

ARTICLES

Does Thailand Fulfill the ASEAN Requirements for Foreign Direct Investment under Partial Liberalization in Electricity Industry?

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This paper explores Thailand's partial liberalization of the electricity industry and to what extent is a Foreign Direct Investment (FDI) allowed in the electricity sector. As Thailand is an ASEAN Member State, the paper aims to review whether the partial liberalization under the ESB model is consistent with the commitments of the ASEAN. The paper examines both the ACIA and the AFAS, and it finds that Thailand has no commitment under both agreements relevant to entry of a FDI in its electricity sector. However, Thailand already allows the entry of a FDI in the power generation business which is aligned with the principles of market access and National Treatment that fulfill the obligations under the ACIA and the AFAS in case Thailand will make any commitments in the future. It is noted that electricity transmissions and the distribution and supply businesses are still prohibited for both Thai and foreign investors.

Keywords

ASEAN, ACIA, AFAS, Electricity, FDI; Trade in Service, Thailand

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I. Introduction

The electricity is the ‘growth engine’ of modern industrial economies. As the centralized characteristics of the power systems conceptually make them a ‘public utility’,¹ ensuring a secure electricity supply is an important policy objective in virtually all modern economies.² However, the idea that only public ownership can deliver security of electricity supply is indeed a very old one.³ The concept of decentralization and liberalization has existed in the electricity sector since the late 1980s and early 1990s. The long-term goal of electricity market liberalization is to create benefits to both society and consumers through price and service quality.⁴

Considering the importance of electricity industry in social welfare and economic development, reforms in this sector are crucial.⁵ Many countries around the world have experience in reforming their electricity industries on different levels.⁶ In fact, there are various degrees of liberalization for countries to choose when opening their electricity markets. While *full liberalization* of the electricity industry means to introduce competition and choice in as many parts of the value chain as possible, from generation to consumption of electricity, *partial liberalization* aims to introduce competition into some part of the value chain.⁷ Finally, the World Bank admits that its “one-size-fits-all” policy of privatization and liberalization⁸ of electricity industries

¹ D. VICTOR & T. HELLER, *THE POLITICAL ECONOMY OF POWER SECTOR REFORM: THE EXPERIENCES OF FIVE MAJOR DEVELOPING COUNTRIES* (2004), *recited from* R. NEPAL & T. JAMASB, *CAUGHT BETWEEN THEORY AND PRACTICE: GOVERNMENT, MARKET, AND REGULATORY FAILURE IN ELECTRICITY SECTOR REFORMS 2* (2013).

² IEA, *SECURITY OF SUPPLY IN ELECTRICITY MARKETS: EVIDENCE AND POLICY ISSUES 9* (2002), *available at* https://folk.uib.no/secea/databank/security-of-supply/security_of_supply_in_electricity_markets_-_evidence_and_policy_issues_iea_and_oecd_2002.pdf (last visited on Oct. 22, 2018).

³ J. Vasconcelos, *Some brief remarks on security of electricity supply*, CIGRE, Aug. 30, 2004, *available at* <https://www.ceer.eu/documents/104400/-/e161c0ba-59ef-2b01-2403-e9d854a1b447> (last visited on Oct. 13, 2018).

⁴ P. Joskow, *Lessons learned from electricity market liberalization*, 29 *ENERGY J.* 11 (2008), *available at* <https://economics.mit.edu/files/2093> (last visited on Oct. 13, 2018).

⁵ *Supra* note 1, at 2.

⁶ Functions of the electricity industry generally consist of five segments, namely, generation, transmission, distribution, and system operation and supply. Not all functions of the industry can be competitive, but just some of them. For uncompetitive parts of industry, the regulation is still necessary. As academics stated: “Competition where possible, regulation where necessary.” See J. Kay & J. Vickers, *Regulatory Reform in Britain*, 7 *ECON. POL’Y* 286 (1988), *recited from* C. FOSTER, *PRIVATIZATION, PUBLIC OWNERSHIP AND REGULATION OF NATURAL MONOPOLY* 145 (1992).

⁷ OECD/IEA, *LESSONS FROM LIBERALIZED ELECTRICITY MARKETS 47* (2005), *available at* <https://www.iea.org/publications/freepublications/publication/LessonsNet.pdf> (last visited on Oct. 13, 2018). [Emphasis added]

⁸ That is why the concept of liberalization implementing in other sectors such as trade in goods or services cannot be applied in electricity sectors. One of the reasons behind this is that the characteristics of electricity are different from other commodities in many aspects such as lacking of storage potential, high cost of outages, fluctuation, transformation, and technical specifications. See P. CAMERON, *COMPETITION IN ENERGY MARKETS: LAW AND REGULATION IN THE EUROPEAN UNION*

is not the perfect solution for all countries.⁹

Thailand was one of the countries which chose to introduce partial liberalization in its electricity industry. The electricity industry in Thailand began with vertical integrated structure and monopoly at all levels. Later on, reform was implemented when Thailand was unable to meet the rapid increasing demand for electricity. In 1992, the Thai government allowed the private investors to participate in the form of Small Power Producer (“SPP”) and Independent Power Producer (“IPP”) to increase generation capacity in the industry. The SPP and the IPP programs appeared to be the first steps of electricity reform in Thailand. Afterwards, the Thai Cabinet approved an Enhanced Single Buyer (“ESB”) model as an industry structure which currently is still in use. At a national level, it can be said that Thailand has implemented partial liberalization in the electricity sector by introducing competition in generation in order to enhance security of electricity supply.

At an international level, meanwhile, the international trade and foreign direct investment (“FDI”) in the energy sector allows countries to balance supply and demand, lower supply costs, and to facilitate the financing constraints for these enormously expensive projects.¹⁰ In principle, liberalization would enhance the security of supply by increasing the number of market participants and improving the flexibility of the energy systems.¹¹ Energy security requires adequate and timely investment in the energy infrastructure. In this regard, electricity markets seem to be able to attract investment in generation capacity and to sustain reliability.¹² It can be said that liberalization has also fundamentally shifted the risks of electricity investment. Roques and Newbery maintained: “One of the theoretical major benefits of liberalization lies indeed in the redistribution of risks among the different stakeholders of the electricity industry.”¹³ Notably, a key task for governments is to ensure that policies and regulations provide an adequate framework for investment.¹⁴

22-3 (2007).

⁹ In June 2004, Francois Bourguignon, the World Bank Chief economist, stated: “There was probably some irrational exuberance in recent years on the potential benefits of privatization.” See S. Thomas, *Electricity liberalization: The beginning of the end*, *Public Services International Research Unit* 3 (Sept. 2004), available at http://gala.gre.ac.uk/3754/1/PSIRU_9253_-_2004-09-E-WEC.pdf (last visited on Oct. 13, 2018).

¹⁰ S. RAHMAN ET AL., *ENERGY TRADE IN SOUTH ASIA: OPPORTUNITIES AND CHALLENGES* 8 (2012).

