Addis Ababa University

College of Law and Governance

EXAMINING THE REGULATION OF ETHIOPIA'S INTERNATIONAL TRADE IN ENERGY (CHALLENGES AND PROSPECTS)

A thesis submitted to the School of Graduate Studies of Addis Ababa University in partial fulfillment of the requirement of the Degree of Master of Laws (LL.M) in Public International Law

By: - Kiddus Merkorios ……Id. No. GSE/7422/10

Advisor: **- Solomon Abay (PhD), Associate Professor**

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Approved by

Board of Examiners

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Advisor	**Signature**
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Table of Contents

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Abbreviations

WTO	World Trade Organization
ECT	Energy Charter Treaty
Gwh	Giga Watt Hour
PPA	Power Purchase Agreement
MT	Multilateral Treaties
GATT	General Agreement on Tariff and Trade
GATS	General Agreement on Trade in Services
LNG	Liquefied Natural Gas
GHG	Green House Gases
MFN	Most Favored Nations Treatment
OAU	Organizations of African Unity
LPA	Lagos Plan of Action
REC	Regional Economic Community
AMU	Arab Maghreb Union
COMELEC	*Comité de L' Electricité Maghrebin*
ECOWAS	Economic Community of West African States
WAPP	West African Power Pool
ECCAS	Economic Community of Central African States
CAPP	Central African Power Pool
COMESA	Common Market for Eastern and Southern African States
SADC	South African Development Community
SAPP	Southern African Power Pool
EAPP	East African Power Pool
IRB	Independent Regulatory Board
EAC	East African Community
EU	European Union
EAPPCC	East African Power Pool Coordination Center
EEA	Ethiopian Energy Authority

ADO	Automotive Diesel Oil
EPSE	Ethiopian Petroleum Supply Enterprise
GC	Gregorian Calendar
LDC	Least Developed Country
UNCTAD	United Nations Conference of Trade and Development
EEPCo	Ethiopian Electric Power Corporation

Abstract

In recent years, Ethiopia plans to develop its energy resources to generate revenue. Currently the country is earning a minimal amount of income from its energy export. However, the various hydro-electric dam projects that the country is now engaging in indicate its plan of generating more revenue from the sector. Conversely, the country is also spending much on importing a variety of Energy products to stimulate its economy. Therefore the energy trade is becoming a major area in which millions of funds are spent upon. This underscores the necessity for an efficient and modern regulatory framework that complies with international trade principles.

Lately, Ethiopia is in the process of acceding to the World Trade Organization, a multilateral international trade regulatory institution, and one of the requirements of acceding to the organization is the need to reform national trade laws and practices to comply with international trade principles. This paper examines Ethiopia's regulatory frameworks governing its international trade in energy and assesses its viability in the current global trade environment, and also identifies the prospects and challenges of the frameworks.

Chapter One

Background of the study

1.1.Preliminary

Energy is the basic input in almost every economic activity. It is a driving force behind all socio-economic undertakings, an instrument for the reduction of poverty and for advancement of the human life. The modern history of most of currently developed countries reveals the fact that efficient energy supply has at some point drastically changed their economic growth. Energy has an intrinsic relationship with all economic sectors.[1] Thus, any decision made as regards energy has a direct consequence in all economic activities. In the past, many counties have considered Energy as a strategic commodity and distinguished its commerce from all other sectors. The nature of energy itself, the problems of global energy trade, and the unsettled debate within the WTO pertaining to energy trade are the factors that separate it from other products.[2]

Trade in energy is regulated internationally by two types of international legal sources. These sources are the multilateral sources of energy trade regulation and other sources of trade regulation. The multilateral sources include the World Trade Organization (WTO) with its adjunct treaties and the Energy Charter Treaty (ECT). Among the goods and services whose trade is regulated by WTO are energy goods and services. Nonetheless, since the WTO rules are devised by taking international trade in a comprehensive manner, there are many peculiarities in the energy sector that are not properly addressed in its normative system.[3] The second relevant source of multilateral trade regulation in the international scenario, which is open to any interested party but, applies to a certain group of countries, is the Energy Charter Treaty (ECT).[4]

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[1] Ministry of water and energy , Ethiopian National Energy Policy (2nd Draft , 2013) 4

[2] Dr. Rafael Leal-Arcas and Ehab S. Abu gosh, *'Energy Trade as a Special Sector in the WTO: Unique Features, Unprecedented Challenges and Unresolved Issues '* [2014] 6(1)(176/2014) Indian Journal of International Economic Law 2, p. 10

[3] MARCEAU,G. The WTO in the Emerging Energy Governance Debate In: PAUWELYN, J. (ed.) Global Challenges at the Intersection of Trade, Energy and the Environment. Geneva: Center for Trade and Economic Integration, 2010, p.25. and also Carlos A. Cavalcanti and others, The Regulation of the International Trade Energy, Fuels and Electricity (FIESP 2013) 81

[4] Ibid 82

Besides, International trade in Energy is also regulated by other sources that exist alongside the multilateral mechanisms. Countries that are not members of the above multilateral sources of regulation use various bilateral agreements to regulate their reciprocal Energy trade. Most of the Energy trade conducted in the African continent particularly in the East African region is regulated by such bilateral energy trade agreements. The energy trade performed by Ethiopia is no exception. Ethiopia is one of the Least Developed Counties (LDCs) endowed with various energy resources, especially the country's hydropower prospects has a huge potential to make it to its neighbors Sudan, Kenya, Djibouti, Somalia, and Eritrea. These countries constitute a readily available market for hydro-electric power within the region. Some of these countries are already facing power deficiency and hence are in dire need of electricity to run their economies. Ethiopia has included in its Energy Master Plan, a project to create a power interconnection with all East African countries and beyond. The power interconnection plan serves as a good source of foreign currency and plays a critical role in the geopolitical stability of the region.

Ethiopia's current international trade in Energy is mainly confined to import of energy products and export of electricity. Recently the country has become one of the countries which heavily imports energy products and exports raw energy to neighboring countries. Particularly the country is earning millions, out of its energy export trade.[5] Hence, as its economy grows, Ethiopia has the potential to become the greatest energy exporter in the East African region. The export trade will also boost its economy significantly in the near future. So in order to facilitate its energy export, Ethiopia needs to set essential regulatory framework and institutions which take into account global economic and legal considerations. Especially the framework must incorporate various international trade regulatory norms and restrictions.

Until recently, there has not been much economic analysis made on Ethiopia's international trade in energy let alone an examination of the agreements and domestic laws that pave the way for such trade. As a matter of fact, there has not been any study previously made explaining the international trade principles enshrined in the legal regimes. For instance, the legal frameworks

[5] Muluken Yewondwossen, 'Ethiopia energy exports to exceed USD one billion ' (Capital Magazine, 25th February) <https://www.capitalethiopia.com/featured/ethiopian-energy-exports-to-exceed-usd-one-billion/> accessed 1 December 2019

must integrate general international trade principles of non-discrimination, respect for sovereignty over natural resources, and must recognize the importance of energy-efficient and environmentally sustainable policies. In addition, the laws must provide solutions or mechanisms of resolving disputes in case controversies arise between the Parties.

Thus, this paper intends to fill the knowledge gap by examining the laws governing and institutions regulating Ethiopia's international trade in energy and tries to identify international trade law principles incorporated in them. Moreover, the research tries to examine the practices of Ethiopian state trading enterprises that engage in international trade in energy. The paper first introduces essential questions that the research wants to address in chapter one and then ponder upon the concept of Energy and its global trade in general, and finally analyze Ethiopia's regulatory regime by elucidating the prospects and challenges.

1.2.Research question

By this work, the researcher intends to address the following salient research questions, which have great importance for the study.

- Does Ethiopia have a regulatory framework governing its International Trade in Energy?
- If there is one, what are the prospects and challenges of the regulatory system?

1.3. Objective of the study

This study is intended to achieve the following important objectives:-

A. Examining and exploring the legal instruments regulating Ethiopia's international trade in Energy.
B. Analyzing whether, the legal regimes regulating Ethiopia's International Trade in Energy, are in line with international standards.
C. Identifying the prospects and challenges of the legal regimes.

1.4.Research Methodology

This research has mostly adopted the socio-legal approach of legal research. With respect to adopting the socio-legal research method, the writer took account of the focus of the research to be analyzing the impact of the existing legal framework on cross border energy trade. Therefore it is found that the socio-legal research method provides ideal tools for extracting knowledge from stakeholders who are involved in enforcing the law. In addition, the researcher to some extent adopted the doctrinal legal research methodology. Thus, all relevant binding agreements, especially Power Purchase Agreements (PPA) and MTs (Multilateral Treaties), Proclamations,

Regulations, books, and journals concerning the rules governing Ethiopia's International Trade in energy are analyzed.

