciliation Manager, https://www.ea.govt.nz/operations/market-operation-service-providers/reconciliation-manager/ (last accessed May 9, 2017).
[410] *Id*.
[411] *See* Pricing Manager Market Operator Service Provider Agreement (2015), https://www.ea.govt.nz/dmsdocument/20643 (last accessed May 9, 2017).
[412] *See* Clearing Manager Market Operator Service Provider Agreement (2015), https://www.ea.govt.nz/dmsdocument/20644 (last accessed May 9, 2017).
[413] *See* Reconciliation Manager Market Operator Service Provider Agreement (2015), https://www.ea.govt.nz/dmsdocument/20639 (last accessed May 9, 2017).
[414] *See* System Operator Service Provider Agreement (2015), https://www.ea.govt.nz/dmsdocument/3711 (last accessed May 9, 2017).
[415] Financial Markets Conduct Act 2013, Public Act 2013 No 69, Section 7(1)(d) (2013) (New Zealand).
[416] *Id*., Section 8(4)(a).
[417] *Id*., Section 8(4)(b).

of the property.[418] Derivatives issuers must be licensed to make regulated offers[419] of derivatives.[420]

Financial product markets, on the other hand, are defined as generally any facility where offers to acquire or dispose of financial products are made or accepted.[421] All operators of financial product markets must be licensed by the FMA.[422] Rules on the approval of market rules,[423] reportorial obligations,[424] and control limits[425] are also laid down under the FMCA.

Under Section 42(2)(g) of the EIA, the Energy Authority must facilitate or provide for trading financial hedge contracts for electricity. The EIA also includes traders in electricity as industry participants. A trader includes any person who trades in electricity and electricity derivatives such as *(a)* a person who buys or sells contracts under which payment obligations may change according to the changes at in the price at which electricity is bought or sold in any New Zealand market, or *(b)* any related clearing house or exchange.[426] Further, the EIPC includes the hedge market as part of the wholesale market.[427] The EIPC also requires participants to disclose information about risk management contracts,[428] which may be contracts for differences, fixed price supply contracts, or options contracts.[429] The information to be submitted depends on the specific kind of contact involved.[430]

Trading of electricity derivatives in this jurisdiction does not include the physical delivery of electricity but only cash settlements.[431] Specific to electricity derivatives, there are two markets in New Zealand: *(a)* the OTC market where hedges such as

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[418] *Id*., Section 8(4)(d)(ii).
[419] *Id*., Section 41, which provides:
41 Meaning of regulated offer and of regulated product
(1) In this Act, regulated offer—
(a) means an offer of financial products to 1 or more investors where the offer to at least 1 of those investors requires disclosure under this Part (regardless of whether or not an exclusion under Schedule 1 applies to an offer to 1 or more other investors); but
(b) does not include an offer of financial products to 1 or more investors if—
(i) the only investors who are able, under the terms of the offer, to acquire the products are investors to whom disclosure under this Part is not required; and
(ii) all of the investors who acquire the products under the offer are investors to whom disclosure under this Part is not required. xxx
[420] *Id*., Section 388(d).
[421] Financial Markets Conduct Act 2013, Section 309.
[422] *Id*., Section 310.
[423] *Id*., Section 327 to 336.
[424] *Id*., Section 337 to 343.
[425] *Id*., Section 344 to 348.
[426] Electricity Industry Act 2010, Section 5.
[427] Electricity Industry Participation Code 2010, cl 1.1(1).
[428] *Id*., cl 1.1(1). The definition of risk management contracts excludes FTRs.
[429] Electricity Industry Participation Code 2010, cl 13.217.
[430] *Id*., cl 13.219.
[431] Wholesale Advisory Group, Overview of Hedge Market Definition and Metrics (2013), https://www.ea.govt.nz/dmsdocument/16231 (last accessed May 9, 2017).

contracts for difference and options are traded,[432] and *(b)* ASX.[433] The ASX is licensed to operate the derivatives market in New Zealand at two nodes: Otahu in the North Island and Benmore in the South Island.[434]

Under Section 317 of the FMCA, an overseas financial product market may secure a license to operate the same market in New Zealand subject to certain conditions. Since the operations of the ASX is governed by Australian laws and under the supervision of the ASIC, its license from the FMA is subject to two conditions: *(a)* that it will require trading participants to inform New Zealand investors of the differences between trading in Australian and New Zealand markets,[435] and *(b)* that it will require trading participants to be licensed as derivatives issuers under the FMCA.[436]

ASIC-approved ASX operating rules are deemed approved under the FMCA with ASX having the obligation of informing FMA in case there are material amendments to these rules not less than 14 days, or such other time as they may agree upon, before such amendments are effected.[437] Clearing and settlement arrangements in the ASX are also provided by ASX Clear.[438]

ASX has certain reporting obligations to the FMA, including information on the names and business addresses of trading participants and details regarding any written complaint which it may have received concerning these trading participants.[439] ASX must also provide the FMA with a copy of any report issued by the ASIX on the exchange within three working days from its publication.[440]

The types of New Zealand electricity futures and options are:[441] *(a)* monthly base load futures, *(b)* quarterly base load futures, *(c)* quarterly peak load futures, *(d)* calendar year base load strip options, and *(e)* average rate base load options.

There is also a specialized market for financial transmission rights ("**FTRs**") which was established in 2013 by the Electricity Authority under Parts 13 and 14 of the EIPC

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[432] Electricity Authority, How the Hedge Market Works, https://www.ea.govt.nz/operations/wholesale/hedges/how-the-hedge-market-works/ (last accessed May 9, 2017).
[433] *Id*.
[434] *Id*.
[435] New Zealand Financial Product Market License (Australian Securities Exchange Limited) 2014, cl. 8.
[436] *Id*., cl. 7.
[437] *Id*., cl. 6.
[438] *Id*., cl. 9.
[439] *Id*., cl. 11.
[440] *Id*., cl. 13.
[441] Australian Securities Exchange, New Zealand Electricity Futures and Options – Contract Specifications (2015), http://www.asx.com.au/documents/eproducts/ASX_NZ_Electricity_Contract_Specifications_Sept2015.pdf (last accessed May 9, 2017).

and it is subject to the authority of the FMCA under the FMA. Currently, it operates in five points, namely, Otahuhu, Benmore, Haywards, Invercargill and Islington.[442]

A FTR addresses the risks related to differences in prices among locations. These price differences may have impact on, for example, those who buy and sell at different points in the grids. The holder of a FTR receives the difference in spot prices between two points in the grid for a contracted amount and period.[443]

One common type is the "obligation" FTR or what is essentially a swap. If a party was selling electricity at point 1 and buying it at point 2, it would receive payment when the price in point 2 was higher than in point 1, and pay the difference when the opposite was true.[444] Another type is the "option" FTR where a party which was selling at point 2 and buying at point 1 would receive payment whenever the price in point 1 is higher than in point 2 but has no obligation to pay when the opposite was true.[445]

At the end of the one-month contract period of a FTR, the purchaser receives payment equal to the sum of all difference in spot prices that occurred during each trading period during that month. For an obligation FTR, both positive and negative differences are considered; for an option FTR, only the positive.[446]

Similar to other products, FTRs are settled purely on cash basis; no physical delivery of electricity is required.[447] Unlike other financial contracts, however, a party does not deal with a counter-party but with an FTR manager which allocates FTRs to parties.[448] The FTR manager administers the monthly auctions where FTRs purchased.[449] Participants also do not draw on their funds to settle FTRs which are instead centrally funded from the auction revenues and available loss and constraint excess rentals ("**LCE**").[450] LCE funds refer to a pool of money which results from the differences in spot prices in relation to marginal losses and congestions. When the amount of money paid by all electricity purchasers is more than what is required to pay sellers, a surplus occurs. If this is more than enough to settle the FTRs, then this is added to the portion which is rebated back to transmission customers. If this is insufficient to settle the FTRs, partial payments are made on a pro-rata basis. This causes FTR holders to be exposed to revenue inadequacy risks.[451]

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[442] Electricity Authority, Financial Transmission Rights (FTR) Market, https://www.ea.govt.nz/operations/wholesale/hedges/ftr-market/ (last accessed May 9, 2017).
[443] Electricity Authority, Financial Transmission Rights Development – Issues and Options Paper (2017), Section 3.1 & 3.2.
[444] *Id*., Section 3.4.
[445] *Id*., Section 3.5.
[446] *Id*., Section 3.6.
[447] *Id*., Section 3.9.
[448] *Id*., Section 3.10(a).
[449] *See* Electricity Authority, Financial Transmission Rights Development – Issues and Options Paper (2017), Section 3.14(b).
[450] *Id*., Section 3.10(b).
[451] *Id*., Section 3.11 to 3.13 and 3.14(c).

E. NEW YORK

After the overhaul of the Nordic power industry in 1990, the United States soon followed when its Congress passed the Energy Policy Act ("**EPAct**") of 1992. It provided the legal framework intended to spur production of domestic energy sources and by providing for measures to increase the power producers in the US with a view to increased market competition.[452]

Within the state though, New York was experiencing record electricity prices. New York consumers bought electricity at rates that were among the highest in the country. This was in part due to the fact that during this time, the electricity market was dominated by influential vertically-integrated utilities. These utilities owned and operated the power plants, transmission facilities and distribution systems, providing "bundled" service to consumers.[453]

Even with the passage of the EPAct of 1992, prices remained high as the market leaders reportedly stifled competition by not allowing new entrants to use their grid. They supposedly allowed excess grid capacity to go unused resulting to inefficiencies and high prices. By 1996, the Federal Energy Regulatory Commission ("**FERC**") issued a final rule regarding the restructuring of the electric industry.[454] This was embodied in FERC Order No. 888 ("**Order 888**"), referred to as the "open access" rule, which required transmission owners to offer nondiscriminatory, comparable transmission service to all eligible customers.[455] Order 888 further ensured that all potential generating companies will have equal access to the market and encouraged the creation of a separate exchange for a new competitive market.[456]

1. PHYSICAL MARKET

The issuance of Order 888 also encouraged transmission-owning utilities to form Independent System Operators ("**ISOs**") governed by independent boards of directors that would operate the transmission grid independently from the owners of these vertically-integrated utilities.[457] This was created as a response to the failing model of the New York Power Pool ("**NYPP**"),[458] which was being operated by the

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[452] Richard Hirsh, A New Era for Electricity, http://americanhistory.si.edu/powering/past/history6.htm (last accessed May 9, 2017).

[453] Susan Tierney, The New York Independent System Operator: A Ten Year Review (2010), http://www.nyiso.com/public/webdocs/markets_operations/committees/mc/meeting_materials/2010-04-21/Tierney_-_Analysis_Group_-_NYISO_10-Year_Review_-_4-12-2010_FINAL.pdf (last accessed May 9, 2017).

[454] Federal Energy Regulatory Commission, History of FERC, https://www.ferc.gov/students/ferc/history.asp (last accessed May 9, 2017) ("**History of FERC**").

[455] *Id*.

[456] *Id*.

[457] Long Island Power Authority, Electric Market Seams: Barriers to Competitive Trade Between Northeastern Regional Electric Markets (2007), https://www.ferc.gov/CalendarFiles/20070328154023-LIPA%20Overview%20o%20f%20Northeast%20Seams.pdf (last accessed May 9, 2017).

[458] The New York Power Pool was a voluntary wholesale power coordinating institution established by New York's electric utilities as a response to the massive Northeast electrical blackout of 1965. It was a centralized electric reliability coordination organization that was responsible for managing the

private investor-owned utilities themselves. It could not operate efficiently because the investor-owned utilities were said to be protecting their own interests instead of having market efficiency and reliability in mind. The need for ISOs was intended to ensure an efficient and secure operation of the grid by a neutral entity. This marked the beginning of the physical market of New York as known today.

In 1997, pursuant to Order 888, the members of the NYPP filed with the FERC a proposal to establish an independent grid operator. Among other things, it was proposed that the NYPP would be dissolved and be replaced by a new, independent institution called the New York Independent System Operator ("**NYISO**"). It was also proposed that the functions of the NYPP (reliability and generation-dispatch functions) would be transferred to the NYISO. It was further proposed that the NYISO would have a new structure of governance which would have an independent board of directors independent of any market participant in New York's power market.[459]

The FERC approved the proposal establishing the NYISO in a series of orders throughout 1998 and 1999. On December 1, 1999, NYISO went online, officially taking over NYPP. The NYISO's mission was to, "ensure the reliability of the New York State power system; operate New York's transmission system and wholesale electricity markets in order to facilitate open, fair and effective competitive markets; improve regional cooperation for operations and planning; and meet or exceed customer expectations in all areas."[460]

The NYISO is responsible for operating the wholesale power markets that trade electricity, capacity, transmission congestion contract, and related products, and is also responsible for administering auctions for the sale of capacity.[461]

More specifically, NYISO operates both the day-ahead market and the real-time market for the wholesale electricity market. In the day-ahead market, market participants may secure prices for their electricity needs one day before the operating

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electricity grid. Apart from the many functions that the NYPP performed (*i.e.* dispatching generating units according to schedules provided by the utilities, balancing electric system supply and demand in real time, maintaining voltage, and managing operating reserves and monitoring contingencies that require rapid response to assure system reliability) it also facilitated an automatic wholesale power market between the utilities that were members of the pool. However, the NYPP was merely a voluntary organization and various factors combined to eventually render the model of the NYPP obsolete. But it was the precursor of the NYISO.
See Letter *from* Frank Bifera, Acting General Counsel, New York State Department of Environmental Conservation *to* Peter Bergen, Esq., LeBoeuf, Lamb, Greene & MacRae (1995), http://www.dec.ny.gov/docs/legal_protection_pdf/19_09.pdf (last accessed May 9, 2017).

[459] Susan Tierney, The New York Independent System Operator: A Ten Year Review (2010), http://www.nyiso.com/public/webdocs/markets_operations/committees/mc/meeting_materials/2010-04-21/Tierney_-_Analysis_Group_-_NYISO_10-Year_Review_-_4-12-2010_FINAL.pdf (last accessed May 9, 2017).

[460] New York Independent System Operator, Inc., Annual Report of the New York Independent System Operator, Inc. (2000), http://www.nyiso.com/public/webdocs/media_room/publications_presentations/Annual_Reports/Annual_Reports/annual2000_final.pdf (last accessed May 9, 2017).

[461] Federal Energy Regulatory Commission, Energy Primer: A Handbook of Energy Market Basics (2015), https://www.ferc.gov/market-oversight/guide/energy-primer.pdf (last accessed May 9, 2017).

day and mitigate the price volatility that occur in real-time. For the day-ahead market, the NYISO receives supply offers and demand bids for energy. An regional transmission organization then constructs supply and demand curves and the intersection of these curves identifies the market-clearing price. The scheduled suppliers must produce the committed quantity during real-time or buy power from the real-time marketplace to replace what they have committed but did not produce.[462]

In the real-time market, the NYISO balances system supply and demand every five minutes. While the day-ahead market produces the schedule and financial terms of energy production and use for the operating day, a number of factors can change that schedule, thus the NYISO operates the spot market for energy to meet the energy needs within each hour of the day.[463]

The market participants in the NYISO include generators, transmission owners, financial institutions, traditional local utilities, electric co-ops, and industrials.[464] Nevertheless, before one can trade in the NYISO, one must first secure an application and the approval of the NYISO.

2. FINANCIAL MARKET

The New York Mercantile Exchange ("**NYMEX**") first traded electricity futures at about the same time the NYPP was undergoing an overhaul. The first two futures contracts were traded in March 29, 1996.[465] These contracts had a contract size of 736 MWh per month at a rate of 2 MW per hour for 16 peak hours on 23 peak delivery days. The two contracts were substantially the same and the only difference is that one requires delivery at the California-Oregon Border and the other requires delivery at the Palo Verde switchyard.[466] These contracts were settled only by physical delivery.[467]

In 1998, the first Eastern electricity futures were launched, the Cinergy and Entergy, which were both settled only by physical delivery as well. NYMEX launched its first financially settled electricity futures complex only in 2003. These futures contracts were the first NYMEX futures contracts with ISO price settlement.[468] There was continued growth of the futures trading in the NYMEX such that by 2011, open interest reached 1 billion MWh, and the volume reached over 2 billion MWh.[469] It is being operated by the Chicago Mercantile Exchange ("**CME**") Group which also

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[462] History of FERC.
[463] *Id*.
[464] *Id*.
[465] In the Matter of: Anthony Diplacido, et. al., CFTC Docket No. 01-23 (Sept. 12, 2002), http://www.cftc.gov/files/enf/02orders/enfavista-kristufek-order.pdf (last accessed May 9, 2017).
[466] Steven Stoft et. al., Primer on Electricity Futures and Other Derivatives (1998).
[467] Bradford Leach, The Evolution of the CME Group Electricity Complex (2012), https://www.hks.harvard.edu/hepg/Papers/2012/Leach_Brad.pdf (last accessed May 9, 2017).
[468] *Id*.
[469] *Id*.

operates three other exchanges, the CME, Chicago Board of Trade, and Commodity Exchange, Inc.[470]

Today, most energy futures are still traded on the NYMEX and the NYMEX offers both futures and options with varying contract sizes.[471] The futures that are traded in the NYMEX are 1 MW futures, calendar-day futures, calendar-month futures, calendar-day day-ahead LMP futures, calendar-day real-time LMP futures, calendar-month day-ahead LMP futures, and calendar-month real-time LMP futures.