¹¹ Centre for European Policy Studies, *Security of energy supply: A question for policy or the markets?*, available at <https://www.ceps.eu/system/files/book/37.pdf> (last visited on Oct. 13, 2018).

¹² *Supra* note 2, at 1.

¹³ F. Roques, D. Newbery & W. Nuttall, *Generation adequacy and investment incentives in Britain: Form the pool to NETA* (Cambridge Working Papers in Economics No. CWPE 0459) at 31, available at <https://www.repository.cam.ac.uk/bitstream/handle/1810/131567/ep58.pdf> (last visited on Oct. 13, 2018).

¹⁴ *Supra* note 2.

As Thailand is a member of the ASEAN, it has a commitment with the ASEAN Economic Community (“AEC”) to make the ASEAN a single market as stipulated in the AEC Blueprint.¹⁵ In the AEC Blueprint, the ASEAN aims to transform their economic community into a region with free flow of goods, services, investment, skill labor and free flow of capital.¹⁶ In addition, there are three main agreements for transforming the ASEAN to a single market which are the ASEAN Trade in Goods Agreement (“ATIGA”),¹⁷ the ASEAN Framework Agreement on Service (“AFAS”),¹⁸ and the ASEAN Comprehensive Investment Agreement (“ACIA”).¹⁹ Under an ESB model, Thai investors can operate in power generation business, so that this may pose a question of whether the entry of FDI is allowed in Thai electricity sector. Also, as Thailand is an ASEAN Member State, another question would arise whether a partial liberalization under the ESB model is consistent with the ASEAN commitments.

The primary purpose of this research is to review whether Thailand’s partial liberalization under ESB model is consistent with ASEAN requirement for a FDI. This paper is composed of six parts including Introduction and Conclusion. Part two will discuss the definition of electricity as goods or services within the context of the World Trade Organization (“WTO”) and the ASEAN. Part three will explore the principles of the ACIA and the AFAS including Thailand obligations to enter a FDI in the electricity sector under these two agreements. Part four will address the concept of Thailand’s partial-liberalized electricity industry and Thai laws on electricity industry operations. Part five will analyze the connection between Thai laws and its commitment under the ACIA and the AFAS.

II. Defining ‘Electricity’ in the Context of the ASEAN Agreements

It is difficult to define ‘energy’ whether it is a good or service because of its dual

¹⁵ See AEC Blueprint 2007, available at <http://asean.org/wp-content/uploads/archive/5187-10.pdf> (last visited on Oct. 13, 2018).

¹⁶ *Id.*

¹⁷ ATIGA 2009, available at http://fta.miti.gov.my/miti-fta/resources/2.ASEAN_Trade_in_Goods_Agreement_.pdf (last visited on Oct. 13, 2018).

¹⁸ ASEAN Framework Agreement on Services (AFAS), 1995, available at <http://investasean.asean.org/files/upload/Doc%2008%20-%20AFAS.pdf> (last visited on Oct. 13, 2018).

¹⁹ ASEAN Comprehensive Investment Agreement (ACIA) 2009, available at http://www.asean.org/storage/images/2013/economic/aia/ACIA_Final_Text_26%20Feb%202009.pdf (last visited on Oct. 13, 2018).

characteristics.²⁰ The case of electricity is more complicated than other types of energy. In the context of the WTO, electricity was formerly not included or excluded as a good both in the GATT 1947²¹ and the Harmonized Commodity Description and Coding System (“HS”).²² The WTO Services Sectoral Classification List²³ does not include electricity as a service, either. The only evidence that the GATS was trying to include ‘electricity’ may be found in the reference as “Services Incidental to Energy Distribution.”²⁴

There are two main reasons why it is difficult to clearly define electricity. One is that electricity has special features different from other commodities. The demand fluctuates in the various time horizons both randomly and non-randomly; it cannot be economically stored.²⁵ This means that: (1) generation capacity needed to meet peak demand is partly unused in lower demand periods; (2) reserve capacity required to meet periods of demand fluctuations or generation shortfalls; and (3) a diversified investment of power generating technologies is needed to provide the different loads of electricity at a minimal cost.²⁶ As electricity cannot be economically stored like other commodities, drafters of the GATT assume that electricity should not be classified as a good.²⁷

The other is that due to the vertically integrated structure of the electricity sector, it is difficult to distinguish whether electricity is a good or a service. Generally, functions of the electricity industry consist of five segments such as generation,²⁸

²⁰ Council of Trade in Services, Background Note by the Secretariat: Energy Services, WTO Doc. S/C/W/52 (Sept. 9, 1998), available at https://www.wto.org/english/tratop_e/serv_e/w52.doc (last visited on Oct. 13, 2018).

²¹ The Statistic Division of the Department of Economics and Social Affairs of United Nations maintain a list of international family of economic and social classifications, recited from P.-O. Pineau, *Electricity Services in the GATS and the FTAA*, 12 ENERGY STUD. REV. 264 (2004), available at <https://energystudiesreview.ca/esr/article/download/465/445> (last visited on Oct. 13, 2018).

²² The Harmonized Commodity Description and Coding System (HS) is maintained by the World Custom Organization. See *supra* note 21.

²³ WTO, Services Sectoral Classification List, WTO Doc. MTN.GNS/W/120 (July 10, 1991), available at https://www.wto.org/english/tratop_e/serv_e/mtn_gns_w_120_e.doc (last visited on Oct. 13, 2018).

²⁴ *Id.*

²⁵ C. Ocana, *Regulatory reform in the electricity supply industry: an overview*, 3 OGEL (2003), available at <https://www.ogel.org/article.asp?key=456> (last visited on Oct. 13, 2018).

²⁶ *Id.*

²⁷ Council of Trade in Services, *supra* note 20.

²⁸ Generation is the activity of producing electricity. See S. Dow, Lecturer Note on Downstream Energy Law and Policy (2010) (unpublished manuscript) (on file with CEPMLP, University of Dundee).

transmission,²⁹ distribution,³⁰ system operation,³¹ and supply.³² Not surprisingly, the electricity system is a vertically integrated utility, because one utility normally handles all the functions in order to sell or supply the power to the end consumers.

Later on, however, the WTO considered electricity as ‘goods’ according to World Trade Report 2010³³ and then categorized it as electrical energy under the HS code of 271600 by the World Customs Organization³⁴ as a result of the WTO Customs Valuation Agreement (“CVA”).³⁵ It aims for a fair, uniform and neutral system for the valuation of goods for customs purposes.³⁶ Notably, the Appellate Body in *Canada-Renewable Energy* published their findings based on the ground that electricity was a good.³⁷ The dispute between Canada and Japan concerned the domestic content requirement of Ontario’s feed-in tariff which was challenged as a discriminatory investment-related measure and as a prohibited import substitution subsidy. The Panel and Appellate Body determined that Canada was violating the GATT and the agreement on Trade-related Investment Measures (“TRIMs”).³⁸ The Appellate Body upheld the Panel’s findings that the measures at hand constituted financial contributions in the form of government purchases of goods in accordance with Article 1.1(a)(1)(iii) of the Agreement on Subsidies and Countervailing Measures (“ASCM”).³⁹ Consequently, the finding on this case has addressed that “electricity is a good” establishes a legal precedent for the following case in the WTO dispute

²⁹ *Id.* Transmission is transportation at very high voltage levels.