1.5.Scope and Limitations of the Research

The research is mainly confined to examining the laws and practices of institutions regulating Ethiopian international trade in energy in comparison with the international regulatory principles of trade. In addition, the research identifies and explicates the prospect and challenges of the regulatory frameworks.

The researcher is faced with various limitations in conducting the study. These include the unavailability of much literature concerning the topic and also the problem of Covid 19 epidemic, which made the collection of data very tiresome. Despite the setbacks, the researcher completed this pioneering research on the area.

Chapter Two

Some Preliminary Remarks on Energy and Energy Trade in General

2.1. Definition and Nature of Energy Products and Services

Energy can be derived from different sources. The sources are divided into two broad categories, these are renewable energy sources meaning energy sources that can be regenerated and reused, and also non-renewable ones which once they are used cannot be restored.[6]Examples of non-renewable energy sources comprise coal, fossil fuels, uranium (an ingredient for making nuclear power), and natural gas. Renewable energy sources on the other hand include geothermal, solar, wind, hydro-electric, wave and tide, and ocean energy. These energy sources are also referred as primary energy sources. Alternatively, experts classify energy sources like electricity and hydrogen as secondary sources of energy, meaning those who carry energy from place to place in a usable form.[7] Generally, all the above sources of energy yield products which in international commercial terms, known as Energy products and services.

Energy Services

The contemporary international legal system governing multilateral trade has seldom deal with energy services. This is partly because of the failure of the international trade regulatory framework to reach an accord whether to regard for instance imported electricity as a good governed by the General Agreement on Tariff and Trade (GATT) or as a service regulated under the General Agreement on Trade in Services (GATS). Experts have long been baffled to label electricity as a service or good. In cases of oil and gas, energy is considered a corporeal product that can be exchanged easily. However, energy takes different forms and inclines to be considered as service when it is "produced on demand, nor stored somewhere for later use".[8]This is a typical case of other Energy products. Despite the absence of agreement regarding the status of or the taxonomy of Energy products, a number of GATT and later WTO member countries distinguished electricity as a good. However, the actual categorization of Energy products in the

[6]US Energy Information Administration, What is Energy?
http://www.eia.gov/energyexplained/index.cfm?page=about_home.

[7] Alexandra Wawry, Law as Change (University of Adelaide Press 2014) 226

[8] Ashley C. Brown, Electricity Markets: Interface between Regulation and Trade (1st edn, UNCTAD 2016) 6

Harmonized system under heading 27.16 continues to be discretionary. States are given the choice to decide whether to consider energy products like electricity as good or service.[9]

Energy Products

According to the legal definition given in the Law insider dictionary:-

"Energy products are products collectively referred as natural gas, crude oil, refined petroleum products, other hydrocarbon products, natural gas liquids and products produced from the fractionalization of natural gas liquids and electricity"[10]

Energy products are products that exhibit unique characteristics as tradable goods. This distinguishing factor lies mainly in the way the goods are transported. Energy products require special modes and facilities to be properly transported. In a more precise word, the trade of energy products is "system dependent"[11] meaning their trade is reliant on "fixed infrastructure".[12] Especially if we consider electricity and natural gas, it is impossible for the products to cross borders unless there is an appropriate infrastructure for them. Electricity requires fixed grids while natural gas needs fixed pipelines to be transported.[13] The current facts for instance shows us that 75% of natural gas and 25 % of liquefied natural gas (LNG) traded globally are transported via fixed pipelines.[14] As regards electricity, its transportation is totally dependent on fixed transmission lines.

2.2. Unique features of Energy as a Tradable Commodity

Since recent times the idea of commodity has been extended and broadened that it has now encompassed all products which can be traded in a regular, open, and competitive international market.[15] A product which can be stored for a period of time, represent capital or asset is

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[9] Ibid.6

[10] Law Insider Dictionary http://www.lawinsider.com/dictionary/energy-products

[11] T. Wälde and A. Gunst, "International Energy Trade and Access to Competing Networks," Energy and Environmental Services: Negotiating Objectives and Development Priorities, UNCTAD (New York & Geneva 2003), p. 118

[12] Rakhmanin at p. 123; see also Energy Charter Secretariat, Trade in Energy: WTO Rules Applying under the Energy Charter Treaty (Brussels, 2001) at p. 11.

[13] Y. Selivanova, "The WTO and Energy: WTO Rules and Agreements of Relevance to the Energy Sector", ICTSD Trade and Sustainable Energy Series Issue Paper No. 1, (Geneva, 2007) at p. 18.

[14] Rakhmanin, at p. 123, footnote 12.

[15] Jean Baptiste Lesourd, 'Electricity; The Limits of Commodity Status' [2004]2 (23 Janvier) 1

considered as tradable. Thus, in the current cosmopolitan world order, energy products such as oil and gas have long attained the status of tradable commodities. However, when it comes to electricity, it differs from all the other energy sources, in that it is an immaterial source of energy. Indeed, in the physical sense of the term, all other sources of energy are corporal and are definitely contained in some material that has some volume and weight.

Despite this, the results of the progress of modern conservation technologies and international electricity markets particularly in Europe and other parts of the world, electricity has acquired features of a tradable Energy product.[16]So, for many years, trade in energy has been treated differently in international trade. The energy trade was also taken as an important trade sector for various reasons.

Special Characteristics of Energy[17]

Energy is an essential ingredient that enhanced the rapid economic improvement and advancement of the modern society. The commodity is now a vital instrument in promoting technological progress. Therefore, every country is considering energy as a critical economic tool and its trade as an important sector of international trade which necessitates regulation. The main reasons for this notion are:-

i. Economic Reasons

The largest share of global trade is dominated by energy goods at least since the beginning of the 20th century. Energy trade constitutes most of the "world's merchandise export" in terms of value. [18] Energy is a vital factor for the proper functioning of every sector of an economy. Thus, the entire economy of a country is dependent on the cost of energy products. The availability of regular, quality and inexpensive energy supply promotes growth, and consequently, every country is interested to regulate its energy trade. For instance, economic inflations occurring in the modern world were found to be direct impacts of the rise in oil prices. Energy is a factor crucial for global and national economic stability. Hence, the cost of energy affects the prices of all other products and services and, as a result, influences the entire economy.[19]

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[16] Ibid

[17] Ibid, P.10-15

[18] WTO, International Trade Statistics 2012 (Geneva: WTO, 2012) p. 61, Table II.1, available at http://www.wto.org/english/res_e/statis_e/its2012_e/its2012_e.pdf;

[19] Melly UNCTAD, p. 164.

ii. Political and Strategic Importance

Energy goods have more than economic significance that the ownership of those resources confers a country some sort of strategic and political value.[20] Besides, the history of the world confirms that most of major conflicts around the world are related to or as a result of energy resources. Numerous international and regional conflicts emanate from the control of energy resources, markets, and trade. The World War I (1914), World War II (1939), the Suez War (1956); the Six-Day War (1967); the oil embargo (1973); the Arab-Israel War (1973), the Iranian revolution (1979), the Iran-Iraq War (1980-1988), the invasion of Kuwait (1990), the Gulf War (1991) and the Iraq War (2003) are the prominent ones. The Sudanese and Libyan civil conflicts in the African continent were fueled because of interests relating to energy resources. Such facts reveal the political and strategic importance and leverage of energy resources in geopolitics. The limited availability of energy resources accentuates the resource's worth in promoting national sovereignty and political stability.

iii. Global Development

The modern global economy has determined the energy sector to be a key component for encouraging economic development. Particularly, the manufacturing sector requires energy as its driving force towards robust production. Thus, the manufacturing sector requires a consistent availability of energy to attain its desired growth. The growth of the manufacturing sector entails the growth of international trade consequently resulting in the revitalization of global development.

iv. Nature of Energy Products

Energy products are typically extracted from primary energy sources worldwide. Oil products are extracted from oil fields and electricity is generated from various sources like hydro dams, wind farms and etc…The unique physical composition, storage, transportation, and distribution of energy products are the main features that differentiate them from other commodities. Depending on the diverse nature and sources of energy products, their trading also varies accordingly. Thus, the distinctive features of energy resources necessitate applying appropriate