As a designated contract market for energy futures and options, NYMEX, its members, and their customers are subject the regulation of the Commodity Futures Trading Commission ("**CFTC**").[472] CFTC's primary mission includes preserving the integrity of these futures markets and protecting market users and the public from fraud, manipulation, and abusive practices related to the sale of commodity futures and options.[473] This is achieved through a regulatory scheme based on federal oversight of industry self-regulation.[474]

Even though it is under the regulation of the CFTC, the NYMEX is set up as a SRO that imposes upon its members a comprehensive scheme of rules. It is owned by its members and governed by an elected board of governors. Rules adopted by the board and approved by the CFTC are interpreted and enforced by various standing committees assisted by a professional staff. It is the NYMEX rules which regulate membership, financial standards, contract terms, and trading practices. NYMEX, as an SRO, is responsible for establishing and enforcing rules governing member conduct and trading; providing for the prevention of market manipulation, including monitoring trading activity; ensuring that futures industry professionals meet qualifications; and examining exchange members for financial soundness and other regulatory purposes. The CFTC's role is to oversee SROs and to ensure that each has an effective self-regulatory program.[475]

NYMEX is not an exclusive exchange but is in fact an integrated exchange. This means that it is also a clearing association, and its rules also govern clearing and settlement of trades.[476]

3. REGULATORY AUTHORITY

It appears that the physical market is primarily under the jurisdiction of the FERC while the financial market is under the jurisdiction of the CFTC. However, recent legislation has resulted in overlaps in the jurisdiction of both agencies such that both

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[470] *Id*.
[471] *See* CME Group, CME Group All Products – Codes and Slate, http://www.cmegroup.com/trading/products/#pageNumber=1&sortAsc=true&sortField=cleared&page=1&subGroup=11&exch=NYMEX (last accessed May 9, 2017).
[472] John Treat, Energy Futures: Trading Opportunities 338 (3rd ed. 2000).
[473] *Id*. at 15.
[474] *Id*.
[475] Jason Burns, The Commodity Futures Trading Commission 16 (2008).
[476] John Treat, *supra* note 472, at 338.

the physical market and the financial market are subject of considerable regulation by both agencies.[477]

According to the Commodity Exchange Act ("**CEA**"), the CFTC has exclusive jurisdiction over "accounts, agreements (including options) and transactions involving swaps or contracts of sale of a commodity for future delivery," and to be legal in the United States, these futures contracts must be traded on a commodity exchange that has been designated as a contract market by the CFTC.[478]

On the other hand, the FERC is an independent regulatory agency within the Department of Energy, which has jurisdiction over the "transmission of electric energy in interstate commerce," and over the "sale of electric energy at wholesale in interstate commerce," and "all facilities for such transmission or sale of electric energy."[479] Furthermore, FERC exercises jurisdiction over corporate activities and transactions by public utilities, accounting by public utilities and reliability of the energy market.[480]

However, with the subsequent amendment of the CEA by the Dodd-Frank Act, it is now unclear whether CFTC's jurisdiction over all electricity options is exclusive.

Section 2(a)(1)(i) of the CEA states that:

> Nothing in this Act shall limit or affect any statutory authority of the [FERC] or a State regulatory authority ... with respect to an agreement ... that is entered into pursuant to a tariff or rate schedule approved by the [FERC] or a State regulatory authority and is—
>
> (I) not executed, traded, or cleared on a registered entity or trading facility; or
>
> (II) executed, traded, or cleared on a registered entity or trading facility owned or operated by a regional transmission organization or independent system operator.

This provision appears to preserve the FERC's jurisdiction over wholesale electricity sales. It does not, however, limit the CFTC's jurisdiction over the same transactions. The very next clause, Section 2(a)(1)(ii), states that:

> In addition to the authority of the [FERC] or a State regulatory authority described in clause (i), nothing in this subparagraph shall limit or affect—

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[477] Terence Healy, et. al., Energy Commodities: The Netherworld Between FERC and CFTC Jurisdiction (2013), http://www.mondaq.com/unitedstates/x/236906/Energy+Law/Energy+Commodities+The+Netherworld+Between+FERC+And+CFTC+Jurisdiction (last accessed May 9, 2017).
[478] *Id*.
[479] Federal Power Act 201, 206, 206 (16 USC 824).
[480] Lawrence Greenfield, An Overview of the Federal Energy Regulatory Commission and Federal Regulation of Public Utilities in the United States (2010), https://www.ferc.gov/about/ferc-does/ferc101.pdf (last accessed May 9, 2017).

> (I) any statutory authority of the [CFTC] with respect to an agreement . . . described in clause (i); or
>
> (II) the jurisdiction of the Commission under subparagraph (A) with respect to an agreement . . . that is executed, traded, or cleared on a registered entity or trading facility that is not owned or operated by a regional transmission organization or independent system operator.

When these two provisions are taken together, it seems that the US Congress did not limit either agency's authority over what it already regulated, but also did not appear to expand either agency's pre-existing authority. Instead, these provisions appear to contemplate that there may be some transactions over which both agencies have jurisdiction, thus resulting in overlaps in the jurisdiction of both the physical market and financial market.[481]

F. SINGAPORE

Like many countries, the electricity industry in Singapore used to be vertically integrated and government-owned. It meant that the generation, transmission and distribution of electricity were all under the control and supervision of the government. Nevertheless, in 1995, with a resolve to reform the energy market, Singapore decided to unbundle these vertically integrated assets and facilitate commercialization with a view to subsequent privatization. This led to the creation of Singapore Power which acted as a holding company for the new companies such as generation companies, the transmission company and the electricity supply and utilities support services company.[482]

1. PHYSICAL MARKET

The next step toward the reform was made in 1998 when the Singapore Electricity Pool commenced operation. The Pool, as it was called, was a day-ahead market where it was administered and operated by PowerGrid, the owner of the electricity grid network. This was the precursor of the National Electricity Market of Singapore ("**NEMS**"), the spot market of Singapore today. Although the Pool already resembled the modern spot market, at that time, all the competing companies were almost exclusively government-owned. This kind of set-up allowed Singapore to the have the benefits of a modern market without having the full complications of a real-time spot market.[483]

With the establishment of the Pool, Singapore took the next step in 2001, which involved further deregulation of the industry. The deregulation began with the enactment of the Electricity Act of Singapore (the "**Electricity Act**") and the Energy Market Authority of Singapore Act of 2001 (the "**EMA Act**"), which are the

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[481] Terence Healy, et. al., *supra* note 477.
[482] Energy Market Authority, Introduction to the National Electricity Market of Singapore (2010), https://www.ema.gov.sg/cmsmedia/Handbook/NEMS_111010.pdf (last accessed May 9, 2017).
[483] *Id*.

cornerstones of the modern electricity market in Singapore. The Electricity Act laid down the framework of the electricity industry in Singapore, while the EMA Act created the Energy Market Authority ("**EMA**") which is the body corporate responsible for regulating the electricity and gas industries.[484]

In 2003, the NEMS was established under the authority and is governed by the provisions of the Electricity Act. It is administered by the Energy Market Company ("**EMC**"), a joint venture of the EMA and M-co Pte Ltd, a private company engaged in the distribution of electricity. It is composed of two markets, a wholesale market, where buyers and sellers trade energy through the EMC and a retail market, where contestable consumers can directly buy their electricity. Previously, only consumers with a maximum power requirement of 2MW or above are given the authority to participate in the retail market. However, this has been lowered, allowing consumers with a power requirement of at least 10,000 kWh to participate in the retail market.

2. FINANCIAL MARKET

The next step made by Singapore was in October 2014 when its electricity futures were listed in the Singapore Exchange ("**SGX**"). Trading began in June 2015. This was launched in partnership with the EMA, the regulator for the energy industry. SGX has since then become the exchange for the trading of electricity futures.[485]

Since the market is relatively new, the only products that SGX offers in relation to electricity are the quarterly base load electricity futures and the monthly base load electricity futures. These can all be traded by the energy industry player, such as generators, retailers, and the large users. But the market is not limited to energy industry players. Due to the limited liquidity that would result if the market is limited, the market was opened to non-market players as well such as banks, commodity funds, and hedge funds.[486]

Under the Securities and Futures Act of Singapore, the Monetary Authority of Singapore has jurisdiction over electricity derivatives being traded in the SGX.[487]

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[484] *Id*.

[485] Singapore Exchange, SGX Powers up Asia First Electricity Futures Market *(Press release)* (2013), http://www.sgx.com/wps/wcm/connect/sgx_en/home/higlights/news_releases/SGX+powers+up+Asia+first+electricity+futures+market (last accessed May 9, 2017).

[486] Andrew Koscharsky, Trading Singapore Electricity Futures, http://first.bloomberglp.com/regional/sg/semr812883/4_TradingSingaporeElectricityFutures_AndrewKoscharsky.pdf (last accessed May 9, 2017).

[487] Securities and Futures Act, Act 42 of 2001, Section 342 (2001) (Singapore).

CHAPTER IV
LEGAL FRAMEWORK FOR AN EDM IN THE PHILIPPINES

A. LEGAL BASIS FOR AN EDM IN THE PHILIPPINES

There is currently no law that specifically authorizes the establishment of an EDM. Laws governing the electric industry and derivatives are silent on this point.

1. EPIRA

The EPIRA is the governing law of the electric power industry in the Philippines. As mentioned,[488] the EPIRA lays out the structure and regulatory framework for the industry. It divided the industry into four sectors, directed the privatization of generation and transmission functions of the government, created the ERC,[489] and allocated powers among the DOE,[490] ERC and NIA[491], and expressly mandated the creation of the WESM[492] - the physical market for the sale and exchange of electricity.

The EPIRA does not provide for a similar mandate for the creation of an EDM. It makes mention of the word "market" eighty-nine (89) times. Out of these, it specifically refers to the WESM thirty-three (33) times; it does not refer specifically to an EDM. The EPIRA, however, in fourteen (14) instances, used the word "market" in a general sense such that it could possibly refer to any kind of market (including perhaps an EDM) as set out below:

Section	Provision
2(j)	(j) To establish a strong and purely independent regulatory body and system to ensure consumer protection and enhance the competitive operation of the electricity MARKET
6	The ERC shall, in determining the existence of MARKET power abuse or anti-competitive behavior, require from generation companies the submission of their financial statements
29	Electricity suppliers shall be subject to the rules and regulations concerning abuse of MARKET power, cartelization, and other anti-competitive or discriminatory behavior to be promulgated by the ERC
43	Functions of the ERC. - The ERC shall promote competition, encourage MARKET development, ensure customer choice and penalize abuse of MARKET power in the restructured electricity industry. In appropriate cases, the ERC is authorized to issue cease and desist order after due notice and hearing. Towards this end, it shall be responsible for the following key functions in the restructured industry

[488] *See* Chapter I, C of this Report.
[489] *See* Electric Power Industry Reform Act, Chapter IV, Section 38.
[490] *Id*., Chapter III, Section 37(f).
[491] *Id*., Chapter VII, Section 58.
[492] *Id*., Chapter II, Section 30.

Section	Provision
43(k)	(k) Monitor and take remedial measures to penalize abuse of MARKET power, cartelization, and anti-competitive or discriminatory behavior by any electric power industry participant
43(o)	(o) Monitor the activities of the generation and supply of the electric power industry with the end in view of promoting free MARKET competition and ensuring that the allocation or pass through of bulk purchase cost by distributors is transparent, non-discriminatory and that any existing subsidies shall be divided pro-rata among all retail suppliers
43(r)	(r) In the exercise of its investigative and quasi-judicial powers, act against any participant or player in the energy sector for violations of any law, rule and regulation governing the same, including the rules on cross-ownership, anti-competitive practices, abuse of MARKET positions and similar or related acts by any participant in the energy sector or by any person, as may be provided by law, and require any person or entity to submit any report or data relative to any investigation or hearing pursuant with this Act
43(s)	(s) Inspect, on its own or through duly authorized representatives, the premises, books of accounts and records of any person or entity at any time, in the exercise of its quasi-judicial power for purposes of determining the existence of any anti-competitive behavior and/or MARKET power abuse and any violation of rules and regulations issued by the ERC
45	Cross Ownership, MARKET Power Abuse And Anti-Competitive Behavior. - No participant in the electricity industry may engage in any anti-competitive behavior including, but not limited to, cross-subsidization, price or MARKET manipulation, or other unfair trade practices detrimental to the encouragement and protection of contestable MARKETs
45	To promote true MARKET competition and prevent harmful monopoly and MARKET power abuse, the ERC shall enforce the following safeguards
45	The ERC shall, within one (1) year from the effectivity of this Act, promulgate rules and regulations to ensure and promote competition, encourage MARKET development and customer choice and discourage/penalize abuse of MARKET power, cartelization and any anti-competitive or discriminatory behavior, in order to further the intent of this Act and protect the public interest. Such rules and regulations shall define the following
45	(a) the relevant MARKETs for purposes of establishing abuse or misuse of monopoly or MARKET position

Section	Provision
45	The ERC shall, *motu proprio*, monitor and penalize any MARKET power abuse or anti-competitive or discriminatory act or behavior by any participant in the electric power industry

Congress, however, in crafting the EPIRA, discussed the possibility of the establishment of an EDM at a future time to complement the WESM. The minutes of the meeting of the bicameral conference committee on the EPIRA state:

> MR. PACUDAN: They normally have a **pool in the power exchange**. They normally submit their available capacity for the following day and the cost of generation in that case. And then this independent system operator will try to schedule the dispatch. It's a numeric order in this case. The lowest cost will be dispatched first up to the highest according to the level of demand. And then the independent system operation will manage the dispatch of electricity in this case. And then you have **financial market here** where traders, brokers and other players in the industry could **hedge actually their contracts with generating company** in this case.
>
> Mr. PACUDAN: The people could **hedge the price** of electricity or could protect their investments or their commitments by hedging the price or fixing the price of electricity for **specific period of time** in that case.[493]
>
> ***
>
> REP. LEDESMA: The "wholesale electricity spot market" is a financial tool that will be used to, in effect, settle the financial disputes or to provide a **hedging mechanism** for the players in the industry **who have, in fact, physical contracts**. And so, it is in effect a **financial tool** by the market and as well as a tool to dispatch power should a situation arise wherein there is an excess of supply and it will be the system operator, whether integrated or not, that in fact will dispatch the power, Your Honor. So, it's a **financial tool**, primarily.[494]
>
> ***
>
> CHAIRMAN LEDESMA: We felt that in time the pool will in fact be used as a **hedging mechanism** and that most of the **contracts going through the pool** or using the pool as the basis, will be really covered under contracts or the contracts where differences or CFDs – these are vest (sic) in contracts. These are financial instruments that remove volatility.
>
> CHAIRMAN LEDESMA: The vast majority of that (referring to actual trades within the pool) will be a **derivative financial instruments** (sic) that will be used as **hedging instruments** by the various players in the industry.[495]

[493] *See* House Committee deliberations for the Electric Power Industry Reform Act of 2001 dated March 12, 1999 where Mr. Pacudan, an assistant professor at the Asian Institute of Technology, a resource speaker, talked about basic principles on electric supply industry and some concepts in regulations and the possible options for the Philippines, pp. 46 to 47; *emphasis and underscoring supplied.*

[494] *See also* House Committee deliberations for the Electric Power Industry Reform Act of 2001 dated April 12, 2000, pp. 366 to 367; *emphasis and underscoring supplied.*

[495] *See also* Bicameral Conference Committee deliberations for the Electric Power Industry Reform Act of 2001 dated January 3, 2001, pp. 30 to 32; *emphasis and underscoring supplied.*

While Congress entertained the idea of setting up a financial market to complement the WESM, Congress did not carry over this idea in the EPIRA explicitly. The EPIRA is silent on the EDM.

That said, the Competition Rules and Complaint Procedures ("**ERC Competition Rules**") issued by the ERC pursuant to its mandate to promulgate rules on anti-competitive behavior and abuse of market power,[496] recognizes the possibility of an EDM being established.

The ERC Competition Rules define "market" as "a market in the Philippines in which electricity or other goods or services that are directly or indirectly related to or used in connection with the generation, transmission, distribution or sale of electricity are, or may be, supplied or acquired."[497] In turn, the ERC Competition Rules define "services" as including "any rights, benefits or privileges (whether provided, granted or conferred under a contract or otherwise) and includes: *(a)* rights conferred under derivatives, futures contracts, hedge contracts or other financial instruments."[498] Thus, when the ERC Competition Rules speaks of "market," it expressly includes an EDM. This indicates that the ERC, in promulgating these rules, is at the very least, aware and perhaps anticipating that an EDM may one day be created, over which it claims jurisdiction on competition law concerns.

The EPIRA's silence on an EDM by itself does not, in our view, necessarily mean that no EDM can be established. Neither the EPIRA nor the ERC Competition Rules prohibits the establishment of an EDM. In other words, while the EPIRA does not provide express legal basis for the establishment of an EDM, it likewise does not provide legal basis for its proscription. It is a rule of statutory construction that what is not expressly or impliedly prohibited by law may be done, except when the act is contrary to morals, customs and public order.[499]

2. SRC

As discussed in Chapter II, the SRC is the primary legislation that governs the regulation of capital markets in the Philippines. The law regulates the sale, transfer, and trading of securities, including derivatives, as well as commodity futures contracts. Specifically, the SRC provides rules on the registration of securities,[500] qualifications of who may trade in securities,[501] and the like.

The SRC, similar to the EPIRA, does not specifically authorize the establishment of an EDM. It does, however, provide for rules governing the registration of

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[496] ERC, Competition Rules and Complaint Procedures, Rule 1 (2006).
[497] *Id*., Rule 3, Section 1; *underscoring supplied*.
[498] *Id.*
[499] *See Manila Electric Company v. Public Service Commission,* G.R. No. 42317, September 21, 1934.
[500] Securities Regulation Code, Section 8.
[501] *Id*., Section 28.

securities,[502] such as derivatives, that may be sold to the public, the qualifications of who may trade in these derivatives,[503] as well as the requisites for establishing organized markets where such derivatives may be traded.[504] Moreover, the SRC authorizes the promulgation of rules on commodity futures contracts (albeit none is effective to date).

These rules could provide a general framework for setting up an EDM for certain derivatives under existing statutes and regulations. For instance, the establishment of an actual organized market for electricity derivatives may follow the SRC provisions on setting up ATS and OTC markets. The derivatives traded in this market may follow the registration requirements under the SRC. The persons allowed to trade in this market may also have to meet the qualification requirements of SRC.

The SRC, like the EPIRA, is likewise silent on the establishment of an EDM, but at the same time, it also does not specifically prohibit the establishment thereof. However, as discussed further below, there are certain legal challenges in the establishment of an EDM including the SRC's proscription against trading of commodity futures except in accordance with the rules promulgated by the SEC, and as discussed above, no such rules are currently in effect. As a result, trading of commodity futures (including some electricity futures) are effectively prohibited at the moment.

B. LEGAL CHALLENGES

Under Article 1306 of the Civil Code, parties are free to establish such stipulations, clauses, terms and conditions as they may deem convenient, provided that they are not contrary to law, morals, good customs, public order, or public policy. However, certain derivative transactions (*e.g.,* forwards, futures, and contracts for difference) may, in certain circumstances, be of doubtful validity. Article 2018 of the Civil Code, the Supreme Court ruling in *Onapal Philippines Commodities, Inc. v. Court of Appeals*[505] (the "**Onapal Case**"), and the current absence of the rules on commodity futures contracts present challenges to the legality of entering into these derivatives and trading them in an organized market.

