ENERGY REGULATION AND MARKETS REVIEW

SEVENTH EDITION

Editor David L Schwartz

ELAWREVIEWS

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PREFACE

In our seventh year of writing and publishing *The Energy Regulation and Markets Review*, we have seen dramatic changes in global energy policies. Europe has experienced a strong economic rebound, which has allowed many countries to dedicate increased resources to the infrastructure needs of the energy sector, including for renewables. While the United States commenced efforts to withdraw from the Paris Agreement, the signatories to the Paris Agreement countries have continued to make efforts to reduce greenhouse gases (GHGs). There is still a significant need to invest in infrastructure, and we have seen significant investment throughout the supply chains in the oil, gas and power sectors globally. The 2011 Fukushima nuclear incident continues to impact energy policy in many countries, and we continue to see extensive liberalisation of the energy sector. Oil prices have started to rebound somewhat, which presents some hope to those countries that remain dependent upon oil prices for national revenue.

I CLIMATE CHANGE DEVELOPMENTS

With respect to climate change efforts, the Paris Agreement was placed into effect on 4 November 2016, but President Trump announced last year that the United States would be withdrawing from the Paris Agreement. Nonetheless, we continue to see significant carbon reduction efforts, such as increased development of renewable resources, as well as energy efficiency and demand reduction measures, globally, including in the United States.

Following the Brexit vote, the United Kingdom closed its 'renewable obligation' programme to new generation, and limited new contracts for differences, which has significantly reduced new renewable construction this year. France has announced a plan to close all coal-fired power plants within five years, double the capacity of wind and solar renewable generation and prohibit shale gas production and all new searches for hydrocarbons. Denmark continues to seek to have renewable energy meet all of its electricity demands by 2050, and over the past year has initiated an effort to improve the output of solar and wind resources through technology improvements. The Netherlands has a goal of reducing GHGs by at least 25 per cent by 2020, and has announced its intent to close all coal plants by 2030. While Germany will likely miss its 2020 renewable energy goals, it has an ambitious goal to achieve 65 per cent renewable generation capacity by 2030. Belgium has continued its effort to develop offshore renewable wind resources (including the development of an offshore grid), but has reduced historical green certificate subsidies. Italy is seeking to reduce carbonisation by having a goal of relying on renewable resources for 28 per cent of its energy needs by 2030. Switzerland has continued to promote the development of renewables and is supporting the development of large-scale hydroelectric resources through state subsidies. Spain is seeking to reach 20 per cent renewables by 2020, and has initiated new auctions for 6,000MW of new renewable installed capacity. Turkey seeks to have 30 per cent renewables by 2023.

China released a plan to have 15 per cent of its energy supplied by non-fossil fuels, 20 per cent from natural gas and no more than 58 per cent from coal by 2020. Korea's goal is to cut GHGs by 37 per cent by 2030, and it is seeking to have 95 per cent of all new installed capacity come from clean energy sources and to shut down coal power plants that are more than 30 years old. India's announced goal to have at least 40 per cent of its installed electric capacity powered by non-fossil fuels may be overshadowed by the fact that it is developing and constructing 50,000MW of new coal-fired generation capacity. Japan is looking at offshore wind and a variety of other new renewable energy sources to assist with the reduction of capacity following the shutdown of most of its nuclear generation capacity. Malaysia has been working hard to reduce its overdependence on coal and natural gas, and to encourage the production and use of renewable energy in an effort to meet its target of 50 per cent renewable resources by 2050. As of last year, 33 per cent of the installed capacity in the Philippines was from renewable resources, and 35 per cent was from coal generation. The United Arab Emirates continues its efforts to reduce its carbon footprint, announcing a goal of having 25 per cent of its capacity from renewables by 2030, and 75 per cent by 2050. South Africa relies upon coal generation for 85 per cent of its generation capacity but has taken steps to increase the development of renewable resources. Australia is adding significant new renewable resources to meet its 2020 renewable energy targets.

While the Trump Administration is seeking to reverse the Obama administration's Clean Power Plan, we are seeing continued significant investment in renewable energy development in the United States. Individual states are moving forward to achieve reduced reliance on fossil fuels and greater reliance on renewable energy, including California and New York, which are seeking a 50 per cent renewable portfolio standard goal by 2030, and Hawaii, which is seeking 100 per cent reliance on renewables by 2045.