[20] UNCTAD, Trade Agreements, Petroleum and Energy Policies , UNCTAD/ITCD/TSB/9 (New York and Geneva: 2000), p. 14, available at http://p166.unctad.org/pluginfile.php/1839/mod_resource/content/0/31oct/itcdtsb9_en.pdf

treatment and regulations to address specific trade issues pertaining to each one of the resources, products, and services.[21]

v. Finite Resources

The majority of energy products that are traded globally are fossil fuels. These resources are non-renewable resources with finite natural reserve. The resources are owned by a number of fossil fuel endowed and exporting countries. The rest of the world is mostly composed of importers of energy products.[22] Energy is the largest traded product around the world. Consequently, the current global energy usage constitutes, largely of limited and non-renewable energy products. [23]

vi. Energy Security

As stated earlier energy is a crucial component of promoting economic development and therefore is seen as a strategic product to every country. Countries purchase this product either from national or international energy markets. So calamities that influence the energy market in terms of price pose a threat to the security of any country.[24] The various historical incidents and conflicts are proof of such fact. Thus, the availability and affordability of energy in the international and national market affects global as well as national energy security.[25]

Throughout history trade in energy is regulated by bilateral negotiations often inclined to political motives. As a result, the global energy trade is not regulated by relevant rules apposite to the sector. In addition, because of the fact that much of the bilateral energy trade negotiations are politicized the resultant rules of regulation lack transparency, predictability, certainty, and stability.[26]

[21] Foot note 2, p. 16

[22] Foot note 13, p. 49

[23] Foot note 2, p. 16

[24] Desta World Trade, pp. 523-524; R. Strange, "Waving a Tangled Web: the Intersection of Energy Policy and Broader Governmental Policies", 5 *Tex. J. Oil Gas & Energy L.* 1 (2009-2010), at p. 6

[25] Yergin, Daniel, "Ensuring Energy Security," *Foreign Affairs,* 85, No. 2 (March/April 2006). See also Desta World Trade at pp. 523-524

[26] Foot note 2, p.16

vii. Transportation of Energy

A considerable share of Energy products is transported via "fixed infrastructure".[27]Particularly, natural gas and electricity are network dependent.[28] Thus, because of this peculiar necessity of transporting energy products, international trade in energy is chiefly confined to regional trade between countries with adequate energy infrastructure.[29] For example, if Ethiopia wants to export electricity to other countries both Ethiopia and the importing countries have to expend huge amounts of capital to build extensive cross border transmission lines to transport and trade electricity. This peculiar feature of energy trade distinguishes it from other sectors of trade.

2.3. Energy Trade

As stated earlier, because of the peculiar nature of energy as a tradable commodity, its global trade is dominated by various challenges and concerns. Now let consider some of these challenges.

A. Imbalance between Supply and Demand

Energy supply and demand disparity is a challenge facing the world in the 21st century. Current studies show that much of the populations of many developing countries still do not have access to essential energy products like electricity. Moreover, these countries are recently endeavoring to develop their economy through industrialization. However, the lack of proper provision of energy impend their efforts significantly. To cop up with this situation the countries import energy products to support their economy. Thus in recent years the global trade is ever more focusing on energy trade.

The world is now facing a tension between expanding trade and increasing economic growth on one hand and the need to promote energy efficiency and protecting the environment on the other. The recent economic growth exhibited in some developing countries and LDCs is a testimony to the rise in demand for energy products. Conversely, a parallel growth is not expected on the supply side. This is due to the need for enormous capital for exploration and production of energy.[30] Therefore, in the near future a mismatch between energy supply and demand will inevitably lead to inflation in the global economy.

[27] Foot note 12, p. 11

[28] Foot note 12, p 118

[29] Foot note 20, p. 11

[30] Foot note 13,P.50

B. Trade in Goods vs. Trade in Services

The WTO system does clearly delineate between trades in good and trade in services. Particularly, some rules apply to trade in goods (the GATT) and other rules apply to trade in services (the GATS). However, in the case of energy, the distinction between energy products and services is blurred.[31]

C. Transit via Fixed Networks

The bulk of international trade in energy is conducted via fixed networks (i.e. pipelines for gas and grids for electricity). This restriction of network usage for specific energy products entails spending an enormous amount of capital and a substantial investment, in addition to drafting suitable investment rules in order to secure open transportation and flow of energy products.[32]

2.4. Forms of International Trade Regulatory Mechanisms with respect to Energy

The special characteristics of energy lead to a question of whether energy trade can be effectively regulated by the general or specialized international trade frameworks.

2.4.1. The General International Trade Frameworks

When we talk about the general international trade frameworks regulating Energy trade, the General Agreement on Tariff and Trade (GATT) and other WTO agreements are among the prominent ones to be cited. Consequently, hereinafter a careful analysis of those treaties and their implications and challenges in global energy trade follows.

2.4.1.1. Energy Trade and the World Trade Organization

Trade in energy, has long been identified not to be included under the regulatory regime of the World Trade Organization (WTO). Nonetheless, the multilateral system of WTO is designed to regulate every trade sector as well as trade in energy.[33]

Challenges associated with the WTO system

The GATT/WTO system has long been in operation regulating international trade. It has now become almost a 50 years old international trading system. Even though, it has its own limitations and setbacks the WTO regulatory system has effectively brought change to global

[31] Cossy Mireille, Energy Trade and WTO Rules: Reflexions on Sovereignty over Natural Resources, Export Restrictions and Freedom of Transit (3 edn, CHAP 2012) 113

[32] Foot note 13,p 2

[33] Yulia Selivanova, 'Challenges for Multilateral Energy Trade Regulation: WTO and Energy Charter ' [June29,2010] 1(2010/20) Society of International Economic Law 4

commercial transactions by promoting free trade and eliminating discriminatory trade barriers. Such limitations have impacted various trade sectors like energy trade. For instance, the usual focus of GATT on market access of domestic manufactured products abroad has left the issue of access to foreign supplies without regulation.[34]In addition, there are specific deficiencies exhibited in the system concerning energy trade.

a. Dual Pricing

Under the UN General Assembly Resolution no. 1803, countries endowed with abundant energy resources have demonstrated their intention to use their wealth of energy to meet national demand, improve their economy, and increase the income of their population.[35] The energy policy of these countries has precisely been influenced by such social considerations. These concerns were also reflected in the WTO negotiations and discussions. Especially their practice of dual pricing of energy products was founded contradictory with WTO rules.[36]

b. Export Restriction

The trade rules of WTO are designed to eliminate barriers of market access to imported products. Their effect with respect to avoiding export barriers is very minimal. Countries exporting energy products demand to attain maximum return from the sale and extraction of those resources. The frequent means of revenue generation for these countries is through the imposition of export taxes. The coverage of export restrictions in WTO rules is very negligible as compared to the emphasis given to import restrictions. Therefore, such inadequacy of addressing export barriers made the process of liberalizing cross border energy trade more complex.[37]

c. Transit Obligations

Transit obligation refers to the duty assumed by a certain country that is found between two or more countries or customs territories, to allow the safe passage of goods and services between them. It specifically, has to do with the customs procedures of that transit country. The GATT

[34] Y. Selivanova, "Managing the patchwork: Challenges for multilateral agreements in trade and investment" in: Global Energy Governance: The New Rules of the Game, eds. Andreas Goldthau and Jan Martin Witte (Washington, DC: Brookings Institution Press, 2010).

[35] In accordance with UN General Assembly Resolution No. 1803 of 16 December 1962 On the Permanent Sovereignty

[36] J. Selivanova, "World Trade Organization Rules and Energy Pricing: Russia's Case", 38 Journal of World Trade 4 (2004)

[37] Foot note 33, P.5-6

rules do not expressly tackle problems related to energy transit. For example, an obligation not to interrupt energy flow and the duty to avoid impediments to develop new infrastructure is not sufficiently addressed.[38]

d. Monopolies

Monopolies are enterprises found in a country with exclusive control of the trade of certain products. Energy trade is often dominated by powerful government enterprises controlling the supply and sale of energy in the domestic market. These enterprises, more or less, control major energy transportation and distribution facilities. In particular, most of the grids and pipelines that are essential for transportation of energy are in the hands of these enterprises. Hence, such a monopoly gives them the power to obstruct access to infrastructures by using regulatory ploy or by imposing an unfair fee of usage. To make the matter worse the WTO framework has no clear rules on the subject.[39]

2.4.2. The Specialized International Trade Frameworks

The specialized trade frameworks are legal regimes that are essentially designed to govern the trade of a specific commodity or service. At present, there are several specialized regulatory frameworks governing cross border energy trade globally. Some of the frameworks are multilateral like the Energy Charter Treaty and others are region-specific regulatory regimes.