1. ARTICLE 2018 OF THE CIVIL CODE

As discussed in Chapter II, derivatives are financial instruments that primarily derive their value from the performance of an underlying variable or asset. Their elements may be broken down as follows: *(a)* it is a financial instrument (*i.e.*, a contract); *(b)* the value of the financial instrument changes in response to or is dependent on changes in a specified interest rate, security price, commodity price, FX rate, index of prices or rates, credit rating or credit index, or other variables; and *(c)* it is settled at a future date. Derivatives include forwards, futures, options, and contracts for difference.

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[502] *Id*., Section 8.
[503] *Id*., Section 28.
[504] *Id*., Section 33.
[505] G.R. No. 90707, February 1, 1993.

Some of these derivatives may be considered aleatory contracts.[506] The Civil Code defines aleatory contracts as follows:

> Article 2010. By an aleatory contract, one of the parties or both reciprocally bind themselves to give or to do something in consideration of what the other shall give or do upon the happening of an event which is uncertain, or which is to occur at an indeterminate time.

Thus, in aleatory contracts, while the parties are already bound by a contract, their respective obligations therein to give or do something arises only upon the happening of an uncertain event. Futures, options, and contracts for difference could qualify as aleatory contracts if the obligation to pay/deliver due under them depends on some unknown future contingency,[507] such as the future value of some asset or set of assets.[508] Forwards would not qualify as aleatory contracts. For purposes of this memorandum, our understanding of these contracts are as follows:

(a) Futures. The obligation to give in futures depends on the market value of the underlying asset at a future time.

For example, X enters into a future contract with Y for the purchase of 100 MW electricity in six months at an agreed rate, for example ₱10.00/kWh. If electricity prices in the WESM in six months is at ₱12.00/kWh, which is above the agreed fixed rate, Y has the obligation to either deliver the electricity or pay X the difference between the WESM prices and the agreed fixed rate (in this case, ₱2.00/kWh). Conversely, if electricity prices in the WESM in six months is at ₱7.00/kWh, which is below the agreed fixed rate, X has the obligation to either accept delivery of electricity or pay Y the difference between the WESM prices and the agreed fixed rate, which is ₱3.00/kWh.

(b) Options. The obligation to pay/deliver under an option contract depends on the exercise of the option, which in turn would depend on the option holder's assessment of the market price of the underlying asset.

For example, X enters into an option contract with Y for the right (but not the obligation) to purchase 100 MW electricity at fixed agreed rate of ₱15.00/kWh in six months in exchange for the payment of a premium or the option price. If electricity prices in the WESM in six months is, say, ₱20.00/kWh or more

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[506] Black's Law Dictionary defines "aleatory contracts" as a "contract in which at least one party's performance depends on some uncertain event that is beyond the control of the parties involved." (Black's Law Dictionary 342 (8th ed. 2007).). In this regard, the word "aleatory" is derived from the Latin word "aleator," which means "gambler," which comes from "alea," a dice used in gaming. (*See* Black's Law Dictionary 78 (8th ed. 2007).).

[507] *See* Timothy E. Lynch, Derivatives: A Twenty-First Century Understanding, 43 LOYOLA UNIVERSITY CHICAGO LAW JOURNAL 1, 16 (2011), http://www.luc.edu/media/lucedu/law/students/publications/llj/pdfs/lynch_derivatives.pdf (last accessed May 9, 2017).

[508] Other unknown future contingencies may also include: *(a)* the outcome of an event or events, *(b)* some future metric or metrics, or *(c)* some combination of these. (*See* Lynch, *supra* note 507, at 16-17).

than the fixed agreed rate, X may opt to exercise his option to purchase and thereby require Y to deliver electricity at the fixed agreed rate. X may then sell the electricity purchased from Y to the market at the prevalent market price to earn a profit. Conversely, if the electricity prices in the WESM in six months is at ₱12.00/kWh or less than the fixed rate, X may opt not to exercise the option, thereby not require Y to deliver electricity at all.

(c) Contracts for Difference. The obligation to pay in contracts for difference depends on the market value of particular asset.

For example, X and Y enter into a contract for difference. Under their contract, X agreed to pay Y the difference between an agreed rate of ₱15.00/kWh and WESM rates if the WESM rates are greater than the agreed rate, and Y agreed to pay the difference if the WESM rates are less than the agreed rate. Thus, if the WESM rate is greater than the agreed rate, say the WESM rate is ₱18.00/kWh, X shall pay Y the difference of ₱3.00/kWh. Conversely, if the WESM rate is less than the agreed rate, where the WESM rate is ₱11.00/kWh, Y shall pay X the difference of ₱4.00/kWh.

(d) Forwards. Under the 2015 SRC IRR, forwards are contracts for the delivery of a particular commodity that is settled by the actual delivery of the commodity and payment of the pre-determined price on the specified delivery date.[509] Hence, forwards do not appear to be aleatory contracts inasmuch as the obligations to deliver and to pay are fixed in the contract.

For example, X enters into a forward contract with Y for the purchase of 100 MW electricity in six months at an agreed rate, for example ₱10.00/kWh. Regardless of whether the prices in the WESM are above or below the agreed rate, X will have to pay Y the agreed rate, and Y will have to deliver the agreed quantity of electricity. However, if the prices of electricity in the WESM in six months is at ₱12.00/kWh, which is above the agreed fixed rate, X theoretically gained (and Y theoretically lost) ₱2.00/kWh. Conversely, if electricity prices in the WESM in six months is at ₱7.00/kWh, which is below the agreed fixed rate, X theoretically lost (and Y theoretically gained) ₱3.00/kWh.

The Civil Code provides for three types of aleatory contracts: *(a)* insurance,[510] *(b)* gambling,[511] and *(c)* life annuity.[512] An insurance contract pertains to an agreement whereby one undertakes for a consideration to indemnify another against loss, damage or liability arising from an unknown or contingent event.[513] Gambling pertains to games of chance, which depend more on chance or hazard than skill or

[509] *See* Rules and Regulations Implementing the Securities Regulation Code, Rule 11, Sections 11.1.3.
[510] *See* An Act to Ordain and Institute the Civil Code of the Philippines [CIVIL CODE], Republic Act No. 386, Articles 2011 to 2012 (1950).
[511] *Id*., Articles 2013 to 2020.
[512] *Id*., Articles 2021 to 2027.
[513] The Insurance Code, Section 1.

ability.[514] Annuities refer to obligations to pay a stated sum, usually monthly or annually, to a stated recipient and the payments terminate upon the death of the designated beneficiary,[515] while a life annuity is an annuity that is payable only during the annuitant's lifetime, even if the annuitant dies prematurely.[516]

The Civil Code provisions on aleatory contracts declares two types of aleatory contracts as void: *(a)* a life annuity that is constituted upon the life of a dead person under Article 2023, and *(b)* contracts that fall under Article 2018.

In this regard, Article 2018 of the Civil Code states:

> Article 2018. If a contract which purports to be for the delivery of goods, securities or shares of stock is entered into with the intention that the difference between the price stipulated and the exchange or market price at the time of the pretended delivery shall be paid by the loser to the winner, the transaction is null and void. The loser may recover what he has paid.

It is a cardinal rule of statutory construction to ascertain, and give effect to the intent of the law.[517] As a general rule, the intent of the legislature to be ascertained and enforced is the intent expressed in the language of the statue.[518] If a statute is clear, plain, and free from ambiguity, the provisions of the law must be given its literal meaning and applied without attempted interpretation.[519] If however, there is some ambiguity in the language of the law, the intent can be ascertained using extrinsic aids.[520] Resort can made to the legislative context and history of the statute.[521]

Article 2018 indicates that a contract is void when: *(a)* the contract purports to be for the delivery of goods, securities, or shares of stock, *(b)* the parties intended that the difference in the stipulated price and the exchange or market price of the goods, securities, or shares of stock shall be paid by the loser to the winner, and *(c)* there is pretended delivery. Under Article 2018, in case of these void contracts, the loser is allowed to recover what he or she has paid.

In this connection, delivery of the underlying asset appears to be the relevant element. This is because derivatives in EDMs in other jurisdictions are usually settled through payment of the difference between the stipulated price and the market price rather than the actual delivery of the underlying asset.[522] If the same feature would be adopted here, the question would be: "are electricity derivatives settled through cash payment and not actual delivery void under Article 2018?"

There are two views.

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[514] *See* CIVIL CODE, Articles 2013 to 2020.
[515] Black's Law Dictionary 99 (8th ed. 2007).
[516] *Id*.
[517] *See David v. Commission on Elections*, G.R. Nos. 127116 & 128039, April 8, 1997.
[518] *See Regalado v. Yulo,* G.R. No. L-42935, February 15, 1935.
[519] *See Bustamante v. NLRC,* G.R. No. 111651, November 28, 1996.
[520] *See Commissioner of Customs v. Esso Standard Eastern, Inc.*, G.R. No. L-28329, August 7, 1975.
[521] *Id*.
[522] *See* Chapter III of this Report.

A conservative view may treat non-cash futures (*i.e.,* which are settled by cash payment and without actual delivery and contracts for difference) as falling within the prohibition under Article 2018 and may be declared void if the transaction is questioned, especially in light of the Onapal Case, as discussed below. Forwards and options, on the other hand, do not appear to be proscribed under Article 2018.

To explain:

(a) Futures. Non-cash futures settled by cash payment would fall under Article 2018.

First. A non-cash future contract may be considered as purporting to be for the delivery of goods because *(a)* it is a contract to sell a specified quantity of a specified good at a specified price on a specified date in the future, and *(b)* it is a contract for the delivery of the specified good.

Second. If settled by payment, the difference between the stipulated price and the market price would effectively be paid by the loser to the winner. As in the example above, if the market price on a specified future date is above the specified price, the seller has the obligation to either deliver the specified good or pay the buyer the difference in the market price and the specified price.

Third. If settled by cash payment, there would be no actual delivery of the specified good and may be considered as a "pretended delivery."[523]

(b) Contracts for Difference. Contracts for difference on non-cash assets would fall under Article 2018.

First. A contract for difference may be considered as purporting to be for the delivery of goods because *(a)* it is an agreement between the buyer and seller of a commodity to exchange the difference between the current value of an asset and the value of an asset when the contract was initiated,[524] and *(b)* it involves the delivery of the commodity sold by the seller and purchased by the buyer.

Second. A contract for difference is intended to be settled by cash payment where the difference between the agreed price and the market price shall be paid.

Third. A contract for difference is intended to be settled by cash payment and as such, may be considered as a "pretended delivery."

[523] Cash-based forwards and futures, if settled by cash payment, would not involve "pretended delivery". Since the underlying asset is cash, settlement by cash payment is effectively delivery of cash.
[524] Nasdaq, Inc., Contract for Difference, http://www.nasdaq.com/investing/glossary/c/contract-for-difference (last accessed on May 9, 2017).

(c) *Options*. There is basis to argue that options do not fall under Article 2018. Options do not purport to be for the delivery of a specified good. An option is a contract that gives the buyer the right (but not the obligation) to buy or sell a specified asset at a specified price on or before a specified date. The subject of an option contract is the option itself – the right to buy or not buy or the right to sell or not sell an underlying asset.

(d) *Forwards.* Under the 2015 SRC IRR, forwards are characterized as contracts that entail or are settled by actual delivery of the underlying commodity. As such, forwards would not be covered by Article 2018 of the Civil Code because actual delivery would remove the element of "pretended delivery."

It should be clarified that if non-cash forwards/futures would be settled through physical delivery,[525] they would be valid under Article 2018. Actual delivery would remove the elements of "purported delivery" and "pretended delivery" under Article 2018.

Notably, forwards and futures traded in the Philippines in the past involved actual delivery. The commodity futures traded in the MIFE all required physical settlement.[526] Furthermore, the 1980, 1983, and 1999 CFC Rules also contemplated actual delivery. Even derivatives currently traded by banks involve physical delivery. These derivatives are cash-based *(i.e.* the underlying commodity is cash) and it could be said that the cash settlement constitutes physical delivery.

However, a liberal view of Article 2018's application (*i.e.,* if read in context of its legislative context and history) may yield a different interpretation.

First. Article 2018 falls under the chapter of Gambling in the Civil Code. Gambling entails chance or hazard rather than skill or ability. Trading in derivatives, while their value may depend on chance, also involves skill and ability to measure risks, predict market trends, an understanding of industry of the underlying asset. Moreover, gambling or "games" of chance usually do not serve any useful commercial purpose or benefit to the public. Trading in derivatives could serve an economic purpose – *i.e.,* hedging electricity price volatility risks.

Second. Article 2018 traces its roots to Section 764 of the German Civil Code,[527] which has since been ruled by the German High Courts to not contemplate derivatives

[525] This memorandum does not consider the technical feasibility of delivering the electricity subject of the non-cash forwards/futures.
[526] ERIK BANKS, *supra* note 161, at 485-490.
[527] *See* ARTURO M. TOLENTINO, COMMENTARIES AND JURISPRUDENCE ON THE CIVIL CODE OF THE PHILIPPINES Volume V 481 (1992 ed.).

transactions (although Section 764 has since been repealed altogether[528]). Similar to Article 2018, Section 764 of the German Civil Code[529] states:

> If an agreement for the delivery of goods or stocks is made with the intention that the difference between the agreed price and the stock exchange or market price at the date fixed for delivery should be paid by the losing party to the winning party, the agreement is to be deemed a gaming agreement. This consequence shall take place, even if one of the parties only had the intention that the difference should be paid, if the other party knew of such intention or by the application of proper diligence would have known.[530]

In 1923, more than two (2) decades the Civil Code was enacted, the Reichsgericht, then the highest German court for civil matters, held that hedging transactions were beyond the intended scope of Section 764 notwithstanding the fact that these transactions fell within the literal meaning of the provision.[531] The court ruled that hedging is characterized by an underlying transaction and that its purpose was to "secure against the risk of price fluctuations."[532] It further held that applying Section 764 to hedging transactions would be inconsistent with the legislative intent considering that the law was "never designed to bar sensible economic business behavior."[533]

Third. As previously discussed,[534] the Securities Act, the prevailing law on securities at the time Article 2018 of the Civil Code took effect, authorized the sale of speculative securities subject to certain conditions. It is an established rule in statutory construction that a subsequent law treating a subject in general terms (such as the Civil Code), and not expressly contradicting the provisions of a prior special statute (*i.e.*, the Securities Act), is not to be considered as intended to affect the more particular and specific provisions of the earlier law, unless it is absolutely necessary so to construe it in order to give its words any meaning at all. In other words, where there are two laws, one of which is special and particular, and certainly includes the matter in question, and the other general, which, if standing alone, would also include the same matter (and thus conflict with the special act), the special law must be taken as intended to constitute an exception to the general law. Otherwise stated, when the provisions of a general law are repugnant to the provisions of a previously enacted special law, the passage of such general law does not operate to modify or repeal the special law, either wholly or in part, unless such modification or repeal is provided for in express words, or arises by necessary implication.[535] Thus,

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[528] *See* Wolfgang Fikentscher, Philipp Hacker, RupprechtPodszun, FairEconomy: Crises, Culture, Competition and the Role of Law 137 (2013). *See also* Bürgerliches Gesetzbuch(Germany), https://www.gesetze-im-internet.de/englisch_bgb/englisch_bgb.html (last accessed May 9, 2017) (Langenscheidt Translation Service trans. 2015).
[529] *See* TOLENTINO, *supra* note 527.
[530] Ernest J. Schuster, Esq., Time Bargains in Stocks and Produce, 6 J. Soc. Com. Legis. n.s. 121, 123 (1905).
[531] Friedrich E.F. Hey, A New Era of Financial Futures Trading in Germany: Sweeping Changes in Legal and Business Environment, 10 Nw. J. Int'l L. & Bus. 281, 288 (1989-1990).
[532] *Id*.
[533] *Id*.
[534] *See* Chapter II, B(1) of this Report.
[535] *See Garcia v. Pascual*, G.R. No. L-16950, December 22, 1961.

the Securities Act, a special law that governs securities, could be read as having carved out an exception to Article 2018 of the Civil Code, which is a general law.

Based on the foregoing, it appears that Article 2018, when taken in context of its place in the Civil Code as well its provenance, was intended to cover purely speculative and simple gambling transactions – and not sensible economic behavior. Thus, there is basis to argue that Article 2018 does not contemplate derivative transactions that serve a reasonable commercial purpose of managing price risks.

It bears noting, however, that one of the principal purposes of an EDM is to allow participants to hedge against risk and price volatility and to foster price stability in the electricity market. That there are two equally plausible opposite interpretations on the legality of the products to be traded in the EDM could frustrate that purpose. Investors may be discouraged on account of a lingering uncertainty – that is, trading in a market where the legality of the derivatives (*e.g.,* forwards and futures, and contracts for difference) are debatable and could largely be influenced by the composition and interpretative philosophy of our courts (and which principles of statutory construction they believe should be applied) if the validity of these transactions could be questioned by those who suffer losses. It would be most helpful to seek a definitive interpretation through a Congressional amendment, as will be discussed further below.

2. ONAPAL V. COURT OF APPEALS

Supreme Court decisions form part of the law of the land[536] and set precedent in interpreting laws. The Supreme Court applied Article 2018 in only one case thus far – the Onapal Case. The Supreme Court applied Article 2018 in declaring a commodity future contract void and allowing the losing party to recover what she lost thereby.

Onapal was a commission merchant licensed by the SEC to engage in commodity futures trading. Onapal would furnish its customers daily price quotations of various commodities futures contracts sold in exchanges in Hong Kong, Tokyo, and other centers. Under the trading contract, every time a customer enters into a trading transaction with Onapal as broker, the order is sent to Onapal's principal, Frankwell Enterprises of Hong Kong. If the transaction is consummated by Frankwell Enterprises, Onapal issues a "Confirmation of Contract and Balance Sheet." An order from Onapal's customer is supposed to be transmitted from Cebu to Onapal's Manila office. From Manila, the order is forwarded to Hong Kong and then transmitted to the Commodity Futures Exchange in Japan. Under the contract, either the seller or buyer may elect to require delivery of the underlying commodities.