³⁰ *Id.* Distribution is transportation at lower voltage levels from the interconnected network to end users.

³¹ *Id.* System operation is the co-ordination of transportation services to ensure that the system is constantly in a state of static electrical equilibrium.

³² *Id.* Supply is the delivery of electricity to end-users which includes the procurement of electric power and transportation services and the metering and billing of consumption.

³³ L. Macedo, *Electricity Energy and the WTO Customs Valuation Agreement* (WTO Research & Analysis, 2010), available at https://www.wto.org/english/res_e/publications_e/wtr10_forum_e/wtr10_2july10_e.htm (last visited on Oct. 13, 2018).

³⁴ H. Bahar & J. Sauvage, *Cross-Border Trade in Electricity and the Development of Renewables-Based Electric Power: Lessons from Europe* (OECD Trade and Environment Working Paper 2013), available at https://www.oecd-ilibrary.org/trade/oecd-trade-and-environment-working-papers_18166881 (last visited on Oct. 13, 2018).

³⁵ WTO, *Customs Valuation*, available at https://www.wto.org/english/tratop_e/cusval_e/cusval_e.htm (last visited on Oct. 13, 2018).

³⁶ *Supra* note 29.

³⁷ Appellate Body Report, *Canada-Certain Measures Affecting the Renewable Energy Generation Sector*, WTO Doc. WT/DS412, 426/AB/R (adopted May 6, 2013), available at https://www.wto.org/english/tratop_e/dispu_e/412_426abr_e.pdf (last visited on Oct. 13, 2018).

³⁸ *Supra* note 37

³⁹ WTO, *Canada-Renewable Energy/ Canada-Feed-In Tariff Program*, available at https://www.wto.org/english/tratop_e/dispu_e/cases_e/1pagesum_e/ds412sum_e.pdf (last visited on Oct. 13, 2018).

settlement.⁴⁰ Similar to the WTO, Thailand considers electricity a good, according to the Custom Tariff Decree B.E. (No.6) 2559. Electrical energy is categorized under the subheading HS code of 271600 by Thai Custom Tariff Law.⁴¹

Distinguishing electricity as a good or service is important due to the concern of appropriateness to the multilateral trade rules between the GATT and the GATS.⁴² The WTO trade rules separates goods from services. Obviously, the GATS provides that legally binding rules (including MFN, national treatment, market access and domestic regulation) would apply to the establishment of electricity services suppliers, while there are no comprehensive rules on investment for goods.⁴³

In the context of the ASEAN, electricity is not clearly defined by the Member States whether it is a good or service. Obviously, the ASEAN mentions electricity in the topic of the ASEAN Power Grid,⁴⁴ which was included in the ASEAN Plan of Action for Energy Cooperation (“APAEC”) 2016-2025. The APAEC is the blueprint for the energy sector cooperation in the ASEAN, endorsed by the 32nd ASEAN Ministers on Energy Meeting (“AMEM”) in the theme of “Enhancing Energy Connectivity and Market Integration in ASEAN to Achieve Energy Security, Accessibility, Affordability and Sustainability for All.”⁴⁵

Considering the definition of electricity in the context of the ASEAN, it is possible that the ASEAN may consider electricity as goods through the WTO approach. In the ASEAN Framework Agreement on Services (“AFAS”), electricity is mentioned as a “Services Incidental to Energy Distribution” as good as the GATS.⁴⁶ However, it is not mandatory, but optional for the ASEAN to follow the WTO’s ruling. Likewise the WTO, the implication of distinguishing the electricity whether it is goods or services is relevant to the applicability of the ASEAN Agreements. The ASEAN has legal instruments in place to inflow of goods and services in the ASEAN region such as the ASEAN Trade in Goods Agreement (“ATIGA”), the ASEAN Framework Agreement

⁴⁰ In *US - Stainless Steel*, The Appellate Body addressed: “Ensuring ‘Security and Predictability’ in the dispute settlement system, as contemplated in Article 3.2 of the DSU, implies that, absent cogent reasons, an adjudicatory body will resolve the same legal question in the same way in a subsequent case.” See Appellate Body Report, *United States - Final Anti-Dumping Measures On Stainless Steel From Mexico*, ¶ 160, WTO Doc. WT/DS344/AB/R (adopted Apr. 30, 2008), available at https://www.wto.org/english/tratop_e/dispu_e/cases_e/ds344_e.htm (last visited on Oct. 13, 2018).

⁴¹ Thailand Customs Tariff Decree (No. 6) B.E. 2559

⁴² *Supra* note 23.

⁴³ *Id.*

⁴⁴ ASEAN, ASEAN Power Grid Enhancing Electricity Interconnectedness, available at <https://www.asean.org/storage/images/2015/October/outreach-document/Edited%20APG-3.pdf> (last visited on Nov. 6, 2018).

⁴⁵ ASEAN, Overview of ASEAN Minister on Energy Meeting, available at <https://asean.org/asean-economic-community/asean-ministers-on-energy-meeting-amem> (last visited on Oct. 13, 2018).

⁴⁶ *Supra* note 20, at 28.

on Services (“AFAS”) and the ASEAN Comprehensive Investment Agreement (“ACIA”). In this regard, these agreements establish the different principles of liberalization of trade in goods, services and investment, respectively.

Providing that trading electricity is acknowledged as goods in the ASEAN, the rules of the ATIGA will be applied to such transaction and a FDI in electricity sector will fall under the ACIA. However, if electricity is recognized as services under the ASEAN, the AFAS and its underlying principles will govern such electricity trading. As a result, a FDI by establishing a commercial presence in such electricity sector may fall under the AFAS. As the international trades in services can take place through four modes of supply, there is a close link between a commercial presence of Mode 3 in the AFAS and a FDI.⁴⁷ In order to provide service across the borders, international trade in services requires close and continuous contact between producers and consumers, which can often be achieved through locally established affiliates (Mode 3, commercial presence). FDI is to reflect the objective of an investor to obtain a lasting interest in a foreign enterprise.⁴⁸ Although not all FDI results in establishing a commercial presence as defined in the GATS or the AFAS, it is nevertheless a precondition for FDI.⁴⁹ It can be thus said that the foreign commercial presence is a subset of the FDI.⁵⁰

To sum this up, the FDI in the electricity sector in the ASEAN can be categorized under the rules of the ACIA or the AFAS.

III. Thailand’s Commitments on FDI in the Electricity Sector under the ACIA and the AFAS

In general, a foreign investment is relevant to transfer tangible or intangible assets from one country to another for the purpose of their use in that country to generate wealth under the total or partial control of the owner of the assets.⁵¹ The key determinant is that the foreign investor has a degree of managerial control over the business.⁵² FDI is

⁴⁷ Four Modes of Supply under AFAS are as follows: Mode 1: Cross-border; Mode 2: Consumption Abroad; Mode 3: Commercial Presence; and Mode 4: Presence of Natural Persons.