2.4.2.1. Energy Charter Treaty (ECT) and Energy Trade

The Energy Charter Treaty is a multilateral treaty that is rooted in the European Energy Charter, and which was envisaged at the 1991 declaration. The aim of the declaration was to set up a regulatory regime to enhance cooperation in the energy sector. The treaty affirms the principles of "permanent sovereignty over natural resources" and non-discrimination.[40] Moreover, it recognizes the significance of efficient and environmentally sustainable energy policies. It also set out trade and investment regulatory provisions among other things.[41] Then again it contains "soft law" provisions on competition, access to capital, and transfer of technology.[42]

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[38] Ibid. P.8

[39] Id.

[40] Fiesp, The Regulation of the International Energy Trade: Fuels and Electricity (1st edn, FIESP 2013) 84

[41] Ibid.

[42] Foot note 33,p. 9

The ECT has a membership of 52 states mostly from Europe and Asian continents. The member included Mongolia, European Union, former USSR republics, and Japan. The treaty came into force in 1998 four years after the date of signature in 1994. The membership of ECT includes both resource endowed and importer countries and also transit states. Moreover, some of the members are not contracting parties to the WTO.[43]

The ECT regulatory framework governs the trade of energy goods and services. Principally, the treaty applies to trade of mineral coal, natural gas, oil, nuclear energy, electrical energy firewood, and energy-related equipment such as turbines, pipelines, furnaces, platforms, processes, and even charcoal. The only exception is the area of bio-energy.[44]

In the energy sector, there is no other special treaty like the ECT, which sets out international legal norms governing trade and investment in the energy areas. The comprehensive investment dispute resolution clauses contained in the treaty distinct it to be the only energy linked investment treaty. Another distinguishing feature of the ECT is that it is the only treaty that includes intricate principles of "energy transit".[45] The ECT sets out principles that are essential for global energy sector governance, some of which are relevant for international trade in energy.

a. Principle of Cooperation

The principle of cooperation can be taken as a pillar of the ECT. The treaty under article 2 promotes long term collaboration in the field of energy based on "complementarities and mutual benefits".[46] State parties to the treaty are required to conduct energy trade with the objective of attaining mutual benefits.

b. Sovereignty over Energy Resources

The ECT enshrines as a principle the sovereign right of member countries to utilize their energy resources in whatever means. Nevertheless, it also sets rules to ensure exploitation to be in line with international norms.[47] Member countries to the ECT are given the right to develop their

[43] Id.

[44] Foot note 34,p.85

[45] Foot note 33,p. 9

[46] Energy Charter Treaty, Art 2

[47] Ibid, Art 18

energy resources in accordance with domestic policy objectives. Similarly, states are given the discretion to open their energy sector to foreign investors.[48]

c. Development of Efficient Energy Markets

The ECT imposes an obligation on members to facilitate access to the global energy market in transactional terms and the duty to support a free and competitive market for materials, products, and equipment related to the energy sector.[49]Consequently, the parties undertake to adopt a market-oriented price setting and establish a fair market for energy trade.

d. Non-derogation from the WTO agreement

The GATT and other WTO agreements, provide a basis for the ECT to come up with rules of multilateral trade framework concerning energy. Especially, article 4 of ECT states the non-derogation from multilateral trade rules as the major keystone of the treaty.[50]Through the "WTO by reference" approach the ECT extends the applicability of WTO rules to non-member countries of the WTO.[51] WTO obligations of Most Favored Nations Treatment (MFN), National Treatment (NT), Elimination of Quantitative Restrictions and peaceful settlement of disputes based on the WTO model are among the major ones extended.

e. Freedom of Transit

Contracting parties of ECT determined the rules contained in GATT concerning freedom of transit not to be sufficiently detailed. This was because of the complexity of trade in energy. For instance, the GATT provision on freedom of transit is unclear on issues of wheeling fees (transit fees) for accessing grids and pipelines.[52]Therefore, detailed rules were needed to fill the gap of GATT Article V, to maintain the interest of states and the need for security and stability of energy transit.[53]Even though the rules stated in the ECT simply duplicated the concept of freedom of transit written in Article V of GATT, they provide intricate and precise rules on energy transit issues. Member states of the ECT as in like GATT parties are obliged to make

[48] Foot note 33,p. 10

[49] Foot note 46, Art 3

[50] Foot note 46, Art 4

[51] Foot note 33,p. 10

[52] The Energy Charter Treaty, A Reader's Guide, Energy Charter Secretariat (2002), p. 29.

[53] Id. P.29.

energy flow possible in line with the rule of freedom of transit and also the duty to maintain stable movement of energy.[54]

Furthermore, members are required to remove unfair trade practices relating to ownership, origin, or destination of the goods and services. On the other hand, the ECT imposes an obligation on members to refrain from acts impeding the development of new infrastructure to facilitate energy transmission.[55] As regards transit countries, they assumed the obligation not to interrupt or decrease the flow of energy. Such duty remains albeit having disagreement relating to the transit obligations.[56] The other positive obligation of members is the duty to encourage vital institutions, like corporations controlling transit facilities, to cooperate in modernizing transmission infrastructure, upgrade and improve energy facilities. In relation, members are also obliged to promote the interconnection of energy transit facilities in order to reduce the effects of interruption of the supply of energy. As regards the settlement of transit disputes the treaty has foreseen a "special conciliation procedure".[57]

f. State and Privileged Enterprises

Generally, member countries to the ECT are required to ensure state enterprises found in their territory supply energy goods and services in line with their obligations stated under Part III of the convention. Particularly, contracting parties shall provide energy sector investors treatment no less favorable than provided to domestic state enterprises. Especially, it shall afford protection against unreasonable discriminatory measures.[58]

2.4.2.2. Regional Regulatory regimes

During the last two decades of the 20th-century engagements and signing of treaties related to energy were more frequent at a regional level. The main objectives of the treaties were the need to facilitate energy trade and ensuring an efficient supply of energy goods and services. The treaties in the area of energy also reflect essential geopolitical considerations. Moreover, the agreements aim to create clear and objective rules to ensure the security of investment, security in energy trade, the standard of competition, and also the maintenance of incentives for the

[54] Foot note 33 ,p. 10

[55] Foot note 46, Art 7(4)

[56] Foot note 46, Art 7(6)

[57] Foot note 46, Art 7(7)

[58] Foot note 46, Art 22 and Art 10-15

development of new technologies and promotion of the use of clean and renewable energy.[59] There are various regional energy trade agreements around the world, but for sake of significance to this research, we shall examine those who are made within the African continent more importantly those made in the East African region.

In the 1980s the Lagos Plan of Action (LPA) was launched by the Organization of African Unity (OAU) to promote economic integration among African states. The action plan resulted in a binding strategy declared at the conference of Head of States held in 1991. The outcome of the meeting was the establishment of an important institutional set up called the African Economic Community (AEC). The objective of the institution was to first commence free trade areas and progressively a custom union, then a monetary union. The idea of instituting regional economic communities (RECs), which were the building blocks of economic integration, was introduced by AEC. It was held that RECs are the prelude to continental economic integration.[60]In relation to energy, RECs has recently developed specialized agencies to promote energy trade and created regional energy markets to encourage inter-state power trade. These specialized energy markets are called "Power Pools".

"Power pools are a group of two or more operators of public power that coordinate electricity generation and transmission activities within a specific country or region. The management of activities of these power pools may cover several dimensions, such as (i) the connection of power plants with transmission lines; (ii)joint planning in the construction of new production and transmission facilities; (iii) managing the electricity demand; and (iv) coordination and planning of the power delivery".[61]

There are five regional power pools that have been established under each RECs in the African continent including: (i) AMU - Maghreb Electricity Committee (*Comité de L' Electricité Maghrebin* - COMELEC); (ii) ECOWAS - Western Africa Power Pool (WAPP); (iii) ECCAS - Central Africa Power Pool (CAPP); (iv) COMESA - Eastern Africa Power Pool (EAPP); and (v) SADC - Southern Africa Power Pool (SAPP).