Susan Chua, Onapal's customer, was invited to invest in commodity futures trading by depositing an initial amount of ₱500,000. Onapal's account executives represented to Chua that they would take care of "how to trade business and her account." Chua was made to sign a trading contract and other documents without making her understand the risks involved. Onapal also informed Chua that its

[536] *See* CIVIL CODE, Article 8.

principal was Frankwell Enterprises in Hong Kong. Nevertheless, Onapal kept Chua's money in a separate account in a local bank even though it was supposed to transmit Chua's money to Hong Kong. The commodities were never actually delivered. It was established that the customers merely received the price difference between the price stipulated and the exchange price.

After two months, Onapal informed Chua that she had to deposit an additional ₱300,000 to "pay the difference" in price, or risk losing her original deposit. Not wanting to lose her initial deposit, Chua was constrained to deposit the additional amount. Later, Chua withdrew from the business when "she realized she was involved in gambling." She was able to obtain only ₱470,000 of her total deposit of ₱800,000.

The Supreme Court characterized futures as purely speculative transactions:

> [T]here are nominal contracts to sell for future delivery, but where in fact no delivery is intended or executed. The nominal seller does not have or expect to have a stock of merchandise he purports to sell nor does the nominal buyer expect to receive it or to pay for the price. Instead of that, a percentage or margin is paid, which is increased or diminished as the market rates go up and down, and accounted for to the buyer. This is simple speculation, gambling or wagering on prices within a given time; it is not buying and selling and is illegal as against public policy.[537]

The Supreme Court agreed with the findings of the Court of Appeals that the parties never intended to make or accept delivery of any particular commodity but that they merely speculated on the rise or fall in the market of the contract price of the commodity on the pretended date of delivery. Although the trading contract provided for actual delivery of the commodity, the Court took note of the following facts which showed that there was no intent to deliver: *(a)* the unrebutted testimony of a certain Mr. Go that all of Onapal's customers were mere speculators who merely forecast the rise or fall in the market of the commodity, *(b)* Onapal discourages its customers from taking or accepting delivery of any commodity by making it hard, if not impossible, for them to make or accept delivery of any commodity,[538] *(c)* there was no evidence that Onapal transmitted the orders and money to its principal Frankwell Enterprises, *(d)* there was no evidence that the orders were forwarded to the Commodity Futures Exchange in Japan, and *(e)* Onapal did not make arrangements with the Central Bank for purposes of remitting its customers' money abroad.

The Supreme Court also noted that while the trading contract bears all the indicia of a valid trading contract, the transaction which was carried out to implement the written contract deviated from the true import of the agreement:

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[537] *See Onapal Philippines Commodities, Inc. v. Court of Appeals*, G.R. No. 90707, February 1, 1993.

[538] This was evident from Onapal's rules for commodity trading which states that the customer shall apply for the necessary licenses and documents with the proper government agency for the importation and exportation of any particular commodity. (*See Onapal Philippines Commodities, Inc. v. Court of Appeals*, G.R. No. 90707, February 1, 1993.).

> As a contract in printed form, prepared by petitioner and served on private respondent, for the latter's signature, the trading contract bears all the indicia of a valid trading contract because it complies with the Rules and Regulations on Commodity Futures Trading as prescribed by the SEC. But when the transaction which was carried out to implement the written contract deviates from the true import of the agreement as when no such delivery, actual or constructive, of the commodity or goods is made, and final settlement is made by payment and receipt of only the difference in prices at the time of delivery from that prevailing at the time the sale is made, the dealings in futures become mere speculative contracts in which the parties merely gamble on the rise or fall in prices. **A contract for the sale or purchase of goods/commodity to be delivered at future time, if entered into without the intention of having any goods/commodity pass from one party to another, but with an understanding that at the appointed time, the purchase is merely to receive or pay the difference between the contract and the market prices, is a transaction which the law will not sanction, for being illegal.**
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> ***
>
> After considering all the evidence in this case, it appears that petitioner and private respondent did not intend, in the deals of purchasing and selling for future delivery, the actual or constructive delivery of the goods/commodity, despite the payment of the full price therefor. The contract between them falls under the definition of what is called "futures". **The payments made under said contract were payments of difference in prices arising out of the rise or fall in the market price above or below the contract price thus making it purely gambling and declared null and void by law**.[539]

Thus, the Court nullified the trading contract and required Onapal to refund Chua what she has lost by reason of the trading contract:

> **Under Article 2018, the private respondent is entitled to refund from the petitioner what she paid**. There is no evidence that the orders of private respondent were actually transmitted to the petitioner's principal in Hongkong and Tokyo. There was no arrangement made by petitioner with the Central Bank for the purpose of remitting the money of its customers abroad. The money which was supposed to be remitted to Frankwell Enterprises of Hongkong was kept by petitioner in a separate account in a local bank. Having received the money and orders of private respondent under the trading contract, petitioner has the burden of proving that said orders and money of private respondent had been transmitted. But petitioner failed to prove this point.[540]

In the Onapal Case, the Supreme Court classified commodity futures contracts (*i.e.* future contracts where the underlying asset is a commodity/good) which were settled through cash payment and without actual delivery as contracts covered under Article 2018, and declared them void.

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[539] *Onapal Philippines Commodities, Inc. v. Court of Appeals*, G.R. No. 90707, February 1, 1993; *emphasis and underscoring supplied*.
[540] *Id.; emphasis and underscoring supplied.*

However, as with Article 2018, distinctions can be made between the situation in the Onapal Case and the contemplated EDM. For example, arguments can be raised that the Onapal Case *(a)* should not be indiscriminately applied to all commodity futures without considering the differences in the factual situations, *(b)* should be reexamined considering that the legal sources used by the Court have since been modified, and *(c)* should give way to the SRC as the later and more specific law, which recognizes the validity of derivatives and commodity futures (subject to the issuance of SEC rules).

First. Supreme Court decisions should be read in context of the specific factual milieu obtaining in the case.[541] In this regard, the Onapal Case involved:

(a) commodity futures that were never proven to have been actually traded in an exchange;

(b) commodity futures that were supposedly traded abroad and likely not registered with the SEC, as required under RSA which was then effective;

(c) a purported exchange abroad which was likely not licensed and regulated by the SEC, as required under the RSA;

(d) a clearinghouse abroad which was likely not licensed and regulated by the SEC, as required under the RSA; and

(e) an uninformed and unsophisticated investor, who was "made to sign the trading contract and other documents without [being made] aware/[to] understand the risks involved," and who "was not made to understand what the business was all about," unlike the sophisticated investors allowed to trade derivatives under BSP regulations.

These facts – especially the lack of government scrutiny and the lack of sophistication and business acumen of the investor – do not persuade towards upholding the validity of the commodity futures involved. It is possible that the courts would be less inclined to nullify a contract if there is greater government regulation, as required by law, and if the claimant is a sophisticated investor.

Second. The Supreme Court, in arriving at its ruling in the Onapal Case, relied on U.S. cases, which in turn, were based on laws that have since been modified. These cases, promulgated between the late 1800s and early 1900s, involved state laws similar to Article 2018, prohibiting speculative contracts with pretended delivery. The current state laws however, provide for an exception, and now allow commodity futures contracts traded in government-regulated markets. In particular:

[541] *See Riviera Filipina, Inc. v. Court of Appeals, et al.,* G.R. No. 117355, April 5, 2002.

(a) In 1893, in *Lemonius, et al. v. Mayer, et al.*,[542] the Supreme Court of the State of Mississippi observed that cotton futures settled by cash payment were unlawful under 1882 Mississippi statute which provided that "it shall [] be unlawful for any person, by agent or otherwise, to deal in contracts commonly called futures in this state."[543]

However, the current 2013 Mississippi Code allows for the trading of commodity futures in certain conditions as when *(a)* such contract are made in accordance with the rules of any board of trade, exchange or similar institution where such contracts of sale are executed; *(b)* such contracts are actually executed on the floor of such board of trade, exchange or similar institutions and performed or discharged according to the rules thereof; and *(c)* when such contracts of sale are made with or through a regular member in good standing of a cotton exchange, grain exchange or similar institution organized under the laws of the State of Mississippi or any other state.[544]

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[542] 14 So. 33 (1893).

[543] An Act to Prohibit the Sale and Purchase of 'futures' in the State of Mississippi [Act of 1882], Section 1 (1882).

[544] *See* 2013 Mississippi Code, Section 87-1-15, which provides:

> (1) All contracts of sale for future delivery of cotton, grain, stock, or other commodities (a) made in accordance with the rules of any board of trade, exchange or similar institution where such contracts of sale are executed; and (b) actually executed on the floor of such board of trade, exchange or similar institutions and performed or discharged according to the rules thereof; and (c) when such contracts of sale are made with or through a regular member in good standing of a cotton exchange, grain exchange or similar institution organized under the laws of the State of Mississippi or any other state shall be, and they are hereby declared to be, valid and enforceable in the courts of this state according to their terms.
>
> (2) Notwithstanding the provisions of subsection (1) of this section, contracts of sale for the future delivery of cotton in order to be valid and enforceable must not only conform to the requirements of clauses (a), (b) and (c) of subsection (1) of this section, but must also be made subject to the provisions of the United States Internal Revenue Code of 1954, subchapter D. In the event, however, that this subsection be held inoperative for any reason, then contracts for the future delivery of cotton shall be valid and enforceable if they conform to the requirements of clauses (a), (b) and (c) of subsection (1) of this section.
>
> (3) If contracts of sale for future delivery of cotton, grain, stock, or other commodity shall conform to all of the requirements set forth above in this section, then the same shall be valid and enforceable in all the courts of this state, notwithstanding that at the time of execution of such contracts that either or both of the parties thereto did not contemplate or intend that the same should be consummated by the actual delivery and receipt of the commodity specified. The plain intent of this section, while declaring unlawful all transactions conducted in and through a "bucket shop" as hereinafter defined, is to make lawful and enforceable and to withdraw from the provisions of the gaming and wagering laws, all transactions executed upon and in accordance with the rules of a legitimate cotton, grain, stock or other commodity exchange or board of trade whether the intent of delivery of the actual commodity was present or not and this section shall be liberally construed at all times so as to effectuate this purpose.

(b) In 1914, in *S.M. Weld Co. v. Austin*,[545] the Supreme Court of the State of Mississippi again declared cotton futures which were settled by cash payment void under the Mississippi Code of 1906.[546] As mentioned, the current 2013 Mississippi Code allows the trading futures under certain circumstances.

(c) In 1907, in *Anderson v. State*,[547] the Court of Appeals of the State of Georgia ruled that dealings in cottons, stocks, and other commodities on margins for future delivery were "dealings in futures" and illegal under the Boykin Act.[548] The Boykin Act states that:

> [E]very contract or agreement, whether or not in writing, whereby any person or corporation shall agree to buy or sell and deliver, or sell with an agreement to deliver, any wheat, cotton, corn or other commodity, stock, bond, or other security to any other person or corporation when in fact it is not in good faith intended by the parties that an actual delivery of the articles or thing shall be made, is hereby declared to be unlawful, whether made or to be performed wholly within this state or partly within and partly without this state; it being the intent of this act to prohibit any and all contracts or agreements for the purchase or sale and delivery of any commodity or other thing of value on margin, commonly called "dealings in futures," when the intention or understanding of the parties is to receive or pay the difference between the agreed price and the market price at the time of settlement; provided, that nothing herein contained shall be construed to apply to transactions by mail or wire between persons in this state, and persons

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[545] 65 So. 247 (1914).

[546] *See* 1906 Mississippi Code, Section 2303, which states:

> Section 2303. A contract for the purchase or sale of a commodity of any kind, to be delivered at a future date, the parties not intending that the commodity is to be actually delivered in kind and the price paid, shall not be enforced by any court; nor shall any contract of the kind commonly called "futures" be enforced, nor shall a contract in this section mentioned be a valid consideration, in whole or in part, for any promise or undertaking, and any person who shall make any such contract and by reason thereof lose any money, property or other valuable thing, real or personal, and shall pay or deliver the same or any part thereof, may, or his wife or children may sue for and recover such money, property or other valuable thing so lost and paid or delivered, or any part thereof, from the person knowingly receiving the same, either for himself or as agent for another, together with all costs of suit.

[547] 58 S.E. 401 (1907).

[548] An act to prohibit contracts and agreements for the sale and future delivery of cotton, grain, provisions and other commodities, stocks, bonds and other securities upon margin, commonly known as dealing in futures; to declare such transaction unlawful, and to constitute a misdemeanor on the part of any person, association of persons or corporation participating therein, whether directly or indirectly; to prohibit the establishment, maintenance or operation of any office or other place where such contracts are made or offered; to define what shall constitute prima facie evidence of guilt; to compel all persons participating in such transactions to testify concerning their connection therewith; to provide that no discovery made by any witness which would tend to subject him to conviction or punishment under this act shall be used against such witness in any penal or criminal proceeding, and that he shall be altogether pardoned therefor; to provide that regular commercial exchanges and other bona fide trade organizations may post quotations or market price, and for other purposes (Laws Ga. 1906), Section 2.

> outside this state where the person outside this state is not represented in this state by any broker, agent or attorney in said transaction.[549]

The 2016 Georgia Code, however, now authorizes trading of commodity futures if the following requirements are met: *(a)* the contract is made in accordance with the rules of any board of trade, exchange, or similar institution; *(b)* the contract is actually executed on the floor of such board of trade, exchange, or similar institution and performed or discharged according to its rules; and *(c)* the contract of sale is placed with or through a regular member in good standing of a cotton exchange, grain exchange, board of trade, or similar institution organized under the laws of the State of Georgia or any other state. Nevertheless, the contracts of sale for future delivery of cotton is, in addition to meeting the aforementioned requirements, subject to the United States Cotton Futures Act.[550]

(d) In 1911, in *Hentz & Co. v. Booz*,[551] the Court of Appeals of the State of Georgia held that the consideration of the note was illegal and immoral because it was advanced in active participation of speculations in cotton futures and that actual delivery of the cotton was not an essential feature of the contracts entered into by the parties. Citing *Anderson v. State*, the Court of Appeals of the State of Georgia declared the transaction void under the Boykin Act. As discussed earlier, the 2016 Georgia Code permits futures trading under certain conditions.

(e) In 1891, in *Plank v. Jackson*,[552] the Supreme Court of the State of Indiana ruled that the Revised Statutes of Indiana of 1881[553] which renders void notes

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[549] *Id*.

[550] *See* 2016 Georgia Code, Section 13-9-2, which states:

> (a) All contracts of sale for future delivery of cotton, grain, stocks, or other commodities (1) made in accordance with the rules of any board of trade, exchange, or similar institution, (2) actually executed on the floor of such board of trade, exchange, or similar institution and performed or discharged according to the rules thereof, and (3) placed with or through a regular member in good standing of a cotton exchange, grain exchange, board of trade, or similar institution organized under the laws of this state or any other state shall be valid and enforceable in the courts according to their terms, provided that contracts of sale for future delivery of cotton, in order to be valid and enforceable as provided in this Code section, must not only conform to the requirements of clauses (1), (2), and (3) of this subsection, but must also be made subject to the United States Cotton Futures Act, approved August 11, 1916, and any amendments thereto; provided, further, that if this clause should for any reason be held inoperative, then contracts for future delivery of cotton shall be valid and enforceable if they conform to the requirements of clauses (1), (2), and (3) of this subsection.
>
> (b) All contracts as defined in Code Section 13-9-1, where it is not contemplated by a party to the contract that there shall be an actual delivery of the commodities sold or bought, shall be unlawful.

[551] 70 S.E. 108 (1911).

[552] 26 N.E. 569 (1891).

[553] *See* 1881 Revised Indiana Statute, Section 4950, which provides:

given "for repaying money lent at the time of such wafer for the purpose of being wagered" does not include cases where money was borrowed with an intention on the part of the borrower to invest it in some speculative transaction at some time in the future. The Supreme Court of the State of Indiana held that these contracts are speculative and against public policy, and therefore void.

The 2016 Indiana Code, however, now authorizes commodity futures trading, subject to the following conditions: *(a)* the person is registered or temporarily licensed with the Commodity Futures Trading Commission for each activity and the registration or temporary license has not expired or been revoked or suspended, or *(b)* the person is exempt from registration with the Commodity Futures Trading Commission under the Commodity Exchange Act or the CFTC rule.[554]

(f) In 1883, in *William J. King & Sons v. Quidnick Co.*,[555] the Supreme Court of the State of Rhode Island observed that the cottons subject of the suit were not dealings in "futures" because there was an actual sale and delivery.

The 2016 Rhode Island Code now recognizes commodity futures trading if the contract is: *(a)* traded on or subject to the rules of a board of trade that has been designated as a contract market for such a contract pursuant to federal commodities laws; or *(b)* traded on a foreign commodity board of trade,

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4950. For money won on wager, void. By this section any and all securities, when the whole or any part of the consideration thereof shall be for a valuable thing won on the result of any wager or for re-paying money lent, at the time of such wager, for the purpose of being wagered is declared to be void.

[554] *See* 2016 Indiana Code, Section 23-2-6-23 which provides:

Sec. 23. (a) A person may not engage in the commodities trade or business or otherwise act as a commodity merchant unless the person:
(1) is registered or temporarily licensed with the Commodity Futures Trading Commission for each activity causing the person to be considered a commodity merchant and the registration or temporary license has not expired or been revoked or suspended; or
(2) is exempt from registration with the Commodity Futures Trading Commission under:
(A) the Commodity Exchange Act; or
(B) a CFTC rule.

(b) A board of trade may not trade or provide a place for the trading of any commodity contract or commodity option if the commodity contract or commodity option must be traded on a contract market or commodity market designated by the Commodity Futures Trading Commission or is subject to the rules of a contract market or commodity market designated by the Commodity Futures Trading Commission, unless:

(1) the board of trade has been designated for the commodity contract or commodity option by the Commodity Futures Trading Commission; and
(2) the designation has not been vacated, suspended, or revoked.

[555] 14 R.I. 131 (1883).

exchange, or market, and is carried on the books of a commodity intermediary for a commodity customer.[556]

The American court decisions used by the Supreme Court in the Onapal Case are therefore no longer the same as when these were promulgated. While this does not affect the binding effect of the Onapal Case, the amendments in the state laws indicate a trend towards a more liberal approach in upholding commodity futures trading, which the Supreme Court may consider in future cases if similar amendments would be made in our own statutes.