⁴⁸ WTO, *Measuring Trade in Service* (Nov. 2010), available at https://www.wto.org/english/res_e/statis_e/services_training_module_e.pdf (last visited on Oct. 13, 2018).

⁴⁹ *Id.*

⁵⁰ *Id.*

⁵¹ M. SORNARAJAH, *THE INTERNATIONAL LAW ON FOREIGN INVESTMENT* 8 (3d ed. 2010).

⁵² J. Kurtz, *A General Investment Agreement in the WTO? Lessons from Chapter 11 of NAFTA and the OECD Multilateral*

defined as ownership with some form of control of all or part of a business in another country,⁵³ while indirect investment or portfolio investment is normally represented by a movement of money for the purpose of buying shares in a company formed or functioning in another country.⁵⁴ FDI is motivated by conditions of ownership and market access in host countries, whose restriction is the key to international trade and investment.⁵⁵

As mentioned above, it is ambiguous to define whether electricity is goods or services in the ASEAN. This paper will thus discuss the issues under the ACIA and the AFAS, respectively. First, the meaning of investment under the ACIA is broadly defined as “every kind of asset, owned or controlled, by an investor.”⁵⁶ This broad and open-ended asset-based definition covers both direct and indirect investment in order to focus on maximizing investment protection.⁵⁷ In principle, the ACIA consists of comprehensive investment provisions based on four pillars: liberalization, protection, facilitation, and investment promotion.⁵⁸ According to liberalization, the ACIA promotes progressive liberalization of investment in the ASEAN beginning with five sectors which are manufacturing, agriculture, fishery, forestry, and mining and quarrying including services incidental to these five sectors.⁵⁹ Hence, the electricity sector is not included in progressive liberalization of investment under the ACIA.

Moreover, the ACIA adopts the progressive liberalization of the GATS model as specified in Article 2 (b) of the ACIA, which provides: “This Agreement shall create a liberal, facilitative, transparent and competitive investment environment in ASEAN by adhering to the following principles: ... (b) progressive liberalization of investment with a view towards achieving a free and open investment environment in the region...”⁶⁰ The mechanism of progressive liberalization is allowed by specific

Agreement on Investment, 23 U. PA. J. INT'L ECON. L. 713 (2002), available at <https://jeanmonnetprogram.org/archive/papers/02/020601.pdf> (last visited on Oct. 21, 2018).

⁵³ *Id.*

⁵⁴ *Supra* note 44, at 8.

⁵⁵ S. Thangavelu & C. Findlay, *The Impact of Free Trade Agreements on Foreign Direct Investment in the Asia-Pacific Region*, in *ASEAN+1 FTAs AND GLOBAL VALUE CHAINS IN EAST ASIA* 112-31 (C. Findlay ed., 2011), available at <https://pdfs.semanticscholar.org/3a67/00e41e7ca16d26c0f8396f7948f2bc6291ff.pdf> (last visited on Oct. 21, 2018).

⁵⁶ ACIA art. 4(c).

⁵⁷ UNCTAD, *Scope and Definition 24-7* (2011), available at https://unctad.org/en/Docs/diaacia20102_en.pdf (last visited on Oct. 21, 2018).

⁵⁸ *See Asean Comprehensive Investment Agreement (ACIA): Towards free flow of Investment in the ASEAN Single Market* (Sept. 11, 2015), at 7, available at [https://www.giz.de/de/downloads/giz2015-en-Information_Seminar_on_the_ASEAN_Comprehensive_Investment_Agreement_\(ACIA\)_-Documentation.pdf](https://www.giz.de/de/downloads/giz2015-en-Information_Seminar_on_the_ASEAN_Comprehensive_Investment_Agreement_(ACIA)_-Documentation.pdf) (last visited on Oct. 13, 2018).

⁵⁹ ACIA art. 3 (3).

⁶⁰ *Id.* art. 2(b).

commitments on market access⁶¹ and national treatment⁶² made in a positive list of sectors, whereas the limitations to these commitments were presented as reservation in a negative list. The reservation is applied only to such sectors like manufacturing, agriculture, fishery, forestry, mining and quarrying, services incidental to these sectors as well as all or a combination of these sectors.⁶³ Article 9(2) of the ACIA allows each Member State to submit its reservation list to the ASEAN Secretariat for the endorsement of the AIA Council which forms part of the ACIA. Reservations are measures for each ASEAN Member State to maintain the central or regional level of governments, which do not conform to their National Treatment (Article 5) and Senior Management and Board of Directors (Article 8) obligations under the ACIA.⁶⁴ This approach is flexible for the ASEAN Member States to liberalize the sectors which are strong enough to compete with other players.

Considering Thailand's reservation under the ACIA, foreigners shall obtain a license or certificate from the Department of Business Development, and comply with conditions set forth in the Foreign Business Act B.E. 2542 (1999) and subsidiary legislations in order to operate business in Thailand.⁶⁵ Moreover, minimum capital used at commencement of the business under the lists of the Foreign Business Act B.E. 2542 (1999) shall not be less than that prescribed by the Ministry of Commerce's regulations, which in no case shall be less than three million Baht.⁶⁶ Also, foreigners in Thailand are permitted to own land according to the Investment Promotion Act B.E. 2520 (1977), Industrial Estate Authority of Thailand Act B.E. 2522 (1979), and the Petroleum Act B.E. 2514 (1971). The Ministry of Interior permits foreigners who invests at least 40 million Baht to own land for residential purposes not exceeding 1 rai (1 rai = 1,600 square meters). In the case of hiring land more than 100 rai for commercial or industrial purposes, where a foreigner or a juridical person according to Section 97 of Land Code is a hirer, sub-hirer or transferee of the right of hirer, its

⁶¹ Market access generally describes the right of states to control which foreign entities are admissible and can establish themselves in the host country. Market access for investment refers to the control by states of admission and establishment of foreign investors. See M. Menzel, Committee on Investment Promotion & Market Access for Investment, Model WTO, available at <http://www.model-wto.org/committee-on-investment-promotion-market-access-for-investment> (last visited on Oct. 13, 2018).

⁶² ACIA art. 5. It states: "Each Member State shall accord to investors of any other Member State treatment no less favourable than that it accords, in like circumstances, to its own investors with respect to the admission, establishment, acquisition, expansion, management, conduct, operation and sale or other disposition of investments in its territory."

⁶³ ASEAN, Schedule to the ASEAN Comprehensive Investment Agreement, Headnote List of Reservations, available at <http://www.aseansme.org/dbfile/fta/aiaacia/4.1Headnote.pdf> (last visited on Oct. 21, 2018).

⁶⁴ ACIA art. 9.

⁶⁵ Thailand Reservation on ACIA, No. 16, available at <http://investasean.asean.org/index.php/page/view/acia-reservation-list> (last visited on Oct. 13, 2018).