[59] Foot note 40,p.226

[60] Ibid ,p.316

[61] Id, P.315

The East African Power Pool (EAPP)

The EAPP is an intergovernmental organization established in 2005 as a specialized agency of COMESA to foster inter-country power connectivity. Its member includes Egypt, Libya, Sudan, Ethiopia, Kenya, Rwanda, Burundi, Tanzania and the Democratic Republic of Congo. The institute was founded with the aim of optimizing the supply of energy to residents; supplying clean energy sources, utilizing the energy resources available in line with social and environmental considerations and finally providing cheap electricity.[62]

One of the organs of the EAPP which is tasked with setting up energy markets within the EAPP, to enforce standards, specifications, and procedures, and resolution of disputes as regards energy trade is called the Independent Regulatory Board (IRB). The board is composed of appointees of member countries' energy regulatory authorities.[63]

The feature of the market envisaged by EAPP is a regional energy market governed by sound and effective rules. The regional market is designed to function based on the existing trade arrangements and treaties governing commercial transactions among members. Particularly, the market rules are there to regulate trade and flow of electricity via transmission lines between market participants. The EAPP sets standards, procedures, and codes of inter-connection for the East African Community (EAC).[64]The East African Power Pool Regulatory Forum is an organ within the EAPP responsible for the above tasks. This organ was later changed to Independent Regulatory Board during the 5th conference of Ministers on the 30th of March, 2012. In the conference, it was decided to make Addis Ababa, the permanent seat of the Secretariat of EAPP. The Independent Regulatory Board (IRB) was given the power to recommend changes in national legal frameworks of member states; stimulate regional power trade and promote the role of EAPP in creating an efficient electricity market. Furthermore, the IRB was empowered to oversee, and monitor the operation of regional energy trade, propose modifications as necessary and resolve inter-country energy trade disputes arising between EAPP members.

Although it has been nearly 8 years since its establishment, the IRB hasn't begun regulating cross- border trade in electricity. The Board in fact developed draft market rules to regulate regional electricity trade but it has not come into operation.

[62] Id.,p.322

[63] Ibid,p.323

[64] Id, p. 323

The East African Power Pool is established to create an electricity market in which any electricity exporting or importing enterprises within each member country can participate. The organization has developed draft market rules for participants that want to engage in cross border electricity trade. The rules require each participating enterprises to register and enter into an agreement with East African Power Pool Coordination Center (EAPPCC) to join the market. In approving or rejecting the application of registration, the EAPPCC applies market guidelines and principles of fairness and equal treatment to all member country enterprises who applied to participate in the market. [65]

Moreover, the EAPPCC and each participating enterprises warrant each other that the execution, delivery, and performance of the relevant Trade Agreements do not violate or conflict with any applicable law or any provision of the constitutional documents applicable to the EAPPCC, and Participating Enterprise or any of their assets, or any contractual restriction binding on or affecting any of their assets. [66]

Members shall also at all times act in accordance with the Market Conduct Rules when engaging in trade and related activities of energy products, and shall seek to promote integrity and efficiency in the market. They shall take due account to any relevant regulatory or legal obligations, any proper and relevant professional standards of conduct, and the need for the market to operate fairly and efficiently for all Members. Especially members are obliged not to apply unreasonable business practices when carrying out trade, and shall always seek to act in accordance with good business practices.[67]

[65] East African Power Pool, Draft Market rules, Art 9

[66] Ibid, Art. 10 &11

[67] Id, Annex 4, Clause C

Chapter Three

The Regulatory Framework Governing Ethiopia's International Trade in Energy

3.1. An Overview of Ethiopia's International Trade in Energy

Ethiopia is an African country which is endowed with a variety of renewable energy resources including hydro, wind, geothermal, solar, and bio-energy. "*The total hydropower potential of the country is projected at 650,000 GWh per year of which 25% (160,000 GWh per year) could be economically exploited for power*".[68] Since it is endowed with large hydropower and other renewable energy resources, Ethiopia has determined the Energy sector in its national energy policy as an area that can generate revenue; and identified regional energy interconnection and integration as a strategy for its realization.[69] Thus it has recently commenced energy interconnection projects with its neighbors. The power interconnection is serving the country as a good source of foreign currency, besides it also plays a critical role in geopolitical stability in the region. The instability in one country will have direct consequences on the economies of others. As countries' economies and politics become more interdependent they tend to cooperate to maintain regional peace and security.

Ethiopia has started its role in creating energy interconnection with its neighbors over the last decade. At present, the sole public enterprise that is conducting cross border electricity trade is the Ethiopian Electric Power. Nonetheless the Energy Proclamation no. 810/2013 under art 6 (1) permits other licensed energy producers "Independent Power Producers" to engage in the power import/export trade. This is a big step towards promoting investment in the energy sector. One of the missions of the Ethiopian Electric Power is to provide electricity to neighboring countries. As a result, it is now supplying electricity by generating power connections with neighboring countries such as Sudan and Djibouti and in turn earned USD 66.4 million during the 2019/2020 Fiscal Year.[70]

In addition, the country is working to move beyond the continental level by developing and strengthening energy links with other countries to enhance the economic and social ties of the

[68] Foot note 1,p. 5

[69] Foot note 1, p. 6, Para. 5

[70] Ethiopian Electric Power (EEP),Market Business Development Office ,July 25,2020

region beyond East Africa. In the long-term, Ethiopia is also developing mutual relations with Yemen and other Middle Eastern Countries. Consequently, extensive tasks are being done to make the sector one of the areas which will generate more foreign currency for the country.[71]

The government organ which is mandated with the regulation of cross border electricity trade is the Ethiopian Energy Authority. The Ethiopian government had established the former Ethiopian Electricity Agency by Proclamation No 86/97. Although the agency did so many works related to its mandates, it was not authorized to undertake energy efficiency regulatory activities. Understanding the country's demand for Energy resource, the Ethiopian government recognized the importance and urgency of Energy Efficiency and Conservation regulation. As a result, the government has consolidated the Ethiopian Electric Agency (EEA) to become the Ethiopian Energy Authority (EEA) by the new Proclamation no. 810/2013 and Council of Ministers Regulation no. 308/2014. Following the new proclamation, the Authority is mandated to fully undertake the regulatory activities of the energy sector. The authority is granted with the power to examine and approve essential cross border electricity trading instruments i.e. the electric power purchase agreements under article 4(7) of Energy Proclamation no. 810/2013 and Article 77 (3) of Regulation no. 447/2019. It is also conferred with the power to regulate Ethiopian international trade of electricity through the conditions set for importation or exportation of electricity.[72]

On the other hand, Ethiopia is heavily importing other energy products like petrol in a volume incomparable with its export. About 80% of the country's petroleum consumption is by the transport sector, which mainly uses diesel fuel. The Import of diesel and kerosene is increasing over the years. Diesel (ADO) accounts for 55% to 60% of total imports followed by kerosene (20% to 25%). Kerosene import is consumed by the household and by the aviation sectors.[73]

The Ethiopian Petroleum Supply Enterprise is the exclusive importer of Energy products such as coal and petrol. It is mandated by Regulation no. 265/2012 with the functions of supplying petroleum to distribution companies by importing clean products and by processing crude oil on

[71] Ethiopia electric power , 'Power Sale' (*EEP web site*, 23 June 2016) <https://www.eep.com.et/en/power-sale/> accessed 25 March 2020

[72] Energy Proclamation, Art. 14 (1)

[73] Foot note 1 ,p.15

the basis of an assessment of the country's demand. As one can observe from the proclamation the Ethiopian international oil trade is fully monopolized and regulated by this state enterprise.

So far Ethiopia's international energy trade is mainly dominated by import of Energy products and the export of electricity. As a result, the legal frameworks regulating Ethiopian international trade in energy focuses on these issues.

3.2. Import of Energy Products

In Ethiopia import of Energy products like gasoil and coal is conducted by a state monopoly called the Ethiopian Petroleum Supply Enterprise. It is a nationally registered public enterprise with a major mission of supplying refined petroleum products to the country. The enterprise had been established in 1967 GC as '' Ethiopian Petroleum Association Company" to import and refine crude oil by its own refinery. As the crude oil refined by the company was not satisfying the then requirement, refined products were imported to fulfill the balance.

The enterprise has been serving the country for the last 50 years with various names, structuring, and accountability but with a similar mission of supplying sustainable refined petroleum products to the country. It has been the sole importer of refined petroleum products since its establishment. It is also responsible for the administration of strategic petroleum reserve and the establishment of petroleum reserve depots.

The refined products are mainly purchased through open international tenders and are imported via Djibouti. However, a portion of Gasoil and Gasoline are purchased directly from Kuwait Petroleum Corporation and Sudan Petroleum Corporation respectively. Aviation fuel is fully imported from the State of Kuwait. In both cases, periodic negotiation is conducted on premiums based on the bilateral agreements Ethiopia has made with the two countries.[74]The enterprise import energy products through three modes i.e. open international tendering, restricted international tendering, and based on government to government dealings.