II INFRASTRUCTURE DEVELOPMENT

For many countries, reliable energy supply is the primary concern, regardless of fuel source. Rural electrification and system reliability remain priorities in India, Indonesia, Myanmar, Mozambique, Angola, parts of Nigeria and Central and West Africa and we are seeing significant efforts to pursue electric generation and transmission projects in those regions. Turkey seeks to increase energy industry infrastructure in the power sector and the oil and gas sectors, in light of an estimated 6 per cent demand growth per year through 2023. Denmark has a new North Sea Agreement to secure future exploration and production of hydrocarbons from the North Sea. Panama continues to seek to attract foreign investment to assist with badly needed transmission and generation infrastructure needs. The 8 May 2018 announcement by President Trump that he intends to withdraw from the Iran nuclear deal and institute significant new sanctions is expected to present a significant roadblock to further foreign investment in the Iranian energy sector.

III NUCLEAR POWER GENERATION

Seven years after the Fukushima disaster, Japan has stopped operations for 43 out of its 48 nuclear power stations, and 14 nuclear power stations are in the process of complying

with new safety standards for possible restart. Germany continues to phase out all nuclear generation by 2022. Belgium is seeking to dismantle all nuclear plants by 2025. France is seeking a reduction of nuclear power generation to 50 per cent of total electricity production within five years. Switzerland and Korea are planning to limit the life of their nuclear generation units, with Korea abandoning the construction of six new nuclear power plants and cancelling the extension of others.

On the other hand, Turkey is continuing with development of the Akkuyu nuclear power plant (first unit estimated to be operational in 2023), and the United Arab Emirates is almost finished with the construction of the Barakah nuclear power plant, both of which are expected to be operational in 2020. South Africa is facing substantial resistance to its efforts to develop 9,600MW of new nuclear generation capacity. India's goal of 40 per cent non-fossil fuel generation is expected to require a substantial ramp-up of nuclear generation capacity.

In the United States, the early retirement of certain nuclear plants has been driven by cost and power market considerations, rather than safety concerns. Some nuclear owners in the United States have sought state subsidies in New York, Illinois, Ohio and Pennsylvania, among others, in order to avert premature retirements. Illinois and New York have implemented legislative and regulatory payment programmes for nuclear facilities in those states, but they are currently being challenged on constitutional grounds and remain pending before US federal circuit courts of appeal.

IV LIBERALISATION OF THE ENERGY SECTOR

We have seen significant energy sector regulatory reforms in many countries. Italy is seeking to reduce the gap between price and cost of energy, compared to the rest of Europe. Portugal continues to work on liberalising its electricity and gas markets. Japan has now fully liberalised the retail electricity sector. And we are seeing continued efforts to encourage further privatisation of the electricity sector in the United Arab Emirates and in certain countries in Central and West Africa. Turkey is seeking to privatise its generation assets. Brazil has seen significant privatisation, including the auction of four hydroelectric plants. Given Switzerland's interest in promoting the use of renewable resources, it has suspended a planned 49 per cent divestiture of its state-owned hydroelectric fleet. China has made moves to deregulate energy pricing. In a move away from privatisation, Colombia ordered the liquidation of Electricaribe (owned primarily by Gas Natural Fenosa), which is now in arbitration.

I would like to thank all the authors for their thoughtful consideration of the myriad of interesting, yet challenging, issues that they have identified in their chapters in this seventh edition of *The Energy Regulation and Markets Review*.

David L Schwartz

Latham & Watkins LLP Washington, DC May 2018

MOZAMBIQUE

Fabrícia de Almeida Henriques and Paula Duarte Rocha¹

I OVERVIEW

Mozambique is a rapidly developing country with great potential for the production and export of hydrocarbons and the generation of electrical power.

However, legislation in energy matters is only now trying to keep up with the pace of the growing complexity of the energy investments being made in the country, and the aspiration of establishing specific incentives for the generation of renewable electricity and for off-grid power initiatives in non-urban and 'peri-urban' communities. The framework of the electricity sector, the Electricity Act,² for instance, is over 15 years old. A regulatory overhaul in the electricity sector is said to be in the pipeline and the new legislative framework for oil, approved by Law No. 21/2014 of 18 August, has, after several years in the pipeline, finally been enacted.