⁶⁶ *Id.* No.17.

investment in an operation of such commerce or industry shall not be less than 100 million Baht, excluding the cost of hiring. In addition, the total amount of money invested shall be foreign exchange brought into Thailand or withdrawn from the foreign currency deposit account or withdrawn from the non-resident Baht account.⁶⁷ Finally, a foreigner is not allowed to own housing except a condominium. The total condominium units owned by foreigners must not exceed 49 percent of the condominium units in each condominium building.⁶⁸

Similar to other principles recognized and used by international trade community, the ACIA has regulations to support the liberalization of foreign investment in the ASEAN, based on the principles of the National Treatment (“NT”)⁶⁹ and the Most Favored Nation Treatment (“MFN”).⁷⁰ Even though the electricity sector has not been included in Thailand’s commitment schedule under the ACIA, this paper will look at the issue of foreign ownership and market access in addition to the NT and the MFN rules to analyze consistency.

Second, the AFAS is a regional agreement on trade cooperation in services involving the ASEAN Members.⁷¹ The services trade reform has two aspects: removal of discrimination against foreign service suppliers and that of other specific barriers to market access, which may discriminate against foreign suppliers.⁷² It aims at enhancing cooperation in the service sector among member economies by both eliminating intra-regional trade restrictions and expanding the scope of liberalization in services beyond those already undertaken under the GATS. In other words, the AFAS commitments are designed to be ‘GATS-plus.’⁷³ Under the AFAS, initial negotiations focused on five sectors including financial services, transport, telecommunications, tourism, and professional business services. Obviously, the liberalization of electricity sector has not yet been included in the AFAS.

Like the GATS, the AFAS has adopted a “positive list or bottom-up” approach to liberalize service trade.⁷⁴ This approach requires countries to list their horizontal

⁶⁷ *Id.* No.18.

⁶⁸ *Id.* No.19.

⁶⁹ ACIA art. 5.

⁷⁰ *Id.* art. 6.

⁷¹ R. Rajan & R. Sen, *Liberalization of Financial Services in Southeast Asia under the ASEAN Framework Agreement on Services (AFAS)*, (CIES Discussion Paper No. 0226, 2002), available at https://www.researchgate.net/publication/228753276_Liberalisation_of_Financial_Services_in_Southeast_Asia_under_the_ASEAN_Framework_Agreement_on_Services_AFAS (last visited on Oct. 23, 2018).

⁷² P. Dee, *Does AFAS have Bite? Comparing Commitments with Actual Practice* (Jan. 2013), available at https://crawford.anu.edu.au/pdf/staff/phillippa_dee/2013/does-afas-have-bite.pdf (last visited on Oct. 13, 2018).

⁷³ *Id.* at 8.

⁷⁴ D. Nikomborirak & S. Stephenson, *Liberalization of Trade in Services: East Asia and the Western Hemisphere*, Paper

(all-sectors) and sector-specific national treatment and market access commitments in a schedule that specifies the conditions for entry and treatment of foreign service *vis-à-vis* domestic service providers in these sectors. Although the commitments are considered to be binding once they are listed, the specific commitments may be modified in certain cases.⁷⁵

Generally, non-Thai individuals, entities or corporations or foreign-majority owned entities established in Thailand (Foreigners) are subject to restrictions when carrying out business activities stipulated in the Foreign Business Act B.E. 2542 in Thailand. Under the AFAS, qualified foreign-majority owned entities established in Thailand may conduct business as agreed in the AFAS because the AFAS exempts qualified foreigners from some of the restrictions under the Foreign Business Act.⁷⁶ In this context, currently, Thailand has no commitments in the electricity sector except for the area of “Service Incidental to Energy Distributions,” which is not directly considered an electricity business by itself.

In conclusion, exploring Thailand’s commitments on a FDI in the electricity sector under the ACIA and the AFAS releases that Thailand has not made any commitments under these two Agreements to liberalize its electricity industry.

IV. Thailand’s Partial Liberalization in Electricity Industry

A. Structural Reform

1. History and Rationale of Restructuring Thailand’s Electricity Industry

Since 1980’s Thailand has made a reform policy for the electricity industry,⁷⁷ due to the oil crises of the 1970s. These crises pushed Thailand to take out a Structural Adjustment Loans (“SALs”) from the World Bank for the increasing energy prices

prepared for the Pacific Economic Cooperation Council (PECC) Trade Policy Forum on Regional Trading Arrangements, Bangkok, Thailand (June 12-13, 2001), available at https://www.researchgate.net/publication/228596789_Liberalization_of_Trade_in_Services_East_Asia_and_the_Western_Hemisphere (last visited on Oct. 13, 2018).

⁷⁵ *Supra* note 64.

⁷⁶ A. Nobthai, Thailand: ASEAN Framework Agreement on Services, Clifford Chance Briefing (Feb. 17, 2016), available at https://www.cliffordchance.com/briefings/2016/02/thailand_asean_frameworkagreementonservices.html (last visited on Oct. 13, 2018).

⁷⁷ S. Wattana, D. Sharma & R. Vaiyavuth, *Electricity Industry Reforms in Thailand: A Historical Review*, 2 GMSARN INT’L J. 48 (2008), available at <https://opus.lib.uts.edu.au/bitstream/10453/8579/1/2008000503.pdf> (last visited on Oct. 24, 2018).

and implementing measures to privatize state-owned enterprises.⁷⁸ However, this first effort to privatize utilities was met with fierce opposition from labor unions of state electric utilities. As a result, the privatization of state utilities was put on hold until the early 1990s.⁷⁹

In 1992, the SPP and IPP programs appeared to be the first step of electricity reform in Thailand. The government introduced the IPP and SPP programs for partial privatization of some of the Electricity Authority of Thailand (“EGAT”)’s thermal power plants.⁸⁰ The IPP and SPP programs were viewed as the success of electricity reform because these two programs and partial privatization of EGAT’s subsidiary were paid a strong attention from both domestic and foreign investors.⁸¹ This encouraged the Thai government to further market reform.⁸²

In 1996, the government passed a resolution⁸³ that would allow the separation of generation, transmission, distribution business. Again, there was strong opposition from labor unions of the electric utilities at that time.⁸⁴ Then, the Asian financial crisis (1997-98) also fueled the need for electricity reform. The drop in electricity demand combining with the extreme depreciation of Thai currency pushed the electric utilities to a precarious financial situation. In parallel with the IMF loan conditions, including privatization of the utilities, this gave a new impetus for reform.⁸⁵

In 1998, approved was a Master Plan for State Enterprise Sector Reform, which covered four main economic sectors including the energy sector.⁸⁶ The main emphasis of this reform program was to provide market orientation to the electricity industry by introducing competition in electricity supply and providing choice to customers in selecting their electricity service providers.⁸⁷ This market-oriented reform, it was argued, would attract foreign investment, improve the productivity of the industry,

⁷⁸ C. Greacen & C. Greacen, *Thailand’s Electricity Reforms: privatization of benefits and socialization of costs and risks*, 77 PAC. AFF. 517 (2004).

⁷⁹ S. Wattana. & D. Sharma, *Electricity Industry Reforms in Thailand: an analysis of productivity*, 5 INT’L J. ENERGY SECTOR MGMT. 494 (2011).