3.2.1. Open International Tendering

In purchasing petroleum or coal products the Ethiopian Petroleum Supply Enterprise (EPSE) first invites international bidders fulfilling national quality specifications to supply the products, and then the bidders participate in the tender process and finally, the successful bidder will enter

[74] Ethiopian Petroleum Supply Enterprise website <www.epse.gov.et/web/guest/profile> (accessed on 12th of May 2020)

into a contract to supply the products.[75]In the process, the Enterprise purchases products by inviting suppliers from all over the world with the required capacity indiscriminately. Here the state trading enterprise conducts the purchases or imports complying with international trade principles of non-discrimination.[76]

3.2.2. Restricted International Tendering

The other mode of importing energy products especially petroleum products is restricted international bidding. This approach is mainly used at times of urgent need for the supply of petrol products. The enterprise will only invite renowned previously supplying contractors to the tender and then buy products from the successful bidder. This way of purchasing raises the question of why the enterprise restricts the participants to be only previous suppliers and yet the process could be regarded as discriminatory. However, the enterprise gives the argument that the restriction is made only based on the previous capability of the suppliers and their record of fulfilling the enterprise's quality specifications and not based on the origin of the products or the nationality of the suppliers. In other words, it's based on pure market considerations. In addition, the mode is only used in times of urgent demand and to surpass all procedural intricacies of open tendering. Nonetheless, as Ethiopia is heading to become a member of WTO and going to conduct its international trade based on international trade principles, such types of purchases could raise many disputes with its trading partners in the future.

3.2.3. Government to Government Petroleum Supply Agreements

Ethiopia is categorized under the list of Least Developed Countries (LDCs) according to UNCTAD; thus the country often faces shortages of foreign currency to fund its imports especially its petrol trade-in. Hence it is common for the Ethiopian government to make negotiations with governments of prominent global oil supplying countries to acquire petrol products on the basis of long term credit agreements. These agreements are mainly made through diplomatic negotiations and the EPSE supervises their performance.

3.3. Export of Energy

Ethiopia is one of the African countries with immense potential for energy production. It can for instance generate up to 45,000 Mega Watts (MW) of electricity from hydropower and 10,000 MWs of power from geothermal energy sources. Presently, these resources are largely

[75] Pertol and Coal Purchase Directive of Ethiopian Petroleum Supply Enterprise

[76] General Agreement on Tariff and Trade, Art. XVII

unexploited.[77]As a result, Ethiopia has the opportunity to use its energy resources to promote regional energy integration as it is endowed with huge hydropower and other renewable energy resources.[78] Currently, even though the amount is very nominal compared to other countries the country is earning millions, out of its energy export trade.[79] Hence, as its economy grows, Ethiopia will have the potential to become the greatest energy exporter in the East African region. The export trade will also boast its economy significantly in the near future. An export trade that is earning the country a considerable amount of remittances requires a regulatory framework that adheres to the general principles of international trade.

The revised draft investment Council of Ministers regulation under article 6 and the Energy Proclamation of Ethiopia Proc. No. 810/2013 under article 6&7 have opened the door for any person who satisfied the Energy Authority of all the legal and technical requirements to generate, transmit, distribute, and sell, import, or export electricity for commercial purposes to get a License. One can understand from such fact that the Ethiopian Law permitted energy export and import business for both foreign and domestic investors as long as they meet the required statutory and technical requirements. Furthermore, the Energy proclamation under article 14 indicated the conditions of importation and exportation of electricity to be determined by a regulation to be issued. The conditions reflect the regulatory mechanisms envisaged to control the cross border electricity trade. These mechanisms can be categorized into three types of regulatory methods i.e. Legal mechanisms, Technical mechanisms, and Custom regulations.

3.3.1. Legal Mechanisms

This approach is a preliminary regulation of determining who can enter into the energy import/export business. So any applicant who wants to engage into export/import trade of electricity is required, in addition to the mandatory requirements stated under article 3 of Regulation No. 447/2019, to produce power purchase agreement, acceptable license issued by the appropriate Authority to participate in the spot market, disclose the source and amount of desired export/import of power, assess the possible impact of the desired export/import on the

[77]Power Africa, Investment Brief for the Energy Sector in Ethiopia, https://www.usaid.gov/sites/default/files/documents/1860/Ethiopia_IG_2015_05_03.pdf, Accessed on August 23 2020

[78] Footnote 1,p.9

[79] Foot note 7

existing customers and the economy and produce an applicable agreement with entities in the country where the electricity is to be exported in order to get an Exporter License.[80] Most of the conditions are self-explanatory therefore it is preferred to dwell upon some pertinent legal requirements.

3.3.1.1.Power Purchase and Wheeling agreements

a. Power Purchase Agreements (PPA)

Power Purchase Agreements (PPA) are agreements entered for the sale of energy between the buyer enterprises found in one country and a seller found in another country. The power sold is energy generated from renewable facilities. PPAs are signed to last for a long period of time usually from 10 to 20 years.[81] A PPA is simply a contract made between the seller/generator of electricity and the purchaser of power "the buyer/off-taker". The agreement is also referred to as an "off-take agreement". The main purpose of the agreement is to define the rights and duties of the parties and facilitate the trade of energy. One of the peculiar features of PPAs is that they are very technical. But there are fundamental principles common to all types of PPAs. These principles have to do with the schedule of power delivery, the commencement of commercial operation, penalty clause for defective performance, terms of payment, and grounds of termination of the contract. Before PPAs are signed, the prospective buyer or off-taker has to first make pertinent decisions and make a request to the generator that the off-taker is in need of power and that it has the economic capacity to finance its trade. Sometimes it also specifies the sources of power, the desired power generating technology, and the location of the power facility.[82]

Power Demand

In entering the contract the generator does not simply agree to the request of the off-taker but it has to first ascertain the actual and future power demand of the buyer.[83]

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[80] Regulation no. 447/2019, art. 10

[81] Amanda Niklaus, 'What is a PPA? Power Purchase Agreement Explained' (*Pexpark*, 22 January 2019) <https://pexapark.com/solar-power-purchase-agreement-ppa/> accessed 12 May 2020

[82] Power Africa United states department of commerce , 'Understanding Power Purchase Agreements' (*Mbadissy@docgov*, 23 February 2016) <http://go.usa.gov/FBzH> accessed 13 May 2020

[83] Ibid,p.24

Budget and Technology

The off-taker then has to determine the approximate tariff with which it can purchase power, the technology to be used, and the place of the generator facility.[84]

Location

Off takers (and producers) will want to locate the power source as close as possible to a connection point on the power grid and to the end-user to avoid transmission line losses and accessibility to fuel sources.[85]

b. Wheeling agreements

Wheeling agreements are contracts that govern the use of energy transmission utilities for conveying power from exporter countries to buyers.[86] In the context of electricity export wheeling means the use of power transmission infrastructure (Grids) of one country to sell electricity to another country. In using the infrastructure both the purchaser and seller pay a service charge called Wheeling fee. For instance, if Ethiopia wants to export electricity to Tanzania, it could not have access to the consumers of Tanzania unless it uses Kenya's transmission grids. So both countries use Kenya's grids to conduct their energy trade by paying a proportional wheeling fee to Kenya. Therefore a wheeling agreement is an agreement that governs such arrangements.

At present Ethiopia does not export electricity to countries beyond its neighbors, but it plans to expand its power trade beyond its neighbors through wheeling agreements. According to a study made by the East African Power Pool the main setback for conducting power trade among East African countries is the excessive wheeling fee requested by grid owning countries.

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84 Id.p24

85 Id. P.29

86 John Gibbons, Electric Power Wheeling and Dealing; Technological Consideration For Increasing Competition (1st edn, Washington, DC: US Government Printing Office 1989) iii

c. PPAs in Ethiopia's Export Trade

Although the Ethiopian law opened electric export/import business for the private sector as long as they meet the required statutory and technical requirements, it's only the Ethiopian Electric Power, a state enterprise, which is currently engaging in electricity export trade. The enterprise essentially exports electricity to neighboring countries through power purchase agreements. The power purchase agreements can be classified into two based on the commitment assumed by the parties.

i. Surplus Power Purchase Agreements

This type of agreement is a contract in which the exporter/supplier exports the excess electricity produced by its generation facilities. The exporter is not under obligation to supply electricity continually and the importer cannot claim for sustained power supply. The power purchase agreement concluded by Ethiopia and Djibouti is of such a kind.

ii. Firm Power Purchase Agreements (Take or Pay agreements)

The other way of exporting electricity to neighboring countries is through Firm power purchase agreements. These agreements as their name suggests are contracts imposing a firm obligation on the parties. The exporter shall always supply the agreed amount of electricity with the agreed quality, and the importer shall always pay the agreed price. In this agreement, if the importer does not want the electricity supplied, it should take the power or pay the price commensurate to the amount without receiving the power. That is why they are referred as "take or pay agreements". The power purchase agreements signed and about to be signed by Ethiopia with Sudan and Kenya respectively, are of this kind.