Third. The SRC was passed after both the Civil Code and the Onapal Case were promulgated. Under the rules of statutory construction, a special and later law should prevail over a general and earlier law.[557] The SRC, which specifically recognizes trading of derivatives and commodity futures contracts, is the later law, and can be said to be a special law inasmuch as it specifically applies to trading securities. On the other hand, the Civil Code was passed 50 years earlier in 1950, and is a law that governs contracts in general.

Following principles of statutory construction, there is basis for the position that the SRC should prevail over Article 2018 and the Onapal Case (which applied Article 2018). As such, the validity of derivatives and commodity futures (subject to the issuance of SEC rules) recognized in the SRC should also prevail.

In summary, while a plain reading of the Onapal Case could form a view that commodity futures settled without actual delivery are void, there are good reasons to challenge the continuing applicability of the Onapal Case to all kinds of commodity futures transactions. It remains to be seen, however, whether this kind of challenge would stand the scrutiny of the courts. It bears noting that the doctrine in the Onapal Case can be overturned only by the Supreme Court *en banc*.[558]

3. SUSPENSION OF COMMODITY FUTURES CONTRACTS RULES

Under the SRC, "no person shall offer, sell or enter into commodity futures contracts except in accordance with rules, regulations and order the [SEC] may prescribe in the public interest."

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[556] *See* 2016 Rhode Island Code, Section 6A-9-102, which provides:

> (15) "Commodity contract" means a commodity futures contract, an option on a commodity futures contract, a commodity option, or another contract if the contract or option is:
>
> (i) Traded on or subject to the rules of a board of trade that has been designated as a contract market for such a contract pursuant to federal commodities laws; or
>
> (ii) Traded on a foreign commodity board of trade, exchange, or market, and is carried on the books of a commodity intermediary for a commodity customer.

[557] *See Batangas City, et al. v. Pilipinas Shell Petroleum Corporation,* G.R. No. 187631, July 8, 2015.

[558] 1987 Philippine Constitution, Article VIII, Section 4(3).

The 2015 SRC IRR defines commodity futures contracts subject of the proscription, and a commodity, as follows:

> 11.1.1. Commodity future contract means a contract providing for the making or taking delivery at a prescribed *(sic)* in the future of a specific quantity or quality of a commodity or cash value thereof, which is customarily offset prior to the delivery date, and includes standardized contracts having the indicia of commodities futures, commodity options and commodity options and commodity leverage, or margin contracts.
>
> 11.1.2. Commodity means any goods, articles, agricultural and mineral products, services, rights and interests, and financial instruments, foreign currencies, including any group or index of any of the foregoing, in which commodity interest contracts are presently or in the future dealt in.[559]

(In this regard, the Supreme Court has characterized electricity as a commodity.[560] There are also various issuances by administrative agencies characterizing electricity as a commodity.[561])

Based on the foregoing, commodity futures contracts (*i.e.,* contracts which usually have standardized terms that can be settled by delivery or payment of the cash value of the commodity and is usually offset before delivery date) and commodity options cannot be traded without SEC rules.

Notably, the 2015 SRC IRR provides a separate definition for forwards, as follows:

> 11.1.3. Forward means a contract between a buyer and seller whereby the buyer is obligated to take delivery and the seller is obliged to deliver a fixed amount of an underlying commodity at a pre-determined price and date. Payment is full at the time of delivery.[562]

While the definition of commodity futures contracts appears broad enough to cover forwards, an argument can be made that forwards should be excluded from this

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[559] Rules and Regulations Implementing the Securities Regulation Code, Rule 11, Sections 11.1.1 & 11.1.2.

[560] *See JG Summit Holdings, Inc. v. Court of Appeals*, G.R. No. 124293, September 24, 2003, where the Supreme Court defined a public utility as "a business or service engaged in regularly supplying the public with some commodity or service of public consequence such as electricity, gas, water, transportation, telephone or telegraph service." (*Underscoring supplied*). *See also Laurel v. Abrogar*, G.R. No. 155076, February 27, 2006, where the Supreme Court held that, "intangible properties such as electrical energy and gas are proper subjects of theft. … Electrical energy may, likewise, be taken and carried away. It is a valuable commodity, bought and sold like other personal property."

[561] *See* Bureau of Internal Revenue Ruling [DA-(C-055) 191-08] dated September 1, 2008 where the Bureau of Internal Revenue said that, "While a Swap is commonly used to hedge currency and interest rate fluctuations, it can also be used to hedge the price of non-storable commodities like electricity." (*Underscoring supplied*). *See also* Government Procurement Policy Board, Resolution No. 10, series of 2013 (March, 15, 2013), which states that, "The procurement of electricity involves the acquisition of goods."

[562] Rules and Regulations Implementing the Securities Regulation Code, Rule 11, Sections 11.1.3.

definition and the prohibition against the public trading of commodity futures without SEC rules.

Section 11 of the SRC prohibits parties from offering, selling, or even **entering into** commodities futures contracts in the absence of SEC rules. If forwards are deemed included in the prohibition, then nobody can enter or transact a sale of a future thing – common contracts part of everyday commerce – without these SEC rules.

This would create an absurd situation. The law should not be interpreted in such a way that it shall yield to absurd results. The Supreme Court explained:

> Nothing is better settled then that courts are not to give words a meaning which would lead to absurd or unreasonable consequence.[13] That is a principle that goes back to In re Allen[14] decided on October 29, 1903, where it was held that a literal interpretation is to be rejected if it would be unjust or lead to absurd results. That is a strong argument against its adoption.[15] The words of Justice Laurel are particularly apt. Thus: "The fact that the construction placed upon the statute by the appellants would lead to an absurdity is another argument for rejecting it….[563]

Thus, it would be reasonable to take the view that forwards may be entered into and traded even without SEC commodity futures contracts rules. For prudence, an opinion from SEC, the regulator itself, confirming this could be obtained.

The same rationale extends to option contracts. Again, Section 11 of the SRC (read in connection with Section 11.1.1 of the 2015 SRC Rules defining commodities futures contract to include options) prohibits even the mere "entering into" an option contract without SEC rules. An option contract, like forwards, are common contracts used in everyday commerce (*e.g.*, options to buy embedded in lease and financing agreements). To require the promulgation of SEC rules so as to be able to enter into these contracts is not only administratively impossible to monitor but also commercially unwise.

Similarly, an SEC opinion clarifying Section 11.1.1 of the 2015 SRC Rules on entering into commodity options could likewise be obtained from the SEC to address any question on inclusion/exclusion on account of the plain language of the 2015 SRC IRR which proscribes the mere execution of an option contract without SEC rules.

The foregoing is consistent with U.S. laws from which Philippine securities laws are patterned after.[564] In this connection, the CEA[565] contains a "forward contract exclusion," which distinguishes contracts for future delivery which are settled by physical delivery and those which are settled by cash payment. Section 2(a)(1)(A) of the CEA states:

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[563] *Automotive Parts & Equipment Company, Inc. v. Lingad,* G.R. No. L-264406, October 31, 1969.
[564] *See Abacus Securities Corporation, vs. Ruben U. Ampil*, G.R. No. 160016. February 27, 2006. The Supreme Court observed that "The United States, from which our country's security policies are patterned, abound with authorities explaining the main purpose of the above statute on margin requirements."
[565] 7 U.S.C., ch. 1.

> The Commission shall have exclusive jurisdiction, except to the extent otherwise provided in the Wall Street Transparency and Accountability Act of 2010 (including an amendment made by that Act) and subparagraphs (C), (D), and (I) of this paragraph and subsections (c) and (f), with respect to accounts, agreements (including any transaction which is of the character of, or is commonly known to the trade as, an "option", "privilege", "indemnity", "bid", "offer", "put", "call", "advance guaranty", or "decline guaranty"), **and transactions involving swaps or contracts of sale of a commodity for future delivery** (including significant price discovery contracts), traded or executed on a contract market designated pursuant to section 7 of this title or a swap execution facility pursuant to section 7b-3 of this title or any other board of trade, exchange, or market, and transactions subject to regulation by the Commission pursuant to section 23 of this title ….[566]

In turn, Section 1(a)(27) of the CEA provides that "[t]he term "future delivery" **does not include any sale of any cash commodity for deferred shipment or delivery**."[567]

Under the CEA, the CFTC does not have jurisdiction over contracts for future delivery which are settled by actual physical delivery (*i.e.* forwards under 2015 SRC IRR). The reason for the exclusion is practicality:

> [A]bsent the exceptions in the [CEA], the CFTC's jurisdiction would, in theory, extend to virtually everything, tangible and intangible, subject to a contract not settled by immediate delivery. To permit commerce to function, an exception was needed and in provided in section 2(a)(1)(A) of the [CEA].
>
> ***
>
> Were it not for this exclusion (referred to as the "forward contract exclusion"), the broad definition of commodity could result in almost any executory sale being deemed the sale of commodity for future delivery subject to the provisions of the CE Act. One of the principal consequences would be that all executory sales would have to be transacted on commodity exchanges designated as contract markets by the CFTC. Since this is neither desirable nor feasible, the forward contract exclusion has long been and remains necessary to the conduct of everyday commerce, and more recently, to the conduct of institutional and financial markets.[568]

It bears noting that at the moment, there are currently no SEC rules on commodity futures in effect. To recall, the SEC passed 1980, 1983 and 1999 CFC Rules. The SEC, in the 2000 and 2003 SRC IRR, reiterated that without prejudice to applicable BSP rules and circulars, "the public trading of commodities futures contracts and pertinent [SEC] rules shall remain suspended until further orders of the [SEC]." To date, the SEC has not issued any order lifting the suspension. In fact, in 2013 and

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[566] *Emphasis and underscoring supplied.*
[567] *Emphasis and underscoring supplied.*
[568] Committee on Commodities Regulation of the Association of the Bar of the City of New York, *The Forward Contract Exclusion: An Analysis of Off-Exchange Commodity-Based Instruments*, 41(3) The Business Lawyer 853 (1986), http://www.jstor.org/stable/40686731 (last accessed June 2, 2017).

2016, the SEC issued advisories reminding the public of the suspension. In these advisories, the SEC referred to the Supreme Court's ruling in the Onapal Case.

4. ABSENCE OF A DEFINED FRAMEWORK SPECIFIC TO THE EDM

Even if the challenges presented by Article 2018, the Onapal Case, and the absence of rules on commodity futures could be overcome, the absence of a law or regulation specifically defining the legal framework for an EDM also presents its own challenges.

Presently, there are no specific rules on the market and regulatory structures that would govern an EDM. There are no rules delineating and allocating regulatory power among various government agencies that may be involved in an EDM such as the DOE, ERC, PCC and SEC to name a few. Although a derivative is essentially a financial instrument, which is arguably under the jurisdiction of the SEC, this has to be balanced with the DOE's and ERC's mandate under the EPIRA over the underlying asset, (*i.e.*, electricity) as well as the participants from the electric power industry.

There are also no rules on what types of derivatives may be traded in the EDM. As discussed in Chapter II, there are various types of derivatives traded in other jurisdictions and it is possible that not all these types are useful or feasible to the potential market participants. These have to be evaluated to ensure that only derivatives that are commercially viable shall be traded in the EDM.

Questions may also be raised on the taxes which may be applicable in respect of the transactions in the EDM.[569]

A law or regulation defining a framework specific to an EDM would certainly be helpful in the establishment, development and operation of an EDM. It would guide government authorities on how to allocate their powers and regulate the EDM. It would also guide market players in trading derivatives in the EDM.

C. RECOMMENDATIONS

In light of the foregoing legal challenges, the following are recommended:

1. REPEAL OR AMEND ARTICLE 2018

As discussed above, electricity derivatives traded in other jurisdictions are settled in cash without actual delivery of the underlying asset *(e.g.* non-cash forwards/futures settled by cash payment and contracts for difference). If the same feature would be adopted here in the Philippines, it would be advisable to have Article 2018 repealed altogether (like the repeal of Section 764 of the German Civil Code) or amended to create an exception for derivatives traded in regulated markets (like how several

[569] For example, under Section 127 of the Tax Code, the sale of shares in the Philippine Stock Exchange is subject to tax at 0.5% of the gross selling price of the shares sold, and any gain derived from such sale is exempt from capital gains and income taxes.

American states carved out their state laws) to remove the uncertainty whether Article 2018 is applicable to the contemplated electricity derivatives.[570]

While there are reasons[571] to claim that Article 2018 should not be made apply to all derivatives settled without actual delivery in the EDM, the possibility that our courts may apply Article 2018 to these derivatives would remain, as it had done so in the Onapal Case, and this possibility would be removed if Article 2018 is repealed or amended.

The repeal or amendment of Article 2018 would also have the effect of abandoning[572] the Supreme Court's pronouncement in the Onapal Case inasmuch as the underlying legal provision applied in that case would no longer subsist. This may also encourage the SEC to lift the suspension on or pass new rules on commodity futures, considering that the SEC makes reference to the Onapal Case in its advisories reiterating the suspension.

Potential participants may also consider the repeal or amendment of Article 2018 as important in determining whether to trade in the EDM considering the potential impact not only on the stability of the market if the validity of the derivatives traded are questioned, but also on them if there is a risk that their specific transactions could be declared void under Article 2018 (*i.e.*, the loser may recover what he has lost, unlike other void contracts where the parties may be left to bear their respective losses[573]).

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[570] Under Article 1409 of the Civil Code, the right to set up the defense that a contract is void cannot be waived. Thus, even if the parties to a void contract agree that neither of them shall question its validity, the validity of a contract cannot be given to it by estoppel if it is prohibited by law or against public policy. It is not within the competence of any citizen to barter away what public policy by law seeks to preserve (*see Prudential Bank v. Panis*, G.R. No. 50008, August 31, 1987.). Moreover, a contract void at inception cannot be validated by ratification or prescription (*see Nool v. Court of Appeals*, G.R. No. 116635, July 24, 1997.).

[571] *See* Chapter IV, B(1) of this Report.

[572] The impact of repeal or amendment on the Onapal Case would depend on whether Article 2018 is repealed in its entirety or amended only to create an exception for certain types of derivatives.

[573] *See* CIVIL CODE, Article 1412, which states:

> Art. 1412. If the act in which the unlawful or forbidden cause consists does not constitute a criminal offense, the following rules shall be observed:
>
> (1) When the fault is on the part of both contracting parties, neither may recover what he has given by virtue of the contract, or demand the performance of the other's undertaking;
>
> (2) When only one of the contracting parties is at fault, he cannot recover what he has given by reason of the contract, or ask for the fulfillment of what has been promised him. The other, who is not at fault, may demand the return of what he has given without any obligation to comply with his promise. (*Underscoring supplied*)

2. OBTAIN AN SEC OPINION

As discussed above, an argument could be made that forwards are excluded from the term "commodities futures contract," which under Section 11 of the SRC, cannot be traded without SEC commodity futures rules. To confirm this interpretation, it is recommended that an opinion from the SEC *en banc*[574] be obtained.

3. LIFT THE SUSPENSION OR ISSUE NEW RULES ON COMMODITY FUTURES CONTRACTS

Aside from overcoming Article 2018 and the Onapal Case, it is also imperative that there be rules on commodity futures contracts, as there is none in place at the moment. Under Section 11 of the SRC, no person shall offer, sell, or enter into commodity futures contracts (which include commodity options), except in accordance with the rules, regulations, and orders prescribed by the SEC in the public interest. Thus, before commodity futures contracts and options may be traded, the SEC is required to issue rules and regulations to ensure the development of a fair and transparent commodities market.

There are two (2) options to address this concern. First, the SEC may lift the suspension on commodity futures contracts. Second, it may issue new rules to govern commodity futures contracts. Either way, electricity futures cannot be traded in an EDM (whether through an exchange or an OTC market) without these rules inasmuch as the SRC itself requires that commodity futures contracts may be traded only in accordance with the rules promulgated by the SEC.

4. PASS LAW OR REGULATION EXPRESSLY AUTHORIZING THE EDM

The absence of a defined framework specific to the EDM, as discussed above, raises various questions including: *(a)* how would the market be structured, *(b)* what types of derivatives may be traded, *(c)* which government agencies would regulate the market and participants and what would be their roles, *(d)* who could be the market participants and would there be any limitations on their transactions, and *(e)* who would have jurisdiction to resolve disputes arising from transactions in the EDM. The possible tax consequences of transactions concluded in the EDM could also be a question. Addressing these questions is important because all these go into the stability of the EDM. The passage of a law or joint regulations that would be specific to the establishment of the EDM could address these questions.

[574] In *Gamboa v. Teves*, G.R. No. 176579, October 9, 2012, the Supreme Court ruled that "the opinions issued by SEC legal officers do not have the force and effect of SEC rules and regulations because only the SEC *en banc* can adopt rules and regulations. As expressly provided in Section 4.6 of the Securities Regulation Code, the SEC cannot delegate to any of its individual Commissioner or staff the power to adopt any rule or regulation. Further, under Section 5.1 of the same Code, it is *the SEC as a collegial body*, and not any of its legal officers, that is empowered to issue *opinions* and approve rules and regulations." (*Emphasis supplied*.)

CHAPTER V
SETTING UP AN EDM IN THE PHILIPPINES

A sound regulatory framework must be in place in order to achieve a robust and well-functioning EDM in the country.[575] This framework should not simply lay down the regulatory structure over the EDM, but should consider as well adopting measures to achieve the objectives of establishing the EDM. The framework should delineate the roles and responsibilities of governmental bodies tasked to regulate the financial and physical markets and the players therein, and address overlapping jurisdictions. It should also elaborate on the market structure of the EDM, the participants, the derivative products that may be traded therein, rules on membership, dispute resolution, and sanctions for improper conduct.

This chapter will present the proposed regulatory framework and market structure for establishing an EDM in the Philippines, taking into consideration existing legislation, legal challenges, and the recommendations identified in the previous chapters.