⁸⁰ *Supra* note 74, at 41.

⁸¹ *Id.*

⁸² *Id.*

⁸³ Thailand Cabinet Resolution dated 5 March 1996, *recited from* NEPC, Resolution of NEPC 2/2546, Sept. 1, 2003, available at <http://www.eppo.go.th/index.php/th/eppo-intranet/item/1694-nepc-thaksin94> (last visited on Nov. 6, 2018).

⁸⁴ *Id.*

⁸⁵ *Supra* note 69, at 45.

⁸⁶ National Energy Policy Office, *Privatisation and liberalization of the energy sector in Thailand* (1999), available at http://www.eppo.go.th/images/policy/PDF/docs/01_idp07PrivLib.pdf (last visited on Oct. 13, 2018).

⁸⁷ *Id.*

and contribute to enhancing the overall economic prosperity.⁸⁸ However, the reform was failed once again by the protest from the EGAT labor union.

Later in 2005, the Cabinet approved the recommendation of the State Enterprise Capital Policy Committee to proceed with the corporatization of EGAT. EGAT was finally converted to EGAT Public Company Limited on June 24, 2005 under Section 26 of the Capital of State Enterprises Act.⁸⁹ Two Royal Decrees were published accordingly.⁹⁰

EGAT is governed by the provisions of the Public Limited Companies Act, B.E. 2535 (1992). It planned to conduct an IPO in November 2005, offering up to 25 percent of its shares to the public, but the Administrative Court on November 15, 2005 issued an injunction to suspend the IPO until a future date. On March 23, 2006, however, the Administrative Court issued a ruling revoking retroactively the two Royal Decrees. The effect was interpreted as reversing the corporatization of Electricity Generating Authority of Thailand retroactively to June 24, 2005.⁹¹

From historical and rationale perspectives, the Thai government applied the ESB model because it was unable to generate power with sufficient capacity to meet high rapid demand. Therefore, allowing private participants to compete to extent in electricity generation at that time was the option to resolve the capacity problem. Also, it is noticeable for the Thai government to attempt to reform the electricity industry several times by privatizing EGAT. However, there was no a clear evidence that the Thai government tried to introduce full competition into its industry. So far, the government has not yet formulated any policy to fully liberalize this industry. The policy regarding structure of an electricity industry still lays silent.⁹²

2. Partial Liberalization under an Enhanced Single Buyer Structure

The single-buyer model was first adopted in 1978 by the US under the Public Utility Regulatory Policies Act (“PURPA”).⁹³ Thereafter, in the 1990s, many developing

⁸⁸ *Supra* note 69, at 45.

⁸⁹ There are two royal decrees published: Royal Decree stipulating powers, rights and benefits of EGAT, B.E. 2548 (2005); and Royal Decree stipulating time clause for repealing the law governing EGAT, B.E. 2548 (2005).

⁹⁰ Royal Decree stipulating powers, rights and benefits of EGAT Plc., B.E. 2548 (2005).

⁹¹ Supreme Administrative Court on Black Case No. For 14/2548 and Red Case No. 5/2549 <available only in Thai>, available at http://web.krisdika.go.th/news_02.jsp?head=4&newsID=392&id=0&type=1 (last visited on Oct. 13, 2018).

⁹² P. Koomsup & P. Sirasoontorn, *Energy Act: Implications for the Energy Sector in Thailand* (Thammasat University Economics Discussion Paper No. 0013, Sept. 2008), at 3-5, available at https://papers.ssrn.com/sol3/Delivery.cfm/SSRN_ID1806210_code346290.pdf?abstractid=1806210&mirid=1 (last visited on Oct. 24, 2018).

⁹³ The aim of PURPA was not to introduce competition, but to encourage environmentally generation sources. See S. HUNT, MAKING COMPETITION WORK IN ELECTRICITY 41 (2002).

countries focused on power generators known as IPPs in order to relieve electricity shortages while conserving scarce public resources. Governments of several countries allowed private investors to construct power plants to generate electricity and sell it to the national power company.⁹⁴

In principle, this model allows competition in generation by introducing IPPs. The IPPs compete to construct and operate plant by taking the construction and operating at their own risk.⁹⁵ IPPs would sell bulk electricity to the state-dominated power system, known as a ‘Purchasing Agency,’ under a long term contract called, the “Power Purchase Agreement” (“PPA”).⁹⁶ Then, the agency would sell power to distribution companies (“Distcos”) that monopolized the industry. The single buyer model requires long-term contracts since there were not enough buyers for full competition.⁹⁷ For the high investment to build and operate power plants including small number of buyers in the market, the IPPs needed a long-term contract to guarantee that their generated power would be purchased by the customers.⁹⁸

Over sixty years ago in Thailand, the electricity industry was operated by regional authorities and private sectors. Currently, there are three main organizations, the EGAT, the Metropolitan Electricity Authority (“MEA”), and the Provincial Electricity Authority (“PEA”). These organizations were established as state-owned enterprises. In 2003, the Thai Cabinet of Ministers approved an industry model called ESB. The structure of Thailand electricity industry was then vertically integrated. EGAT became the sole agency responsible for generation and transmission of electricity to the entire nation. The MEA and the PEA are responsible for the distribution and retail service in Bangkok and two nearby provinces, and the provincial cities and the countryside, respectively.⁹⁹

In addition to state operation, there are private participants in the generation sector called the SPPs and the IPPs. The IPP project, first introduced in 1994, was restricted to selling power only to EGAT, which is a single buyer responsible for

⁹⁴ L. Lovei, *The Single-buyer Model: a dangerous path toward competitive electricity markets*, Public Policy for Private Sector, (The World Bank Group, Dec. 2000), available at <http://siteresources.worldbank.org/EXTFINANCIALSECTOR/Resources/282884-1303327122200/225Lovei-1211.pdf> (last visited on Oct. 13, 2018).

⁹⁵ S. HUNT & G. SHUTTLEWORTH, COMPETITION AND CHOICE IN ELECTRICITY 43 (1996).

⁹⁶ E. Woodhouse, The experience of independent power producers in developing countries, PESD (June 2-3, 2005), at 4, available at <https://pdfs.semanticscholar.org/d005/32f3990e0b6d3b65a13bec7d2171388c2135.pdf> (last visited on Oct. 13, 2018).

⁹⁷ S. HUNT, MAKING COMPETITION WORK IN ELECTRICITY 43 (2002).