3.3.1.2.Acceptable License of the appropriate Authority to participate in the spot market[87]

When an enterprise applies to export power and participates in an electricity market regulated by a regional multilateral organization like for instance East African Power Pool, the applicant may be required to produce an acceptable license or document issued by such regional organization.

3.3.1.3. Assessment of the possible impact of exported electricity

An enterprise that wants to get an export license should assess the impact of the desired export on existing customers and on the economy of the exporting country.[88] Although the requirement of assessing the impact of exported power in the exporting country's economy is crucial for

[87] Foot note 79, Art 10

[88] Ibid.

conducting business feasibility, it is not necessary or should not be a prerequisite at the preliminary stage to get a license. It is better off if the matter is left for the exporter after it starts operation.

3.3.1.4. Production of Applicable Agreements

The applicant is also required to produce applicable agreement with entities in the country where the electricity is to be imported or exported.[89] This means the applicant has to provide an agreement entered with an enterprise purchasing/importing the power.

3.3.2. Technical Mechanisms

Application for exportation or importation of electricity shall fulfill essential technical requirements.

Compliance with National Grid Code and Access to Grid

Before analyzing rules on compliance of grid code, it is vital to understand the concept of grid code.

What is a Grid Code?

A Grid code is a technical requirement that sets the parameter a facility linked to a public electric network has to attain in order to guarantee a secure and well-sustained electricity transmission system. The facility can be another network, a generating plant, or a consumer. The authority in charge of the system's reliability and sound performance specifies the grid code.[90] The Ethiopian Energy Proclamation no.810/2013 under article 2 (12) defines "Grid Code" as a code issued by the Ethiopian Energy Authority containing technical performance standards in relation to the power generation, transmission, and distribution system.

The exporter is permitted by law to use the national grid adhering to obligations stated in the power sale contract and in line with the terms and conditions specified in the License.[91] In other words, the law made national transmission grids accessible to any licensed enterprise on a non-discriminatory basis. Moreover, the national transmission grid is made open for international

[89] Id.

[90] Wikipedia, the free encyclopedia https://en.wikipedia.org/wiki/Grid_code

[91] Foot note 79, Art. 26(1)(a)&(b)

power trade through a transparent and cost-reflective manner based on the conditions specified in the license and based on the transmission service agreement. [92]

Hence an exporter or importer who applied for a license has to make its generation, transmission, and distribution compatible with the national grid code.[93] Furthermore, the licensee has to give a guarantee to use the national transmission grid in a transparent and cost-reflective manner based on the transmission service agreement and without adversely affecting the services of existing customers.[94] The licensee is entitled to refuse or prevent connection or access when the national grid connection or access contradicts with the grid access principles. In such cases, the Ethiopian Energy Authority shall examine and pass a decision on the reliability of the refusal or otherwise.[95]

3.3.3. Custom Regulations

When we talk about custom regulations the first things that come to our mind are Tariffs and Import/Export taxes. These are very important instruments that enable governments to maintain control and regulate the products entering their territories. The Ethiopian Customs Authority Tariff First schedule based on the 2002 harmonized systems imposes a 10 % tariff per 1000 KWH on imported Electrical energy and exempts the export of electricity from any taxation.

3.4. The Prospects of Regulation of Ethiopia's International Trade in Energy

Energy is critical for economic development. Its significance stems from the fact that energy is a necessary input in all productive activities, including the domestic sector. Energy is also an essential ingredient of industrialization. Ethiopia is one of the LDCs endowed with various energy resources, especially the country's hydropower prospect has an important contribution to make it to its neighbors Sudan, Kenya, Djibouti, Somalia, and Eritrea. These countries constitute a readily available market for hydro-electric power within the region. Some of these countries are already facing power shortages and hence are in dire need of electricity to run their economies. In the 2020/21 fiscal year, Ethiopia has unveiled its ten-year master plan for the

[92] Ibid, Art 33

[93] Id, Art. 10

[94] Foot note 79, art.33

[95] Ibid, art 34

expansion of the energy sector. Particularly, it has given the greatest priority to investments in the renewable energy sector. These include Solar, Wind, and Hydropower sources. The plan sets to raise the electricity supply of the country from 4300MW to 19000MW.[96]

Besides the plan determines to increase the amount of exported power from 300 MW to 400 MW and increase the foreign exchange reserve emanating from the trade. Accordingly, based on the PPA signed with Kenya; Ethiopia will start its first export of 400 MW of power in the 2020/2021 budget year. Moreover, it has anticipated stretching the second transmission lines to Djibouti to increase the power export.[97] On the other hand, in order to properly address the energy problem in the East African region from all aspects, it is necessary to formulate comprehensive energy trade regulatory frameworks that ensure the least-cost and development consistent monitoring at the level of the countries' energy resource endowment and socio-economic policies. There are promising steps taken by Ethiopia in this regard. The steps include:-

3.4.1. Development of Efficient Regional Energy Markets

Ethiopia is a founding member of the East African Power Pool (EAPP) since its establishment in 2005. The EAPP is a specialized institution created to foster power system interconnectivity between member countries of Common Market for Eastern and Southern Africa States (COMESA). The organization endeavors to create an efficient regional power market. [98]

On a meeting held in Nairobi on January 20, 2012; the Energy Ministry Representative's of Democratic Republic of Congo (DRC), Burundi, Rwanda, Tanzania, Uganda, Kenya, Egypt, Ethiopia, and Sudan discussed regulatory issues of energy trade and formed the Eastern Africa Power Pool Regulatory Forum to direct and facilitate the formation of an Independent Regulatory Board (IRB). In this meeting, the forum elected Tanzania to be the chairman and Ethiopia to be the secretary and agreed on a temporary secretariat to be co-located along with the EAPP headquarter. The detailed mandates of the IRB are as follows:

i. Regulate and supervise the operation of the EAPP Regional Energy Trade, conduct a study and suggest revisions as needed, and present a yearly accomplishment report to the Conference of Ministers,

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[96] "Ethiopia has prepared a Electricity Master plan which requires 800 Billion Birr "Reporter Amharic Weekly Newspaper, Published on August 22,2020

[97] Ibid.

[98] East African Power Pool website, http://eappool.org/

ii. Endorse the formula for calculating the EAPP Regional transmission and wheeling tariffs in accordance with the approved methodology or methodologies,
iii. Issue operating licenses to competent market members in conformity with the standard market rules and regional grid codes,
iv. Approve alterations to successive versions of the EAPP regional market rules, EAPP interconnection code, standards, procedures, and specification, and implement standards procedures and specifications,
v. Regulate pertinent actions of the signatories of the Inter-utility memorandum of understanding,
vi. Develop and suggest any changes to the financing formula of regional organizations (Such as EAPP Permanent Secretariat, Coordination Centre),
vii. Propose modification to EAPP member country's national laws to assist the expansion of the EAPP regional power trade and the sustained advancement of the EAPP towards a competitive electricity market,
viii. Settle any electricity cross–border trade disputes which may arise between the members in the EAPP regional power market,
ix. Promote transparency and accessibility of information to all stakeholders,
x. Organize, observe, and implement environmental guidelines for regional projects
xi. Inflict penalties and sanctions on non-conformity with market rules, grid code, and any other appropriate rules and regulations[99]

By performing these mandates the IRB ensures a market-oriented price formation and non-discriminatory energy markets for Ethiopia and the region.

3.4.2. Establishment of Independent National Regulatory Institution

The history of energy trade exhibits in many instances that energy trade had been abused in most parts of the world. Especially in countries where there is a near complete free market economy the trade is run by demand and supply forces with a complete disregard of other developmental objectives. Thus, rules that promote free trade, fair competition, prohibit anti-competitive business practices and which are in line with countries' development objectives are required. Likewise the rules cannot be effective if they are not enforced by an independent regulatory institution.

[99] East African Power Pool website, http://eappool.org/independent-regulatory-board/

In Ethiopia, the government organ which is mandated with the regulation of cross border electricity trade is the Ethiopian Energy Authority. The authority is granted under article 4(7) of the Energy Proclamation no. 810/2013 and article 77 (3) of Regulation no. 447/2019, with the power to examine and approve essential cross border electricity trading instrument i.e. the electric power purchase agreements. It is also conferred with the power to regulate Ethiopian international trade of electricity through the conditions set for importing or exporting of electricity.