A. REGULATORY STRUCTURE

1. EDM

a. GENERAL SUPERVISION

It appears that the SEC would have primary regulatory authority and general supervision over the EDM. As discussed in Chapter II, the SEC is the main administrative agency charged with supervision over the corporate sector, capital markets, market participants, the securities and investment instruments markets, and the investing public.[576]

The SEC's broad powers over corporations and markets extend to an EDM, which is a financial market where financial instruments (*i.e.,* electricity derivatives) are sold, traded and settled. Among the powers and functions of the SEC relevant to an EDM are the following:

(a) Formulate policies and recommendations on issues concerning the securities market, advise Congress and other government agencies on all aspect of the securities market and propose legislation and amendments thereto;[577]

(b) Approve, reject, suspend, revoke or require amendments to registration statements, and registration and licensing applications;[578]

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[575] Union of the Electricity Industry – EURELECTRIC Working Group Trading, *supra* note 348.
[576] Securities and Exchange Commission, Mandate, Mission, Values and Vision, http://www.sec.gov.ph/about/mission-values-and-vision/ (last accessed May 9, 2017).
[577] *See* Securities Regulation Code, Section 5.1(b).
[578] *Id*., Section 5.1(c).

(c) Regulate, investigate or supervise the activities of persons to ensure compliance;[579]

(d) Supervise, monitor, suspend or take over the activities of exchanges, clearing agencies and other SROs;[580]

(e) Impose sanctions for the violation of laws and rules, regulations and orders, and issued pursuant thereto;[581]

(f) Prepare, approve, amend or repeal rules, regulations and orders, and issue opinions and provide guidance on and supervise compliance with such rules, regulation and orders;[582]

(g) Investigate, prosecute and impose administrative and civil sanctions for manipulation of security prices, fraudulent transactions and insider trading;[583] and

(h) Promulgate rules and regulations involving commodity futures contracts to protect investors to ensure the development of a fair and transparent commodities market.[584]

b. LICENSING

The SEC appears to have the authority to issue licenses in connection with setting up an EDM. This is apparent from its authority under the SRC to:

(a) Register SROs, either as an exchange or OTC market;[585]

(b) License persons to engage in the business of buying or selling securities in the Philippine as a broker or dealer, or act as a salesman, or an associated person of any broker or dealer unless registered as such with the Commission;[586]

(c) Register the derivatives that may be traded in the EDM;[587] and

(d) Impose reportorial requirements.[588]

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[579] *Id*., Section 5.1(d).
[580] *Id*., Section 5.1(e).
[581] *Id*., Section 5.1(f).
[582] *Id*., Section 5.1(g).
[583] *See* Securities Regulation Code, Sections 58, 59, 60 and 61.
[584] *Id*., Section 11.
[585] *Id*., Section 39.
[586] *Id*., Section 28.1.
[587] *Id*., Section 8.1.
[588] *Id*., Section 17.

In other words, the SEC is tasked with licensing the entity that will operate the EDM, the persons that will participate in the EDM, and the products that will be traded in the EDM.

c. SPECIAL RULES

i. BSP AND INSURANCE COMMISSION

Apart from the SEC, the BSP and the Insurance Commission would also have regulatory powers over the trading activities of banks and insurance companies, respectively, if they would be interested and allowed to participate in an EDM. The BSP and Insurance Commission have primary authority over banks and insurance companies.[589] They have the authority to grant banks and insurance companies the right to trade in an EDM, fix capitalization qualification for participating in an EDM, set trading/position limits, impose higher prudential requirements, and the like. At present, banks and insurance companies are allowed under the current and existing regulations to deal in derivatives in OTC markets.[590]

ii. ERC

As will be discussed below, apart from competition law concerns, the ERC would be able to exercise some degree of authority over EDM participants which belong to the electricity industry sector inasmuch as it exercises supervision over the electric power industry and the WESM.

For instance, under the EPIRA, the ERC has the power to establish and enforce a methodology of setting retail rates for the Captive Market, as well as distribution wheeling rates which "allow the recovery of just and reasonable costs and a reasonable rate of return."[591] The ERC thus appears to have the authority to determine whether hedging profits or losses may be passed on to consumers. Similarly, the ERC has the authority to approve distribution and wheeling charges and connection fees imposed and collected by distribution utilities from end-consumers.[592] This is of particular importance because under Section 23 of the EPIRA, distribution utilities have an obligation to supply elecitricity in the least cost manner to their Captive Market. The ERC would clearly have an interest in protecting consumers from the indirect consequences of improper trading behavior and potentially speculative derivatives transactions of electricity industry participants in the EDM.

Moreover, the ERC has the authority to approve the price determination methodolody in the WESM,[593] including the imposition of administered price.[594] Inasmuch as the

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[589] *See* The General Banking Law of 2000, Section 4; *see also* The Insurance Code, Section 414.
[590] *See* 2016 MORB, Section X611*; see also* Insurance Circular Letter No. 056-15.
[591] Electric Power Industry Reform Act, Section 43(f).
[592] *Id*., Sections 23 and 24.
[593] *Id*., Section 30.
[594] *See* DOE, WESM Rules, cl. 6.2.3 (2002); *see* ERC, The Price Determination Methodology for the WESM.

prices in the EDM depend or make reference to the prices in the WESM, the impact of the imposition of administered prices would have to be considered in setting or fixing the refernce price for the derivatives to be traded in the EDM.

Furthermore, if forwards between a generation company/supplier and distribution utility intended to service their captive customers are traded in the EDM, it appears that the ERC would have authority to review these contracts and approve the associated generation costs passed on to captive consumers.

A forward which involves actual delivery is essentially a contract for the supply of electricity. The costs incurred under a forward contract are generation costs or costs relating to the procurement of electricity supply. Under Section 45 of the EPIRA, bilateral supply contracts entered into by distribution utilities with generation companies/suppliers for the captive market are subject to review by the ERC. As such, forwards, being essentially supply contracts, appear to likewise be subject to review by the ERC.

Further, under Section 25 of the EPIRA, the retail rates (*i.e.,* the total price paid by end-users consisting of generation, transmssion, related ancillary services, distribution, supply and other related electricity service charges[595]) charged by distribution utilities for the the supply of electricity in their captive market shall be regulated by the ERC. This means that the ERC has the authority to regulate the generation charges forming part of the retail rate paid by captive customers. Because the costs incurred under a forward contract pertain to generation costs, the ERC would have authority to regulate forward costs, if they are intended to be passed on to captive customers.

The foregoing regulatory powers of the ERC to review supply contracts (including forwards) and regulate generation costs would not apply if the forward does not involve a distribution utility's services to the captive market. If a forward involves retail electricity suppliers, there would be no need for the ERC to review the contract or regulate that costs. Under Section 29 of the EPIRA, the prices charged for the supply of electricity to the Contestable Market is not subject to regulation by the ERC.[596]

d. COMPETITION AND MARKET MANIPULATION

i. PCC

The PCC would also have regulatory authority over the EDM insofar as competition law matters are concerned. The PCC has original and primary jurisdiction in the enforcement and regulation of all competition-related issues[597] across various industries, which may include the securities or derivatives markets such as the EDM. As provided in the PCA, the PCC is empowered to exercise, among others, the following functions:

[595] *See* Electric Power Industry Reform Act, Section 4(ss).
[596] *Id*., Section 29.
[597] *See* Philippine Competition Act, Section 32.

(a) Investigate breaches of the provisions under the PCA;

(b) Review proposed mergers and acquisitions, and determine thresholds, requirements and procedures for its notifications;

(c) Determine the proper remedies in case an entity has entered into an anti-competitive agreement or has abused its dominant position;

(d) Inspect businesses and assets where it reasonably suspects that relevant books, tax records, or other documents which relate to any matter relevant to the investigation are kept, in order to prevent the removal, concealment, tampering with, or destruction of the books, records, or other documents;

(e) Conduct administrative proceedings and impose sanctions, fines and penalties;

(f) Monitor compliance; and

(g) Lead in policy-making initiatives in the field of competition law.[598]

The scope of the PCA (and consequently, the powers of the PCC) is applicable to all activities in the Philippines, including transactions in or relating to the financial markets.[599] Accordingly, the PCC would likewise have jurisdiction over the EDM, particularly for transactions that affect competition in the market.

ii. ERC

It appears that the ERC would also have a competition law mandate over some EDM participants to a certain extent. The EPIRA provides that the ERC shall have the authority to monitor and take measures to penalize abuse of market power, cartelization, and anti-competitive or discriminatory behavior by any electric power industry participant.[600] Thus, if a competition law issue in the EDM involves an electric power industry participant, the ERC appears to have the power to take cognizance of this issue and act against such electric power industry participant. This is also reflected in the ERC Competition Rules where the ERC can investigate and penalize anti-competitive agreements, which have the effect of substantially lessening competition in the "market."[601] The ERC Competition Rules define "market" as one "in which electricity or other goods or services that are directly or indirectly used in connection with generation, transmission, distribution or sale are, or may be supplied or acquired" and in turn, defines "services" to include "rights conferred under derivatives, futures contracts, hedge contracts or other financial instruments."[602]

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[598] *Id*., Section 12.
[599] *Id*. Section 3.
[600] *See* Electric Power Industry Reform Act, Section 43(k).
[601] ERC, Competition Rules and Complaint Procedures, Rules 4 and 7.
[602] *Id*., Rule 3, Section 1.

There thus appears to be an overlap of jurisdiction between the PCC and the ERC with respect to competition law issues in the EDM. This is further exemplified by the fact that both appear to have the powers to investigate and prosecute anti-competitive agreements and abuse of market power, and prohibit mergers and acquisitions which affect competition in the market.[603]

On the one hand, the PCA, which is the later law, provides that it is the PCC that shall have original and primary jurisdiction in the enforcement and regulation of all competition-related issues.[604] Where appropriate, however, the PCC is mandated to work together with sector regulators to issue rules and regulations to promote competition, protect consumers, and prevent abuse of market power by dominant players within their respective sectors.[605]

On the other hand, the EPIRA states that the ERC has original and exclusive jurisdiction over all cases involving disputes between and among participants or players in the energy sector,[606] which may be construed to include competition-related disputes. That said, it is worth noting that Section 55 of the PCA (*Repealing Clause)* provides that the PCA has repealed Section 43(u) of the EPIRA insofar as the provision thereof is inconsistent with the provisions of the PCA. The effect of the repealing clause of the PCA with respect to the jurisdiction of the ERC on competition-related issues concerning electric power industry participants or relating to the energy industry has yet to be clarified by the ERC and the PCC.

Given the apparent overlap between the powers of the ERC and the PCC with respect to competition-related issues within the EDM has not yet been clarified or resolved, it appears that under the current regulatory framework, the ERC and the PCC would have concurrent jurisdiction over competition-related issues in the EDM.

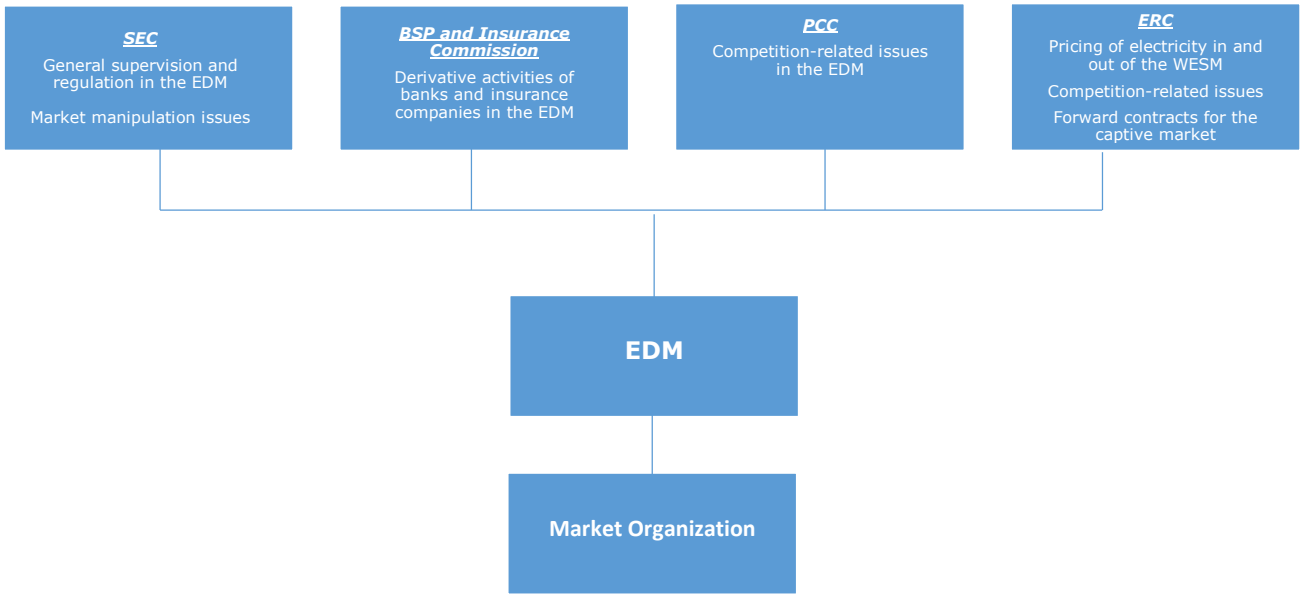
iii. SEC

It is conceivable that the SEC's current authority to investigate and penalize certain acts in a regulated exchange like an EDM may insersect the PCC's and ERC's jusridiction over anti-competitive behavior. For example, the SRC prohibits: *(a)* market manipulation,[607] *(b)* fraudulent transactions,[608] and *(c)* insider trading.[609] The commission of these prohibited acitivities (which appear to broadly cover all kinds of manipulative and fraudulent acts) may include acts which may be considred anti-competitive, (*i.e.* having the object or effect of substantially preventing, restricting, or lessening competition in the market[610]). The SEC has the power to investigate activities that may involve these prohibited acts to ensure compliance with the

[603] *Id*., Rules 4, 5, and 6; *see also* Philippine Competition Act, Sections 14, 15 and 16.
[604] *See* Philippine Competition Act, Section 32.
[605] *Id*., Section 32 (2015).
[606] *See* Electric Power Industry Reform Act, Section 43(u).
[607] *See* Securities Regulation Code, Section 24.
[608] *Id*., Section 26.
[609] *Id*., Section 27.
[610] *See* Philippine Competition Act, Section 14 & 15.

SRC.[611] Further, the SEC can impose administrative sanctions for violations of the SRC,[612] such as engaging in market manipulation, fraud, and insider trading. The SEC may also prosecute violations of the SRC, including market manipulation, fraud, and insider trading, by referring criminal complaints[613] to the Department of Justice, who shall be responsible for instituting the appropriate criminal proceedings.[614]

Based on the foregoing discussions, the regulatory structure for the EDM under existing laws and regulations is illustrated as follows:



2. WESM

The DOE and the ERC are the key governmental regulatory bodies that exercise authority over the WESM.

a. POLICY-MAKING

The DOE is the policy-making body for the entire energy industry and is charged with formulating policies and plans for the efficient supply and use of energy in the country.[615] It has the power to issue rules and regulations on the broad policy considerations governing the WESM. More particularly, the DOE, jointly with electric power industry participants, is also tasked with the formulation of the WESM Rules,[616]

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[611] *See* Securities Regulation Code, Sections 5.1(d) and 53.
[612] *Id*., Sections 5.1(f) and 54.
[613] *Id*., Section 53.1.
[614] *Id*., Section 53.3.
[615] *See* Electric Power Industry Reform Act, Section 37.
[616] *Id*., Section 30; *see also* WESM Rules, cl. 1.2.3.1.

which sets out the basic rules, requirements and procedures that governing the operations of the WESM.[617] It is the rule-making authority over the WESM.

b. GENERAL SUPERVISION, LICENSING, AND ENFORCEMENT

The ERC is the primary entity tasked to regulate the electric power industry, of which the WESM forms an integral part. Its powers under the EPIRA can be broadly classified into: *(i)* rate-making powers or the powers to approve or amend the rates charged to the Captive Market,[618] *(ii)* rule-making powers or the powers to issue rules and regulations implementing the EPIRA,[619] and *(iii)* quasi-judicial powers to settle disputes involving electric power industry participants and to enforce its rulings.[620] More specifically, the ERC is charged with the overall supervision and monitoring of the WESM and the implementation of the rules and regulations governing the operations of the WESM and the activities of the Market Operator and participants.[621] It is the enforcement arm of the government over the WESM.

Moreover, as explained above, the ERC also has a competition law mandate over the electricity market. The ERC is tasked with promoting competition, encouraging market development, ensuring customer choice, and penalizing of abuses of market power in the restructured electric power industry. It is empowered under the EPIRA to monitor and take remedial measures to penalize abuse of market power, cartelization, and anti-competitive or discriminatory behavior by any electric power industry participant,[622] which may include the imposition of price controls, issuance of injunctions, requirement of divestment or disgorgement of excess profits and imposition of fines and penalties.[623] Pursuant to these powers, the ERC issued the ERC Competition Rules, clarifying the anti-competitive conduct (*e.g.* anti-competitive agreements[624] and misuse of market powers,[625] and also prohibits certain types of mergers and acquisitions[626]) that the ERC may penalize. Based on these, it would appear that the ERC has the power to investigate and penalize competition law issues in the WESM.

c. COMPETITION AND MARKET MANIPULATION

The ERC's mandate appears to overlap with the broad jurisdiction of the PCC. As noted above, the PCC has original and primary jurisdiction in the enforcement and regulation of all competition-related issues, cutting across various industries including the electric power industry. Its jurisdiction is broad enough to cover competition-related issues arising from transactions in the physical market. Thus, it would appear that the PCC also has jurisdiction over the WESM.