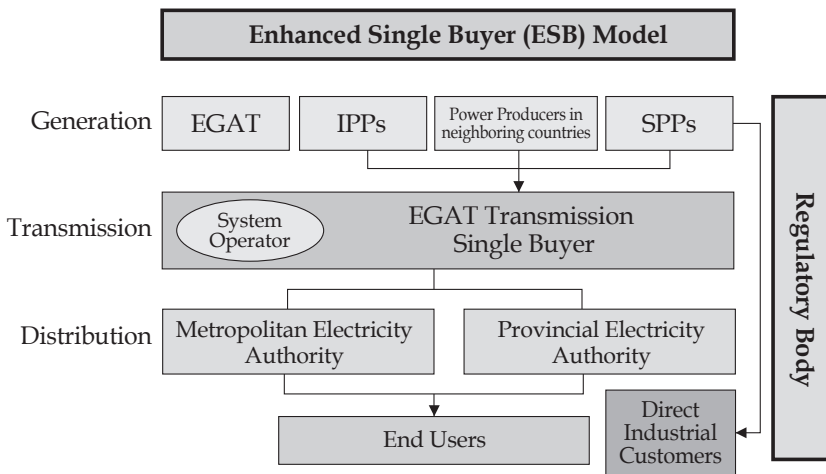
⁹⁸ *Id.*

⁹⁹ World Bank, Overview of Thailand’s Infrastructure Development: Past and Present (2008), at 52, available at <http://siteresources.worldbank.org/INTTHAILAND/Resources/333200-1177475763598/3714275-1234408023295/main-report.pdf> (last visited on Oct. 13, 2018).

power balance and network operation. Figure 1 show how EGAT buys electric power from SPPs, IPPs and neighboring countries; how it sells electricity to the PEA and the MEA; and how EGAT sells a small portion of its generated electric power to some large customers who are connected directly to its transmission network.

This model was proposed by the Boston Consulting Group (“BCG”) to Thai Ministry of Energy with the recommendation that EGAT keeps its monopoly in electricity generation and transmission. BCG claims that having one large monopoly producer is a lower-cost option because a competitive market would require too many small-scale generators to generate power as inexpensive as EGAT.¹⁰⁰

Figure 1: Structure of Thailand Electricity Supply Industry¹⁰¹



Source: EPPO

Some energy economists would argue that the BCG proposal is not economically sensible.¹⁰² They maintain that BCG has failed to recognize the technological revolution in distributed small-scale generation and cogeneration.¹⁰³ Highly efficient units are available at ever smaller sizes. Additionally, these economists point out that there are two risks associated with the ESB model which consist of a risk of high

¹⁰⁰ See *Plan for Thai Electricity Sector: economic nonsense*, 9 WATERSHED 7 (2003-2004).

¹⁰¹ National Energy Policy Council, NEPC Resolution 3/2546 <available only in Thai>, available at <http://www.eppo.go.th/index.php/th/eppo-intranet/item/1699-nepc-thaksin95> (last visited on Oct. 13, 2018).

¹⁰² *Supra* note 92.

¹⁰³ *Id.*

prices and that of overexpansion of electricity generation capacity.¹⁰⁴

Basically, this model allows competition in some parts of electricity generation. All power produced from the IPPs and the SPPs must be sold to a purchasing agency - EGAT, so that EGAT is a single buyer who can buy the output from such private participants. Generators would compete with each other to sell electricity to the purchasing agency. It introduces competition at the level of construction power plants and generating operation. Also, generators would compete for PPAs to supply the purchasing agency.¹⁰⁵

However, Thai ESB model is slightly different from the typical single buyer model. The word 'Enhanced' in this context means that the government would allow some private investments to enhance security of supply under the government's responsibility. EGAT which is a state-owned enterprise retains generation and transmission businesses as well as protects system operator.¹⁰⁶

Another noticeable fact about Thai ESB model is that the EGAT is not only a wholesale purchasing agent owning transmission system, but also a generator. If a conflict arises the generator would also be the system operator responsible for dispatch of power. When running the operators' own plant is more profitable than running a competitor's, conflicts are then likely to happen.¹⁰⁷ One solution would be carefully-drawn contracts that give the system operator the right incentives to distribute electric power from the lowest cost plant, irrespective of ownership or implementing 'merit order' dispatch principle.¹⁰⁸ Undoubtedly, from the structural perspective, the EGAT who owns both generation and transmission systems still plays the key role for the power sector including responsibility for maintaining electricity security by being the main power producer in Thailand.¹⁰⁹

B. Thai Laws on Electricity Industry Operations

Article 47 of Thailand Energy Industry Act 2007 stipulated: "Energy industry

¹⁰⁴ *Id.*

¹⁰⁵ *Supra* note 87, at 43.

¹⁰⁶ P. Sirasontorn, *Privatisation, Restructuring and Regulation: Electricity Supply Industry in Thailand* (Sept. 2004) (unpublished Ph.D. dissertation, Australian National University), at 375, available at https://openresearch-repository.anu.edu.au/bitstream/1885/7561/1/02Whole_Sirasontorn.pdf (last visited on Oct. 13, 2018).

¹⁰⁷ *Id.* at 47.

¹⁰⁸ *Id.*

¹⁰⁹ In September 2018, generating capacity was divided into the generating capacity of EGAT 36.67%, IPPs 34.78%, VSPPs 19.53%, and Import 9.02%, respectively. See *System Installed Generating Capacity*, available at <https://www.egat.co.th/en/information/statistical-data?view=article&id=80> (last visited on Oct. 13, 2018).

operation shall have to obtain a license from the Commission¹¹⁰ Therefore, in order to be a power generator, operators have to obtain the license from Energy Regulatory Commission (“ERC”) under the Energy Industry Act.¹¹¹

Electricity generation in Thailand can be classified into three types based on the total electricity production capacity: (1) IPP (Independent Power Producer); (2) SPP (Small Power Producer); and (3) VSPP (Very Small Power Producer). It refers to a private power project generating and selling electricity with the total production capacity exceeding 90 MW,¹¹² between 10 to 90 MW, and less than 10 MW,¹¹³ respectively.¹¹⁴

It is all the same for the three types of electricity generation which can be classified into two groups of license, i.e., for building the power plant and generating power. In fact, there are four main permits and license requirements. The first one is the Factory Operation License by the Department of Industrial Works under the Factory Act of 1992. The second is the Construction Permit by local authority under the Building Control Act of 1979. The third is the Electricity Generation License by ERC under the Energy Industry Act of 2007. The fourth is Regulated Energy Product License by the Department of Alternative Energy Development and Efficiency (“DEDE”) under the Energy Production and Development Act of 1992.¹¹⁵ The applicants can apply for all licenses through the ERC who should solicit for comments from the authoritative agencies under those respective laws. As such, agencies must notify the Commission of their comments and amount of fees chargeable under those laws. The granting of permission under the laws on those respective matters shall be under the authority and duties of the ERC according to the Energy Industry Act.¹¹⁶

In a particular case of building construction or factory establishment, this requires the applicant to have a copy of the land registration or the letter of land use

¹¹⁰ Thailand Energy Industry Act 2007, art. 47.

¹¹¹ *Id.*

¹¹² Regulation of ERC on Power Purchase for IPP 2012, art. 3 <available only in Thai>.

¹¹³ Regulation of ERC on Power Purchase for SPP 2017, art. 3 <available only in Thai>, available at <http://www.oic.go.th/FILEWEB/CABINFOCENTER2/DRAWER043/GENERAL/DATA0001/00001409.PDF> (last visited on Oct. 13, 2018).