3.4.3. Adoption of Essential Free Trade Principles

As one of the African countries currently in the process of acceding to the WTO, Ethiopia is adjusting its laws governing its international trade to conform to free trade economic principles. This is essentially demonstrated in laws governing its import/export trade in energy and energy products. Pertaining import of Energy products, the Ethiopian Petroleum Supply Enterprise imports energy products following internationally accepted procurement methods treating suppliers in fair and indiscriminate manner, through open and competitive tendering. Here the state trading enterprise conducts the purchases or imports complying with international trade principles of non-discrimination.

In other instances the Ethiopian Energy Proclamation granted all private investors with the right to use the national grid in accordance with the terms and conditions specified in the License and as per the transmission service agreements as may be applicable to export electricity. In other words the law made national transmission grids accessible to any licensed enterprise on non-discriminatory bases.[100] Moreover, the national transmission grid is made open for international power trade through transparent and cost- reflective manner based on the conditions specified in the license and based on transmission service agreement. [101]

3.5. Challenges to Ethiopia's Regulation of International Trade in Energy

3.5.1. Lack of Infrastructure

Energy is transported differently from other products. A significant share of trade in energy is network-dependent.[102] This means that trade in energy, chiefly in the cases of natural gas and

[100] Foot note 79, art. 26(1)(a)&(b)

[101] Ibid, art 33

[102] Foot note 12 ,p. 118

electricity, does not cross borders as other products do, but rather its transportation is usually linked to "fixed infrastructure."[103] Moreover, energy transmission infrastructure is critical for creating efficient regional energy markets. The transmission infrastructure requires huge investment and most developing countries including Ethiopia cannot afford it. The state of infrastructure directly affects the regulatory functions of authorities. Substandard infrastructures yield poor regulatory performance.

3.5.2. Powers of Regulatory Institution

The Ethiopian government has consolidated the Ethiopian Electric Agency (EEA) to the Ethiopian Energy Authority (EEA) by the new Proclamation 810/2013 and Council of Ministers Regulation no. 308/2014. Following the new proclamation, the Authority is authorized to fully undertake the regulatory activities of the energy sector. However, the authority is established by the Ministry of Water and Irrigation at a parallel level with the Ethiopian Electric Power and Ethiopian Electric Utility making its regulatory power unattainable. The Ethiopian Electric Power is the sole government enterprise currently engaging in cross border electricity trade and the Ethiopian Energy Authority (EEA) has found it difficult to exercise regulatory power over an institution that is found in the same position as the regulatory authority. [104]As a result, the Ethiopian Energy Authority is not currently exercising its power of examining and approving essential cross border electricity purchase agreements despite the power given to it by the Energy Proclamation no. 810/2013 Article 4(7) and Article 77 (3) Regulation no. 447/2019.

3.5.3. Excessive Wheeling fee

In the future Ethiopia plans to export electricity to countries beyond its neighbors, this requires expanding its power trade with its neighbors through wheeling agreements. According to a study made by the East African Power Pool the main setback for conducting power trade among East African countries is the excessive wheeling fee requested by grid owning countries. This could be a big challenge for Ethiopia's export trade in the near future.

3.5.4. Discriminatory Treatments

The Ethiopian Petroleum Supply Enterprise in some instances, particularly in restricted tendering, imports energy products by inviting few renowned previous supplier contractors to bid and buy products from the successful bidder. This way of purchase raises the question of why the

[103] Foot note 12, p 11

[104] An Interview with Mr. Habtamu, A Senior Legal Expert at Ethiopian Energy Authority (EEA).

enterprise restricts the participants to be only previous suppliers and yet the process could be regarded as discriminatory. Therefore as Ethiopia is heading to become a member of WTO and going to conduct its international trade based on international trade principles, such type of purchases could raise many disputes with trading partners in the future.

Conclusion and Recommendation

Energy is a sector that plays a driving role in socio-economic advancement; poverty reduction and enhancement of the quality of life. Energy relates to all sectors of the economy as well as forming a sector itself. For decades Trade in energy has been considered as an exceptional case of International trade, different from other trade sectors and products. This is because of a variety of factors including the distinctive features of the product and the unprecedented challenges confronting it.[105]Energy plays a decisive role in countries' economies as all sectors use energy. Besides, Energy is one of the most crucial elements of modern daily life. Thus, trade-in energy constitutes, for every country, a major part of international trade.

There are various challenges and concerns surrounding the global energy trade. Such challenges comprise a mismatch between the growing demands and inert supply of energy, absence of distinction between energy products and energy services, and dependence of energy trade on fixed infrastructure. International trade in energy is regulated by general international trade frameworks like the WTO and specialized trade frameworks like the Energy Charter Treaty, other bilateral treaties, and domestic laws. The specialized regulatory frameworks set out comprehensive rules than the general ones.

Ethiopia is one of the few African countries gifted with various energy resources; in particular, the country's hydropower potential can be an important input to its economic development. The regulation of the energy sector was largely not centralized until recent times let alone its global energy trade. Although there are attempts to regulate regional energy trade through a specialized regional regulatory instrument like the draft market rules of East African Power Pool, the regulatory frameworks governing Ethiopia's international trade in energy are largely domestic laws and energy sale contracts (i.e. power purchase agreements). The Energy proclamation no. 810/2013 and Regulation no. 447/2019 are the basic laws setting conditions for the exportation of electricity. The Ethiopian Energy Authority Establishment Regulation no. 308/2014 instituted the Ethiopian Energy Authority to be a mandated government organ to regulate cross border

[105] Foot note 1,p.2

electricity trade. The authority is granted with the power to examine and approve essential cross border electricity trading instruments i.e. the electric power purchase agreements under article 4(7) of Energy Proclamation no. 810/2013 and Article 77 (3) of Regulation no. 447/2019. It is also conferred with the power to regulate Ethiopian international trade of electricity through the conditions set for importation or exportation of electricity under the regulation.[106] The conditions reflect the regulatory mechanisms envisaged to control the cross border power trade. These mechanisms can be categorized into Legal mechanisms, Technical mechanisms, and Custom regulations. Any applicant who wants to engage into the export/import trade of electricity is required to produce a power purchase agreement, acceptable license issued by the appropriate authority to participate in the spot market, disclose the source and amount of desired export/import of power, assess the possible impact of the desired export/import on the existing customers and the economy and produce an applicable agreement with entities in the country where the electricity is to be exported.[107] An exporter or importer who applied for a license has to also make its generation, transmission, and distribution compatible with the national grid code.[108]

In another respect, the Ethiopian trade in Energy products is primarily conducted and regulated by a sole public Enterprise. The Ethiopian Petroleum Supply Enterprise is the exclusive importer of Energy products such as coal and petrol. The enterprise is authorized by Regulation no. 265/2012 with the functions of supplying petroleum to distribution companies by importing clean products and by importing and processing crude oil on the basis of an assessment of the country's demand. It imports energy products through three modes i.e. open international tendering, restricted international tendering, and based on government to government dealings.

The economic development of the East African region in general and Ethiopia, in particular, is hindered by various factors; one of the reasons is the lack of adequate supply of energy to promote industrialization. So, in order to properly address the energy problem in the region and the country from all aspects, it is necessary to formulate comprehensive energy trade regulatory frameworks that guarantee the least-cost and standard monitoring. This depends on the level of the countries' energy resource endowment and socio-economic policies. Actually there are

[106] Energy Proclamation, Art. 14 (1)

[107] Regulation no. 447/2019, art. 10

[108] Id, Art. 10

encouraging prospects for Ethiopia in this regard. The development of an efficient energy market, the establishment of an independent national regulatory body, and the adoption of essential international trade principles in domestic law are promising steps towards creating a competent regulatory framework for the country's international trade in Energy.

Conversely, there is a range of issues that are becoming a challenge to the regulation of Ethiopia's international trade in energy. The lack of infrastructure to regulate the cross border energy trade, structural problem of regulatory institutions, and discriminatory import practices are among the major ones. Since Ethiopia is considering the energy sector to be a major source of foreign currency for the country, it should at any cost setup advanced infrastructure that enables effective cross border energy trade regulation. The country should also empower independent regulatory institutions to monitor its energy trade. Especially the mandate of the Ethiopian Energy Authority shall be enforced properly. For instance, any exporter or importer of electricity shall get approval of its power purchase agreement by EEA before exporting or importing power. Finally, the country can promote its economic development through the energy trade sector in a much-enhanced manner if it eliminates some discriminatory trade practices. Such operations are mostly observed in urgent purchases of petroleum products through restricted tendering by the Ethiopian Petroleum Supply Enterprise. Therefore this state trading enterprise should abandon such mode of purchases to comply with the international trade principle of non-discrimination.

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