Other legislation recently enacted in the oil and gas sector, includes, notably, Decree No. 45/2012 of 28 December, relating to the production, import, loading, storage, handling, distribution, sale, transport, export and re-export of petroleum products (the Petroleum Products Regulation), and Decree-Law No. 2/2014, relating to the specific legal and contractual regime applicable to projects in the Rovuma Basin.

The electricity sector is a concession-based system with limited competition, in which one company, state-owned Electricidade de Moçambique, EP (EdM) is the national transmission grid operator, and also holds concessions for generation, transmission, distribution and supply of electricity. Other notable concessionaires include Hidroeléctrica de Cahora Bassa SA, which produces most of the energy consumed in Mozambique, and MoTraCo SA, a joint venture between the Mozambican, South African and Malawian governments, which transmits power from South Africa to the Mozal aluminium smelter.

The oil and gas sector also has a concession system, where operating risks from the exploration of hydrocarbons are mostly borne by private investors. Empresa Nacional de Hidrocarbonetos EP (ENH) operates mainly in the upstream sector and holds participations in all oil and gas fields concessions in Mozambique. Recent years have witnessed very significant discoveries of natural gas, which have attracted several oil and gas market participants to the country and transformed the upstream industry.

¹ Fabrícia de Almeida Henriques and Paula Duarte Rocha are partners at Henriques, Rocha & Associados, member of MLGTS Legal Circle as Mozambique Legal Circle.

² Law No. 21/97 of 1 October.

In the petroleum products sector, there have been recent legislative attempts at creating an unbundled and competitive market. State-owned company Petróleos de Moçambique SA (Petromoc) is active in the midstream and downstream sector, storing and selling petroleum derivatives such as fuels, oils and lubricants.

The latest and most detailed instrument of government policy for the energy sector is contained in Resolution No. 10/2009, of 4 June (the Energy Strategy), in which one can find the main policy goals defined by the Mozambican government in this matter, notably:

- a to provide greater access to electricity and fuels to rural and peri-urban areas;
- b to discourage the non-sustainable use of lumber as a source of energy;
- c to stimulate the sustainable production of biofuels;
- d to diversify energy sources;
- e to implement a cost-based tariff system, one that includes environmental externalities; and
- f to engage in international cooperation, especially with the Southern African Development Community (SADC).

Other important policy resolutions for the government can be found in:

- a Resolution No. 27/2009 of 8 June, which adopted the Strategy for the Concession of Areas for Petroleum Operations;
- *b* Resolution No. 62/2009 of 14 October, which adopted the Policy for the Development of New and Renewable Energies; and
- c Resolution No. 64/2009 of 2 November, relating to the Strategy for the Natural Gas Market in Mozambique.

II REGULATION

i The regulators

The most relevant administrative entities regulating the Mozambican energy industry are:

- a the Council of Ministers, for all sectors of the energy industry;
- b the Ministry of Natural Resources and Energy, for all sectors of the energy industry;
- c the Energy Regulation Authority (ARENE); and
- d the National Petroleum Institute (INP), for the oil and gas sector.

The Council of Ministers represents the executive branch of government in Mozambique and, as such, the Constitution and main legislative diplomas in this sector grant it substantial powers in this field. Pursuant to the terms of the Constitution, the Council of Ministers may propose or enact legislation and promote and regulate economic activity. Making use of these powers, the Council of Ministers has adopted the vast majority of energy legislation in Mozambique.

In addition to the powers of legislation and regulation, the Council of Ministers has regulatory powers set out in the law, such as the granting of concessions (after the applicable tender offer) for electricity projects with nominal installed capacity of over 100MVA, according to the terms of Decree No. 8/2000 of 20 April (the Energy Concessions Regulation).

The Ministry of Natural Resources and Energy, as part of the central government, also has important powers in what the energy sector in Mozambique is concerned, defined in Presidential Decree No. 21/2005 of 31 March, such as in adopting regulations in the energy sector and licensing the activities of storage, distribution, supply and sale of natural

gas and petroleum products, as well as the granting of concessions of electricity projects with nominal installed capacity between 1MVA and 100MVA. More importantly, the Ministry of Natural Resources and Energy is the entity that instructs and (in tandem with the Council of Ministers) decides on concession requests for electricity and oil and gas projects, and monitors the activities of the concessionaires.