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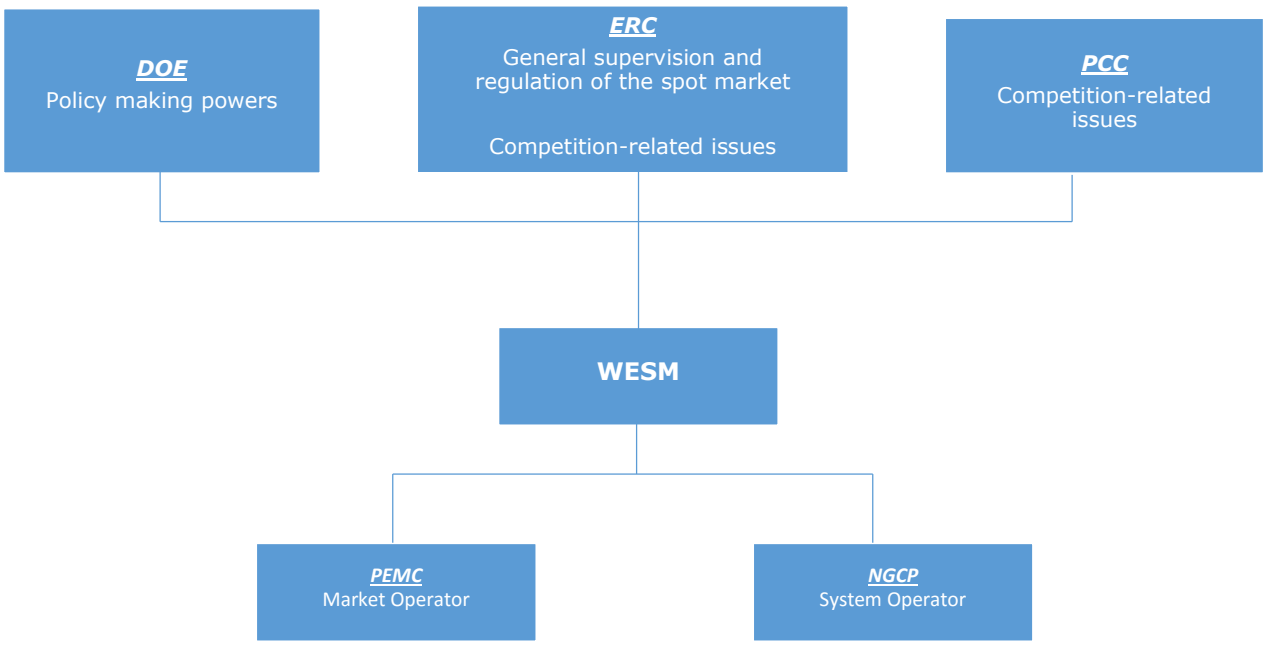
[617] DOE, WESM Rules, Foreword.
[618] *See* Electric Power Industry Reform Act, Sections 43(f), 43(o), 43(p) and 43(q).
[619] *Id*., Sections 43(a), 43(b) and 43(c).
[620] *Id*., Sections 43(r), 43(s) and 43(u).
[621] *Id*., Section 43(c).
[622] *Id*., Section 43(k).
[623] *Id*., Section 45.
[624] ERC, Competition Rules and Complaint Procedures, Rule 4.
[625] *Id*., Rule 5.
[626] *Id*., Rule 6.

As with the EDM, it appears that both the ERC and PCC have concurrent jurisdiction on competition law issues in the WESM. The apparent overlap of their powers in the WESM has yet to be clarified and/or resolved.

Based on the foregoing, the regulatory framework of the physical spot market in the Philippines can be summarized as follows:



3. INTERLINKAGES AMONG GOVERNMENT REGULATORY AUTHORITIES

It can be anticipated that the close correlation between the physical and financial markets may result in jurisdictional overlaps among the government agencies which supervise or have regulatory authority over both markets, especially considering that the market participants in the physical market are also likely the main participants in the financial market. Even in advanced electricity markets such as Norway, regulatory authorities of the physical and financial markets work closely together in settling these possible interlinkages in their respective functions and jurisdictional overlaps.[627]

As explained above, there appears to jurisdictional overlaps between the PCC and ERC on competition law issues in the EDM. There may also be overlaps between the SEC and the ERC. For instance, under the EPIRA, the ERC has the authority to issue, amend, and revoke licenses of electric power industry participants to operate as such.[628] In the same manner, the SEC has the authority to issue, amend and revoke

[627] Dr. Martha M. Roggenkamp & Dr. Francois Boisseleau, *supra* note 263.
[628] *See* Electric Power Industry Reform Act, Section 43(e).

licenses to dealers and brokers participating in the financial market. It is not entirely clear whether or how the ERC's revocation would affect a participant's ability to participate in the financial market.

The ERC also has the power to set aside the prices in the WESM (which serve as the reference price in the EDM) and instead impose an administered price under certain circumstances.[629] This should be addressed in the rules for the EDM to avoid any adverse impact on the trades in the financial market, which is supposed to be regulated by the SEC.

These instances show that government regulators ought to work closely together to ensure stability in the physical and financial electricity markets.

In other jurisdictions, proper coordination among government authorities is achieved through the execution of cooperation agreements or memoranda of understanding ("**MOU**"). For example, in Norway, NVE, the regulator of the physical market, and the Financial Supervisory Authority of Norway, the regulator of the financial market, entered into a cooperation agreement for electricity derivatives.[630] This cooperation agreement was executed to enable them to more efficiently detect and react to possible misconduct by the market players.[631]

Similarly, the regulatory authorities of the Australian electricity market have also entered into several MOUs to establish and promote effective communication, cooperation and coordination in performance of respective roles in Australia's energy industry.[632] AEMO, which is the Market Operator of the Australian physical spot market, has the following MOUs in place:

(a) MOU with the AEMC, which sets out agreed principles between the parties to promote effective cooperation, communication and coordination in the performance of their respective roles in Australia's energy markets;[633]

(b) MOU with the AER, which cognizes the importance of mutual consultation and independent decision making, and for the parties to inform each other about mutually relevant activities and publications, and where appropriate, exchange information relevant to the performance of their various functions, with AEMO

[629] *See* DOE, WESM Rules, Section 6.2.3; *see also* ERC, The Price Determination Methodology for the Philippine WESM.
[630] Norwegian Water Resources and Energy Directorate, *supra* note 312.
[631] Dr. Martha M. Roggenkamp & Dr. Francois Boisseleau, *supra* note 263.
[632] Australian Energy Market Operator, AEMO Memorandums of Understanding, https://www.aemo.com.au/Datasource/Archives/Archive169 (last accessed May 9, 2017).
[633] Memorandum of Understanding *between* Australian Energy Market Commission *and* Australian Energy Market Operator Limited, https://www.aemo.com.au/media/Files/Other/MOUs/MOU_AEMC_and_AEMO_25_Aug_2014.pdf (last accessed May 9, 2017).

(as physical Market Operator) and AER (as Australia's national energy market regulator);[634] and

(c) MOU with the ASIC, which guides collaboration, cooperation and mutual assistance in respect of the statutory functions of each party, given the increasing links between energy markets overseen by AEMO (as physical Market Operator) and ASIC (as derivative market regulator).[635]

AER, which is Australia's national energy Market Operator, also has an MOU with the Independent Competition and Regulatory Commission of Australia, which likewise plays a role in the energy industry.[636] Aside from this, AER has also entered into an MOU with AEMC and the Australian Competition and Consumer Commission, which is responsible for the enforcement of competition laws in the energy industry.[637]

As with these other markets, our regulatory bodies which would have authority over the WESM and the EDM may consider entering into similar MOUs and cooperation agreements or joint issuances that would outline their respective functions and responsibilities, with the objective of achieving better coordination and delineation of functions.

For instance, the SEC and the ERC can issue joint circulars clarifying their respective licensing requirements or how the conditions for a license in one can affect the license in the other. They can pass joint rules providing for when ERC-imposed administered prices can or cannot affect the trades in the EDM, which are referenced on the WESM. In like manner, the ERC and PCC can enter into an MOU delineating their investigative powers over competition law concerns.

B. MARKET STRUCTURE

As discussed in the previous chapter, the current legal landscape presents certain challenges to setting up an ideal EDM in the Philippines. Current legislation presents complications in trading particular derivative transactions such as forwards and futures that are cash settled and contracts for difference. As previously noted, Article 2018 of the Civil Code, the Onapal Case, and the absence on the rules on commodity futures contracts present challenges to the legality of entering into these derivatives and trading them in an organized market.

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[634] Memorandum of Understanding *between* Australian Energy Regulator *and* Australian Energy Market Operator, https://www.aemo.com.au/-/media/Files/PDF/MOU-AER-AEMO-July-2011.pdf (last accessed May 9, 2017).

[635] Memorandum of Understanding *between* Australian Energy Market Operator Limited *and* The Australian Securities and Investment Commission, https://www.aemo.com.au/-/media/Files/PDF/MOU-ASIC-AEMO-Nov2012.pdf (last accessed May 9, 2017).

[636] Memorandum of Understanding *between* Independent Competition and Regulatory Commission *and* Australian Energy Regulator, https://www.aer.gov.au/system/files/MOU%20between%20AER%20and%20ICRC.pdf (last accessed May 9, 2017).

[637] Memorandum of Understanding *between* Australian Energy Market Commission, Australian Energy Regulator *and* Australian Competition and Consumer Commission, https://www.aer.gov.au/system/files/Memorandum%20of%20Understanding%20between%20AER%2C%20ACCC%20and%20AEMC.pdf (last accessed May 9, 2017).

That said, an EDM may be gradually established in steps based on the changes in legislation that need to be undertaken to have a complete and fully operational EDM, and are arranged in the degree of difficulty in securing these changes in legislation. The first step considers setting up an EDM without any change in current legislation in the event that there is interest to set up the EDM immediately. The second step considers setting up an EDM through the issuance of administrative rules and regulations, which are relatively more expedient to pass than statutes in Congress. The third step considers setting up an EDM through changes in statutes passed by Congress.

These steps set out what would theoretically and legally possible – and not necessarily, what would be ideal – in light of current legal milieu and the legal challenges identified in Chapter IV. Indeed, as a practical note, the first step may be omitted and that the EDM be established only after certain administrative regulations are obtained, particularly the SEC commodity futures contracts rules, which would provide greater detail on the licensing, registration and other procedures for trading of commodity futures contracts, including electricity derivatives.

1. STEP ONE: EDM UNDER CURRENT LEGISLATION

The first step considers the current legal landscape, where Article 2018 of the Civil Code, the Onapal Case, and the suspension of the SEC commodity futures contracts rules are in effect and binding. To begin with this step, as mentioned above, it is suggested that an SEC opinion be obtained confirming that *(a)* forwards are not contemplated in the term "commodity future contract" and therefore may be traded in the absence of SEC commodity futures contracts rules, and *(b)* options contemplated under the EDM may also be entered into in the absence of commodity futures contracts rules.

a. ORGANIZED MARKET

Under this regime, certain electricity derivatives may be sold, traded, or distributed either in an exchange or an OTC market, or in both.

Under the SRC, no person may make use of any facility of an exchange in the Philippines to effect any transaction in a security, or to report such transaction, unless the exchange is registered as such in the SEC.[638] Section 33 of the SRC provides that any exchange may be registered as such by filing an application for registration with the SEC.[639] Registration shall be granted to an applicant upon compliance with

[638] *See* Securities Regulation Code, Section 32.

[639] The application must be in such form and must contain such information and supporting documents that the SEC shall prescribe, which includes the following: *(a)* an undertaking to comply and enforce by its members with the provisions of the SRC, its implementing rules and regulations and the rules of the exchange, *(b)* the organizational charts of the exchange, rules of procedure, and a list of its officers and members, *(c)* copies of the rules of the exchange, and *(d)* an undertaking that in the event a member firm becomes insolvent or when the exchange shall have found that the financial condition of its member firm has so deteriorated that it cannot readily meet the demands of its customers for the delivery of

the conditions laid down in the SRC, which includes, among others: *(a)* that the applicant is organized as a stock corporation, [640] *(b)* that the applicant complies with the guidelines on the ownership of exchange[641] as well as the rules on membership in the exchange[642], and *(c)* the applicant complies with the rules on the segregation and limitation of functions of members, brokers and dealers.[643]

Meanwhile, and as mentioned in Chapter II, the SEC has promulgated rules governing OTC markets in 2006. Under the OTC Rules, no person is allowed to create or operate an OTC market unless he is a registered broker, dealer or salesman or a broker or dealer in an OTC market.[644] A group of persons may operate an OTC market by forming an association of brokers and/or dealers pursuant to Section 39 of the SRC which shall act as a SRO or unless the persons are currently members of an SRO.[645]

b. DERIVATIVE PRODUCTS

Given the current legal framework, the only derivatives that may be traded in an exchange and/or OTC market, with relatively minimal risk of being questioned, are forwards. Forwards, as defined under the 2015 SRC IRR, *(a)* requires actual delivery and therefore is allowed under Article 2018 of the Civil Code and the Onapal Case, and *(b)* does not appear to be included in the term "commodity futures contracts" and as such, do not require SEC commodity futures rules. This should be confirmed by the SEC *en banc.*

As discussed above, forwards between generation utilities/suppliers and distribution utilities and the associated generation costs would be subject to review and regulation by the ERC under Sections 25 and 45 of the EPIRA, if the costs are intended to be passed on to captive customers.

Electricity options, while we believe do not fall under the prohibition in Article 2018 as discussed in Chapter IV,[646] appear to fall under the category of "commodity futures contracts," the rules for the trading of which are currently suspended.[647]

Electricity futures and contracts for difference may engender the risks discussed above[648] on account of Article 2018 of the Civil Code and the Onapal Case, as well the SEC's suspension of the rules for trading in commodity futures contracts.

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securities and/or payment of sales proceeds, the exchange shall, upon order of the SEC, take over the operation of the insolvent member firm and immediately proceed to settle the member firm's liabilities to its customers.

[640] *See* Securities Regulation Code, Section 33.2(a).
[641] *Id*., Sections 33.2(b) and (c).
[642] *Id*., Sections 33.2(d), (e), (f), (g) and (h).
[643] *Id*., Section 34.
[644] *See* SEC Memo. Circ. No. 14, s. 2006, Section 4(A)(2).
[645] *Id*., Section 5.
[646] This memorandum does not consider the commercial and technical feasibility of setting up an exchange or OTC where only and options would be traded.
[647] *See* Chapter IV, Part B(3) of this Report.
[648] *See* Chapter IV, Part B(1) & (2) of this Report.

c. MARKET PARTICIPANTS

The market participants at this stage can only include electric power industry participants, namely, generation companies, NGCP, distribution utilities and retail electricity suppliers.

First, since the contracts can be settled only through actual delivery of electricity, necessarily, only electric industry participants with a physical connection to the grid would be able meet this obligation and directly participate in trading.

Second, banks and insurance companies, while allowed to deal with derivatives, are not allowed under the current legal framework to deal in electricity derivatives. Under the existing regulations, derivative activities of banks and insurance companies appear to be limited to those where the underlying asset is cash, cashflow, or interests.[649]

In this regard, the SRC provides that no person shall engage in the business of buying or selling securities in the Philippine as a broker or dealer, or act as a salesman, or an associated person of any broker or dealer unless registered as such with the SEC.[650] Thus, electricity industry participants participating in the market must separately register with the SEC as dealer or broker. Their salesmen and associated persons must likewise register with the SEC.

In this connection, the SEC shall promulgate rules and regulation prescribing the qualifications for registration of each category of applicant, which shall, among other things, require as a condition for registration that:

(a) If a natural person, the applicant satisfactorily pass a written examination as to his proficiency and knowledge in the area of activity for which registration is sought;

(b) In the case of a broker or dealer, the applicant satisfy a minimum net capital as prescribed by the SEC, and provide a bond or other security as the SEC may prescribe to secure compliance with the SRC; and

(c) If located outside of the Philippines, the applicant files a written consent to service of process upon the SEC.[651]

Qualifications for membership in an exchange are usually provided in the rules of the exchange. On the other hand, a broker or dealer may participate in an OTC market only if he is a member of an SRO that has been registered with the SEC for the purpose of regulating and supervising the activities of a broker or dealer in an OTC market.[652] If the broker or dealer is a member of an existing SRO which currently

[649] *See* 2016 MORB, Section X611.1 and Insurance Circular Letter No. 056-15.
[650] *See* Securities Regulation Code, Section 28.1.
[651] *Id*., Section 28.4.
[652] *See* SEC Memo. Circ. No. 14, s. 2006, Section 4.

regulates a market other than the OTC market, he will be allowed to participate subject to proof that his current SRO can and has committed to regulate his activities in the OTC market.[653] The current SRO must also file an amendment to its registration with the SEC for this purpose.[654]

The OTC Rules also provide for the qualifications of an investor in the market. A qualified investor is a qualified buyer under Section 10.1 (L) of the SRC and any of the institutional accounts defined under the SRC IRR or such other person declared qualified by the SEC.[655] When deemed qualified, the investor may directly participate in the OTC market subject to certain conditions.[656] Otherwise, a non-qualified investor may participate only through a broker or by participating in a registered or chartered collective investment scheme.[657]

2. STEP TWO: EDM WITH ADMINISTRATIVE AMENDMENTS

The second step involves amendments to or passage of administrative issuances. These include: *(a)* the lifting by the SEC of its suspension of the CFC Rules or, in lieu thereof, passage by the SEC of new rules on commodity futures trading, and *(b)* the passage of new rules to allow banks (and consequently, insurance companies) to trade in electricity derivatives.

a. ORGANIZED MARKET

Similar to the first step, the EDM may be organized as an exchange or OTC market.

b. DERIVATIVE PRODUCTS

If the suspension on the SEC rules on commodity futures contracts are lifted or new rules are issued, electricity options may be traded in this step, with minimal risk of being questioned, in addition to the electricity forwards.

Except for options, it appears that only market participants with a physical connection to the grid would be able to transact in forwards and futures settled through delivery. Physical settlement would not be feasible for those without connection to the grid.

Allowing the intermediate trading of cash-settled futures with the condition that at the time of delivery the futures are transferred to a participant with a physical connection to the grid (and can therefore receive electricity) would likewise engender the same risk discussed above[658] on account of Article 2018 of the Civil Code and the Onapal Case. Under Philippine law, a void contract is void from its inception and

[653] *Id*., Section 6.
[654] *Id*., Section 8.
[655] *Id*., Section 2(J).
[656] *Id*., Section 7.
[657] *Id*., Section 7.
[658] *See* Chapter IV, Part B(1) & (2).

cannot validated or ratified.[659] A transferee to a contract acquires no better rights than the transferor[660] on the theory that the spring cannot rise higher than its source.[661] The parties to a void contract also do not acquire (much less, can validly transfer) enforceable rights thereunder.[662] Therefore, even the physical settlement by a transferee may not be able to cure the defect of the original contract.

c. MARKET PARTICIPANTS

Similar to the first step, the market participants in the EDM at this stage may include electric power industry participants and all other persons and entities that meet the SEC requirements for trading in a market. Additionally, banks and insurance companies may also be allowed to trade[663] to promote liquidity in the market, which is essential to a well-functioning EDM.[664] However, as discussed above, participants without a physical connection to the grid may not be able to trade in forwards, which would have to be settled through actual physical delivery in light of Article 2018 and the Onapal Case. Thus, banks and insurance companies (or those without a physical connection to the grid) can only directly trade in options at this stage.