¹¹⁴ Regulation of ERC on Power Purchase for VSPP Cogeneration <available only in Thai>, available at <http://www.erc.or.th/ERCWeb2/Upload/Document/2.1.1.%20RegCogen.pdf> (last visited on Oct. 13, 2018).

¹¹⁵ ERC, Handbook for Energy Industry Operation License and Application Procedure, at 1-10, <available only in Thai>.

¹¹⁶ Thailand Energy Industry Act, art. 48. It stipulates: “In the case that the building construction or factory establishment for the purpose of energy industry operation must comply with the law on factories, the law on building control, the law on town and country planning or the law on energy development and promotion, the granting of permission under the laws on those respective matters shall be under the authority and duties of the Commission under this Act. In this regard, the Commission shall have to solicit for comments from the authoritative agencies under those respective laws, and such agencies must notify the Commission of their comments and amount of fees chargeable under those respective laws.”

permission unless the applicant has ownership of the land or land title. In respect of building the power plant, the operator must receive the permission from local authority under the Building Control Act.¹¹⁷ The next requirement is to then obtain the license from the ERC to generate electric power and that from the DEDE to own regulated energy products for safety purpose.¹¹⁸

Foreign investors, non-Thai individuals, entities or corporations or foreign-majority owned entities established in Thailand are subject to Foreign Business Act B.E. 2542 when doing business activities in Thailand.¹¹⁹ However, operating electricity generating facilities exempts qualified foreigners from the restrictions under the Foreign Business Act, because electricity generating is not considered ‘services’ covered by the Act.

V. Thailand’s Partial Liberalization in Electricity Industry and the Obligations to FDI under the ACIA and the AFAS: Its Coherence

As mentioned above, Thailand has no obligations concerning the entry of FDI in its electricity industry under the ACIA and the AFAS. In particular, the principles of market access and the same treatments (NT and MFN) are the key to FDI in the electricity sector. Regardless of the fact that Thailand has no commitment under the ACIA and the AFAS, this section will analyze whether FDI is allowed to Thailand’s partially liberalized electricity industry and whether the partial liberalization under ESB model is consistent with the principles of market access and the NT and the MFN rules.

In regards to market access, it is found that foreign investors in electricity sector are not prohibited by the Foreign Business Act. Instead, they are required to obtain a license to operate in the electricity industry according to the Thailand Energy Industry Act. In order to obtain a license from the ERC, the investors need permission to build the power plant by both gaining a Factory Operation License from the Department of Industrial Works as stated in the Factory Act,¹²⁰ and obtaining a

¹¹⁷ Building Control Act 1979, art. 21.

¹¹⁸ Energy Development and Promotion Act (B.E. 2535), art. 25.

¹¹⁹ Foreign Business Act (B.E. 2542), art. 7.

¹²⁰ Ministerial Regulation 24 (B.E. 2558) under Factory Act B.E. 2535 <available only Thai>, available at <http://www.erc.or.th/ERCWeb2/Front/Law/LawDetail.aspx?sectionID=3&CatId=22&SubId=0&rid=340&muid=24&prid=35> (last

construction permit from the local authority as stated in the Building Control Act.¹²¹ In order to obtain permission to build a power plant the investors are not required to acquire land ownership, but must prove the right to use the land or have a letter of permission of land use from the land owner.¹²² Therefore, it does not violate the Land Code Amendment Act which allows foreigners to own the land for residential purposes only.

In accordance with Articles 5¹²³ and 6¹²⁴ of the ACIA, the market access rules are applied to the Thai investors, following the NT and the MFN principles. Besides, there is no findings of other regulations which can be barriers for operating electricity generation in Thailand.

However, the foreign investors are not able to invest in transmission, distribution or electricity supplying business because Thai electricity industry under partial liberalization scheme does not allowed private participation in such activities. Hence, even if Thailand has no commitment under the ACIA and the AFAS to liberalize its electricity sector in aspect of FDI, the authors would find the coherence between Thai laws and regulations regarding power generating operation under partial liberalization in electricity, and the underlying principles of the ACIA and the AFAS.

VI. Conclusion

Thailand has notably restructured its electricity industry in order to adopt its own style of partial liberalization. All implemented in a unique electricity structure called the ESB model. At national level, this restructuring introduces some level of competition in the electricity generation function among private operators. At international level, particularly in the context of a Member State of the ASEAN, a

visited on Oct. 13, 2018).

¹²¹ Building Control Act 1979, art. 21.

¹²² ERC, Documents Checklist for Energy Industry Operation License and Application Procedure <available only in Thai>, available at http://www.erc.or.th/ERCWeb2/Upload/Document/%E0%B8%A0%E0%B8%B2%E0%B8%84%E0%B8%9C%E0%B8%99%E0%B8%A7%E0%B8%81_%E0%B8%81.-Checklist.pdf (last visited on Oct. 13, 2018).

¹²³ ACIA art. 5. It stipulates: "Each Member State shall accord to investors of any other Member State treatment no less favourable than that it accords, in like circumstances, to its own investors with respect to the admission, establishment, acquisition, expansion, management, conduct, operation and sale or other disposition of investments in its territory."

¹²⁴ *Id.* art. 6. It stipulates: "Each Member State shall accord to investors of another Member State treatment no less favourable than that it accords, in like circumstances, to investors of any other Member State or a non-Member State with respect to the admission, establishment, acquisition, expansion, management, conduct, operation and sale or other disposition of investments."

question may arise: “Does Thailand fulfill the obligations under the ASEAN to enter a FDI in its electricity sector?” Before answering the question, we attempt to examine the definition of electricity, whether electricity is considered ‘goods’ or ‘services’ in the context of international trade rules and under the ASEAN Agreement. We also find that there is no clear definition in the ASEAN on whether electricity is considered goods or services. It is thus indispensable to discuss how to treat electricity as ‘goods’ and ‘services’ in the ASEAN context.

Having considered this research and findings, our conclusion is that Thailand has no commitment concerning a FDI in the electricity sector under both the ACIA and the AFAS. So far, we have discovered there is similarity between Thai laws on FDI, and the principles of the ACIA and the AFAS, especially in the market access and NT. Even though Thailand has introduced partial liberalization in the electricity sector, it is sufficiently consistent with the rules of the ACIA and the AFAS. Foreign investors from the ASEAN Member States can invest in Thailand by establishing power plants according to Thai laws.

However, it is worth highlighting that a FDI in electricity transmission, distribution and supply businesses are prohibited in Thai electricity sector because the ESB model does not allow private participants; neither Thai nor foreign investors could involve in such activities. We would suggest that the structure of electricity industry is linked to the level of liberalization of international trade and investment. Before introducing electricity market integration into the ASEAN, all the ASEAN Member States should review and confirm if their regulatory structures are consistent with the market access regulations in their electricity industries.

As a consequence, partial liberalization of Thailand’s electricity industry with an ESB model would allow not only Thai private sectors to compete with each other in power generation, but also foreign investors of the ASEAN Member States to participate in electric generation business in Thailand.