ARENE is the energy regulation authority that was established by Law No. 11/2007, the same statute that abolished the former CNELEC. ARENE is an independent public company charged with supervising and regulating the energy sector. Among ARENE's powers are:

- a implementation of energy development policies and strategies;
- b participation and supervision of public tenders for electricity concessions;
- ensuring compliance with the terms and conditions of concession contracts and licences;
- d issuance of opinions on proposals and recommendations on energy policy; and
- e performing studies on different aspects of the electricity sectors.

ARENE also has mediation and arbitration functions for disputes arising between: (1) concessionaires and other licensed entities; and (2) concessionaires and their respective consumers.

Finally, the INP has its powers set out in Decree No. 25/2004 of 20 August, categorised as:

- management of National Petroleum Database;
- *b* research activities;
- c powers relating to petroleum development, production and transport activities;
- d powers relating to the safekeeping of operators interests; and
- *e* general powers of administration, monitoring and regulation.

By virtue of Law No. 11/2017, all the rights and obligations of CNELEC were transferred to ARENE. As such, ARENE now has the competences that previously belonged to its predecessor and has also been given more extensive powers in this regard.

The INP also has powers to license as well as inspect any facilities relating to petroleum operations.

As for the applicable sources of law, the main framework legislation both in the electricity and in the oil and gas sectors is enacted in the form of law of the Mozambican parliament (the Electricity Act and Law No. 21/2014 of 18 August, the Petroleum Act). This legislation is implemented largely in the form of Decrees adopted by the Council of Ministers. Finally, the Ministry of Natural Resources and Energy may also issue orders.

ii Regulated activities

All activities in the electricity value chain (generation, transmission, distribution and supply) and most activities in the oil and gas value chain (prospection, research and production and transport of oil and natural gas, as well as the distribution and supply of natural gas) are subject to a regulatory approval by the Ministry of Natural Resources and Energy, the Council of Ministers or local authorities, depending on what is established in the applicable law, in the form of a concession agreement. Activities in the petroleum products value chain (production, storage, transport, distribution and sale, as well as the operation of unloading terminals and oil pipelines) are subject to licensing by the Ministry of Natural Resources and Energy in accordance with the terms of the Petroleum Products Regulation.

Energy facilities across all sectors are also subject to licensing, pursuant to the terms of the relevant legislation.

Concessions in the electricity sector are subject to tender offers, in accordance with the Energy Concessions Regulation. Tenders must follow the guidelines set out in the terms of reference and are directed to the relevant competent authority (i.e., the Council of Ministers, the Ministry of Natural Resources and Energy or local authorities). Tenders must also specify the technical and financial details of the project and provide sufficient evidence of the appropriate qualifications of the applicant. Hydroelectric projects require additional information on the characteristics of the hydroelectric use of the water resources; energy generation and transport concessions are also subject to additional requirements.

After the tender has been requested, ARENE issues an opinion on the subject; projects that imply the acquisition of land-use rights must also be preceded by a public consultation. After these steps have been undertaken, a decision by the relevant regulatory authority must be issued within 15 days. The effectiveness of this decision may be subject to conditions, such as expropriation or the granting of land-use rights.

A favourable decision by the authority will determine the entering of a concession agreement, where terms such as duration, applicable taxes and tariffs, conflict resolution mechanisms, guarantees, reversion and applicable law must be included. The concession agreement must also include a draft of the agreement to be signed by the National Transmission Network operator.

Electricity facilities are also subject to the granting of establishment and operation licences by the Ministry of Natural Resources and Energy prior to the start of operations. For the establishment licence, technical features of the facilities must be presented with the application, which must be decided within 15 days, except if additional documents or information are requested by the Ministry of Natural Resources and Energy. If granted, the publication of an edict in the Official Gazette will ensue and the project for the construction of the facility may begin. At the end of construction, a site visit accompanied by a favourable opinion from the competent inspector is required for an operation licence to be issued.³

Concessions pertaining to hydrocarbons prospection, research and extraction or construction and operation of pipelines are also subject to tender offers, according to the terms of Decree No. 34/2015 of 31 December (the Petroleum Operations Regulation). Exceptions are made for tender offers in which no bidder has been chosen, termination of concession, or unitisation purposes, among others. In such cases, the Decree stipulates that a concession agreement may be attributed via a direct or simultaneous negotiation with applicants.⁴

In the sale and distribution of natural gas, the competent authority to grant a concession depends on the area for distribution or sale awarded pursuant to the terms of Decree No. 44/2005 of 29 November through a tender offer. As in oil and gas upstream concessions, the procedure for the awarding of a concession is also not regulated in the diploma.