3. STEP THREE: EDM WITH STATUTORY AMENDMENTS

The third step involves statutory changes, mainly, the repeal or amendment of Article 2018 of the Civil Code (and by extension, the Onapal Case), as well as the creation of an explicit legal framework for the establishment of an EDM.

a. ORGANIZED MARKET

Similar to the first and second step, the EDM may be organized as an exchange or OTC market.

b. DERIVATIVE PRODUCTS

If Article 2018 is repealed or amended, electricity forwards and futures settled through cash payment without actual delivery of the underlying commodity (similar to those traded in other jurisdictions) may be traded in addition to the electricity options, and forwards and futures settled by physical delivery.

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[659] *See Julian Francisco v. Pastor Herrera,* G.R. No. 139982, November 21, 2002.
[660] *See Republic of the Philippines v. Hon. Mamindiara P. Mangotra,* G.R. Nos. 170375, 170505, 17355-56, 173401, 173563-64, 178779, 178894, October 13, 2010.
[661] *Id*.
[662] *See Chavez v. Presidential Commission on Good Governance,* G.R. No. 130716, May 19, 1999; *see also Hulst v. PR Builders, Inc.,* G.R. No. 156364, September 3, 2007
[663] This legal memorandum does not consider whether participating in the EDM would be commercially and technically feasible for banks and insurance companies.
[664] To recall, under the 2016 MORB and Insurance Circular No. 056-15, banks can only trade in cash-based derivatives and insurance companies, in derivatives for which a universal or commercial bank is authorized to engage in as dealer.

c. MARKET PARTICIPANTS

Similar to the second step, the market participants in the EDM at this stage may include electric power industry participants and all other persons and entities that meet the SEC requirements for trading in a market, including banks and insurance companies.

A summary of the proposed steps in the establishment of a Philippine EDM is as follows:

	STEP 1	STEP 2	STEP 3
LEGAL REGIME	Current legislation*:* • Article 2018 of the Civil Code in effect • *Onapal* is good law • SEC commodity futures rules suspended • BSP regulations allow banks to trade in cash-based derivatives • IC regulations allow insurance companies to trade in certain derivatives with certain banks Subject to an SEC opinion *en banc* confirming that forwards are not covered by the proscription on trading commodities futures contracts in the absence of SEC rules on commodity futures	Changes in administrative issuances: • Lifting of suspension or passage of new SEC commodity futures rules • Passage of rules allowing banks – and consequently insurance companies – to trade in electricity derivatives	Changes in statute: • Repeal of Article 2018 of the Civil Code or amendment to create an exception for electricity derivatives • Adoption of a legal framework for the establishment of an EDM
STRUCTURE	• Exchange and/or OTC market	• Exchange and/or OTC market	• Exchange and/or OTC market
OPERATOR	• Exchange: SRO • OTC: registered broker, dealer or salesman of a	• Exchange: SRO • OTC: registered broker, dealer or salesman of a	• Exchange: SRO • OTC: registered broker, dealer or salesman of a

	STEP 1	STEP 2	STEP 3
	broker or dealer in an OTC market or a group thereof which shall act as an SRO	broker or dealer in an OTC market or a group thereof which shall act as an SRO	broker or dealer in an OTC market or a group thereof which shall act as an SRO
DERIVATIVES	• Forwards	• Forwards • Options	• Forwards • Options • Futures (*i.e.* with cash settlement)
PARTICIPANTS	• Electricity industry participants	• Electricity industry participants • All other entities that meet SEC requirements • Banks • Insurance companies	• Electricity industry participants • All other entities that meet SEC requirements • Banks • Insurance companies

C. TRADING RULES IN THE EDM

In addition to laying down a sound regulatory framework for the EDM, there should likewise be rules that would govern entry and trading activities of participants, as well as the transactions in the EDM. These trading rules should include guidelines on: *(a)* the procedure for application for membership in the EDM,[665] *(b)* membership requirements in the EDM,[666] *(c)* payment of fees and settlement of contracts,[667] *(d)* the instances of non-compliance,[668] *(e)* the liabilities and consequences of force majeure,[669] *(f)* confidentiality and information sharing,[670] and *(g)* the modes of resolving disputes.[671]

1. PROCEDURE FOR APPLICATION FOR MEMBERSHIP IN THE EDM

The trading rules should authorize the exchange to establish minimum requirements (on a per membership category), examine the legal status, experience, and other

[665] *See* Nasdaq OMX Oslo ASA, General Terms Trading Rules, Section 3, http://www.nasdaqomx.com/digitalAssets/91/91702_140407-trading-rules---general-terms.pdf (last accessed June 22, 2017) (the "**NASDAQ OMX Trading Rules**").
[666] *Id*., Section 4.
[667] *Id*., Section 5.
[668] *Id*., Section 7.
[669] *Id*., Section 8.
[670] *Id*., Section 11.
[671] *See* Nasdaq OMX Oslo ASA, NASDAQ OMX Trading Rules, Section 14.

relevant information relating to any applicant or exchange member.[672] Applicants should likewise be required to submit information relating to its legal and financial status, organization, level of competence, and other relevant information that may aid the exchange in determining the applicant's fitness for membership.[673] In addition, regulators may consider requiring applicants, as part of its application, to submit a legal opinion on the applicant's ability to undertake the relevant exchange transactions to ensure that the exchange agreements (including all legal arrangements with the exchange) shall be valid and legally binding.[674] The guidelines must also state that the applicants shall be informed about the result in writing, and, if approved, the applicant and exchange shall execute the relevant trading agreements.[675]

2. MEMBERSHIP REQUIREMENTS IN THE EDM

Membership requirements in the EDM should ideally set out the exchange trading eligibility requirements, information obligations, authorizations of individuals, and representations and warranties.

In particular, the eligibility requirements for trading in the EDM should state that only eligible exchange members may trade in exchange-listed products.[676] The guidelines may also require that to be eligible for exchange trading, the exchange member must, at the time that each order or transaction is registered: *(a)* be also a clearing member that meets the requirements for clearing of the relevant exchange listed products, *(b)* not have its access to exchange trading or the trading system suspended or terminated, and *(c)* hold trading accounts for registration of exchange transactions in its own name.[677]

Information obligations may state that the exchange may, at any time, request for and obtain information on an exchange member's compliance, organization and technical systems, levels of experience and competence. These information shall aid the exchange in assessing the eligibility and status of the exchange member.[678] The trading rules may require exchange members to immediately notify the exchange in writing of the occurrence of certain events including: *(a)* any non-compliance events under the trading rules, *(b)* any disciplinary, criminal or regulatory proceedings related to trading and clearing activities involving the exchange member, *(c)* any default event or insolvency event, *(d)* any business reorganization of the exchange member, *(e)* any material changes to its business.[679]

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[672] *Id*., Section 3.1.
[673] *Id*., Section 3.5.
[674] *Id*., Section 3.6.
[675] *Id*., Section 3.8.
[676] *Id*., Section 4.1.1.
[677] *See* Nasdaq OMX Oslo ASA, NASDAQ OMX Trading Rules, Section 4.1.3.
[678] *Id*., Section 4.2.1.
[679] *Id*., Section 4.2.2.

The trading rules may authorize exchange members to appoint contact persons who shall be authorized to, among others, sign all instruments, give instructions, submit orders, enter into exchange transactions, claim trading errors, and perform other duties required under the rules.[680]

It is also important for the trading rules to set out the representations and warranties of its exchange members. Specifically, exchange members must represent and warrant that they are sophisticated, that is: *(a)* that it is properly staffed and organized to enable it to carry out, and its personnel have the necessary competence and knowledge for exchange transactions, *(b)* that it is aware of and understand the characteristics of the products and its related risks, *(c)* that it has entered into the exchange transactions after a full opportunity to review their terms and conditions, *(d)* that it has sufficient understanding of those terms and conditions and of their risks, and *(e)* it is capable of assuming those risks.[681] Exchange members should also be required to warrant, among others, that: *(a)* the execution, delivery, and performance of the relevant trading agreements and of exchange transactions do not violate or conflict with any applicable law, *(b)* it has obtained all required authorizations under applicable laws and these are in full force and effect, and *(c)* its obligations under each exchange transaction and trading rules constitute legal, valid, and binding obligations.[682]

3. PAYMENT OF FEES AND SETTLEMENT

Exchange trading may be subject to the payment of certain fees, while exchange transactions are subject to settlement. Thus, trading rules should set out guidelines on how exchange trading fees are invoiced, methods for settlement of membership fees and exchange transactions.[683]

4. INSTANCES OF NON-COMPLIANCE

Trading rules should likewise specify what are considered non-compliance events and whether these are material under the circumstances. These non-compliance events may result in the immediate suspension of the exchange members,[684] while material non-compliance events may be a ground for termination of an exchange membership agreement.[685]

5. LIABILITIES AND CONSEQUENCES OF FORCE MAJEURE

It is important for the trading rules to define force majeure and determine its consequences. For instance, if a force majeure prevents a party from performing its obligations under the trading rules, the time for performance shall be suspended for

[680] *Id*., Section 4.3.
[681] *Id*., Section 4.4.1.
[682] *Id*., Section 4.4.1.
[683] *See* Nasdaq OMX Oslo ASA, NASDAQ OMX Trading Rules, Section 5.
[684] *Id*., Section 7.4
[685] *Id*., Section 7.5.

as long as the force majeure subsists.[686] The rules may also impose restrictions on an exchange member's ability to claim relief in connection with the occurrence of a force majeure.[687]

The trading rules may excuse parties from liability for loss or damage arising from any act governed by such trading rules for as long as the party has not acted negligently or intentionally.[688] It can likewise impose limitations on the exchange's ability to recover from the same loss, as well as demand exchange members to indemnify the exchange against any cost, loss, or liability incurred by the exchange in certain instances, such as the occurrence of any non-compliance event, or a delay or failure by the indemnifying exchange member in the performance of its obligations.[689] Further, the trading rules may indicate that the rights specified therein are in full and final satisfaction of the rights of the non-defaulting party in the event of non-compliance events.[690]

6. CONFIDENTIALITY AND INFORMATION SHARING

Generally, the trading rules may consider information relating to transactions and information pertaining to the legal and financial status of an exchange member, its membership eligibility or business in general, shall be treated as confidential information.[691] Moreover, the trading rules may authorize the exchange to enter into information-sharing agreements or other arrangements or procedures with other market operators or clearing organizations for purposes of market surveillance of exchange listed products on the condition that the receiving entity is subject to materially similar confidentiality obligations.[692]

7. MODES OF RESOLVING DISPUTES

Finally, the trading rules should also state how disputes may be resolved. Arbitration may be used as the mode of resolving such disputes.[693]

[686] *Id*., Section 8.1.1.
[687] *Id*., Section 8.1.4.
[688] *Id*., Section 8.2.1.
[689] *See* Nasdaq OMX Oslo ASA, NASDAQ OMX Trading Rules, Section 8.3.1.
[690] *Id*., Section 8.4.1.
[691] *Id*., Section 11.1.
[692] *Id*., Section 11.3.
[693] *Id*., Section 14.2.

GLOSSARY

TERM	DEFINITION
1980 CFC Rules	Rules and Regulations Governing Commodity Futures Exchanges, Futures Commission Merchants, Floor Brokers, Commodity Futures Associations, Commodity Pool Operators and Commodity Advisors
1983 CFC Rules	Revised Rules on Commodity Futures
1999 CFC Rules	New Rules and Regulations on Future Trading
2003 SRC IRR	2003 SRC's Implementing Rules and Regulations
2015 SRC IRR	2015 SRC's Implementing Rules and Regulations
ACER	European Agency for the Cooperation of Energy Regulators
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
AS	Australian Securities
ASIC	Australian Securities and Investments Commission
ASX	Australian Securities Exchange
ASX Clear	Refers to central counterparty for all futures and options products traded on ASX
ATS	Alternative Trading System
ATS Rules	2004 Rules and Regulations on Alternative Trading System
BCQ	Quantities/capacity covered by bilateral supply contracts
BSP	Bangko Sentral ng Pilipinas
CEA	United States Commodity Exchange Act
CFTC	United States Commodity Futures Trading Commission
CME	Chicago Mercantile Exchange
Contestable Market	Refers to the electricity end-users who have a choice of a supplier of electricity, as may be determined by the ERC in accordance with the EPIRA (EPIRA, Section 4(h))
Derivatives	Refers to financial instrument that primarily derives its value from the performance of any underlying variable
DOE	Department of Energy
DS Futures	Deferred Settlement Futures
DVP	Delivery versus Payment
EDM	Electricity Derivatives Market
eDVP	Expanded DVP system
EEX	European Energy Exchange
EIA	New Zealand Electricity Industry Act 2010
EIPC	Electricity Industry Participation Code 2010
Electricity Act	Electricity Act of Singapore
EMA	Singapore Energy Market Authority
EMA Act	Energy Market Authority of Singapore Act of 2001
EMC	Energy Market Company

TERM	DEFINITION
Energy Act	Norwegian Government's Act No. 50 of June 29 1990: Act Relating to the Generation, Conversion, Transmission, Trading, Distribution and Use of Energy, Etc.
EPAct	United States Energy Policy Act of 1992
EPIRA	Electric Power Industry Reform Act of 2001
EPIRA IRR	Implementing Rules and Regulations of the EPIRA
ERC	Energy Regulatory Commission
ERC Competition Rules	ERC Competition Rules and Complaint Procedures
ERGEG	European Regulators' Group for Electricity and Gas
EU	European Union
Ex-Ante Price	Refers to the locational marginal price at the start of a trading interval
Ex-Ante Quantity	Refers to the quantity of electricity scheduled for injection into the grid
Ex-Post Price	Refers to the locational marginal price at the end of a trading interval
Ex-Post Quantity	Refers to the metered quantity actually injected into the grid
FERC	Federal Energy Regulatory Commission
FMA	New Zealand Financial Markets Authority
FMCA	New Zealand Financial Markets Conduct Act 2013
FTR Development	Financial Transmission Rights Development
FTRs	Financial Transmission Rights
FX	Foreign Exchange
GBL	General Banking Law of 2000
GOCC	Government -owned or -controlled corporation
ISDA	International Sap Dealers Association
ISOs	Independent System Operators
LCE	Loss and Constraint Excess rentals
Market Operator	Refers to the operator that implements the WESM in accordance with the WESM Rules. The market operator shall be an autonomous group, constituted by DOE, with equitable representation from electric power industry participants, initially under the administrative supervision of the TRANSCO. (EPIRA, Section 30)
MDOM	Refers to Market Dispatch Optimization Model which simultaneously determines dispatch targets for the end of a trading interval, reserve allocations for the trading interval, associated energy prices at all trading nodes in the power system and when applicable reserve prices for all reserve regions. (WESM Rules, Clause 3.6.1.1)
MIFE	Manila International Futures Exchange
MORB	2016 Manual of Regulation for Banks
MORNBFI	Manual of Regulations for Non-Bank Financial Institutions

TERM	DEFINITION
MOU	Memoranda of Understanding
MPE	Norwegian Ministry of Petroleum and Energy
NASDAQ	National Association of Securities Dealers Automated Quotations
NASDAQ Clearing	NASDAQ Clearing AB which is a multi-asset clearing house approved by Sweden's Financial Supervisory Authority
NASDAQ OMX Trading Rules	NASDAQ OMX General Terms Trading Rules
NEA	National Electrification Administration
NEM	Australian National Electricity Market
NEMS	National Electricity Market of Singapore
NER	Australian National Electricity Rules
NGCP	National Grid Corporation of the Philippines
NPC	National Power Corporation
NVE	Norwegian Water Resources And Energy Administration
NYISO	New York Independent System Operator
NYMEX	New York Mercantile Exchange
NYPP	New York Power Pool
NZX	New Zealand Exchange
Onapal Case	Onapal Philippines Commodities, Inc. v. Court of Appeals, G.R. No. 90707, February 1, 1993
Order 888	Federal Energy Regulatory Commission Order No. 888
OTC	Over-the-Counter
OTC Rules	SEC Memorandum Circular No. 14, s. 2006
PCA	Philippine Competition Act
PCC	Philippine Competition Commission
PD	Presidential Decree
PDEx	Philippine Dealing and Exchange Corporation
PDM	Price Determination Methodology
PEMC	Philippine Electricity Market Corporation
Philippine Congress	Refers to the legislative branch of the Philippine Government
Philippine Energy Plan	This provides for an integrated and comprehensive exploration, development, utilization, distribution, and conversation of energy resources with a preferential bias for environment-friendly, indigenous and low-cost sources of energy and with a policy direction towards the privatization of government agencies related to energy, deregulation of the power and energy industry and reduction of dependency on oil-fired plants (EPIRA, Chapter III, Section 37(b)).
Philippine Government	Refers to the national government of the Republic of the Philippines
Philippine Information Agency	An agency created by Executive Order No. 100, s. 1986
Power Commission	Joint Congressional Power Commission

TERM	DEFINITION
Power Development Program	This refers to a program which shall consider and integrate the individual or joint development plans of the transmission, generation and distribution sectors of the electric power industry (EPIRA, Chapter III, Section 37(c))
PSALM	Power Sector Assets and Liabilities Management Corporation
PSE	Philippine Stock Exchange
PSSC	Philippine Securities Settlement Corporation
RA	Republic Act
RCOA	Retail Competition and Open Access
RES	Retail Electricity Supplier
Revised Securities Act	Batas Pambansa Blg. 178
SCCP	Securities Clearing Corporation of the Philippines
SEC	Securities and Exchange Commission
Securities Act	Commonwealth Act No. 83
Securities Trading Act	Norwegian Securities Trading Act 1997
SGX	Singapore Exchange
SRC	Securities Regulation Code
SRC IRR	SRC's Implementing Rules and Regulations
SRO	Self-Regulatory Organization
TRANSCO	National Transmission Corporation
TSO	Transmission System Operator
TTA	Total Trading Amount
WESM	Wholesale Electricity Spot Market
WESM Merit Order Table	WESM Dispatch Protocol
WESM Rules	Wholesale Electricity Spot Market Rules
WITS	New Zealand Wholesale Information and Trading System

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