Licensing of oil or gas facilities must include an establishment licence, requested from the INP, which has 10 days to make its decision upon receipt of the necessary information and documents, as well as the opinion of various regulatory entities such as for health,

³ Such procedure simplified by the provisions of Decree No. 10/2016 of 25 April.

⁴ A 'model' or 'draft' concession agreement for research and exploration of oil was implemented by Resolution of the Council of Ministers No. 25/2016 of 3 October.

environment, labour and civil protection. The operation licence is then granted after construction, and a site visit made by a committee, which will confirm whether the facility conforms to the project, any regulatory conditions and applicable technical norms.

Finally, licensing of activities relating to petroleum products and the corresponding facilities is subject to the approval of the Ministry of Natural Resources and Energy, except for licensing of fuel stations for resale and sale to end users, which is carried out by the local authorities and by the provincial directorates of the Ministry of Natural Resources and Energy, respectively. Licence requests must be accompanied by several elements of identification, as well as the main technical characteristics of the facilities at which the activities will be undertaken; different activities entail specific documentation or information, which must be presented with the request. The licensing entity must decide within 30 days of receipt of the request, and is bound by certain criteria to overrule it, such as the occurrence of anticompetitive effects stemming from the granting of the licence. Licences may be subject to conditions to be defined by the relevant licensing entity.

Before the start of operations of any of the aforementioned activities in the petroleum products fuel chain, licences must be registered after a mandatory site visit, to be carried out by a commission that includes representatives of various regulatory authorities, including the licensing entity.

iii Ownership and market access restrictions

In the electricity sector, there are no obvious limitations on the ownership of both new and existing assets and companies in this business sector, nor direct restrictions on asset ownership save for the general merger and takeover control provisions introduced in Law No. 10/2013, enacted on 20 March 2013 (the Competition Act), the scope of which is the protection of competition in the undertaking of economic activities. Preference, however, is given to applicants for oil or natural gas concessions that are Mozambican nationals or are associated with Mozambican nationals if two or more applicants are on equal footing.

In the petroleum products sector, however, several restrictions of this nature exist, set out in the Petroleum Products Regulation, the most relevant being:

- a the prohibition of the mingling of distribution and retail activities, except when it relates to liquid petroleum gas (LPG) or compressed natural gas and for training purposes (undertaken in fuel stations);
- b licensed entities may be entitled to hold more than one licence in the value chain, as long as no anticompetitive effects stem from this situation; and
- only Mozambican nationals and Mozambican companies may hold licences for petroleum products (there appears to be no restrictions for Mozambican companies held by foreign equity holders, however).

There are no restrictions on the provision of regulated services (i.e., supply of electricity and natural gas) and no restrictions on the ownership of assets or licensed activities other than those set out in the previous paragraph.

iv Transfers of control and assignments

Transfer of interests in electricity concessions, of assets encompassed by an electricity concession and of establishment licences of electricity facilities are subject to regulatory approval by the regulatory authority that granted the concession or the licence, according to the terms of

the applicable Mozambican law. Transfer of operation licences of electrical facilities is not possible under Mozambican law and, as such, should the licensee change, a new licence will have to be issued pursuant to the terms of Decree No. 48/2007 of 22 October.

The procedure for the transfer of concession rights or assets encompassed by the concession itself is not clear in either the Electricity Act or the Electricity Concessions Regulation, but will likely depend on a request submitted to the relevant regulatory authority and, if land-use rights are transferred, a public consultation, the same as with the granting of a new concession. In respect of establishment licences, the transfer will be subject to a request to the Ministry of Natural Resources and Energy. No express standards for reviews or decision-making guidelines are established in these procedures for the regulatory authorities, but such authorities in Mozambique are, according to the Constitution, bound by principles of equality, impartiality, ethics and justice.

With regards to the transfer of interests in oil or natural gas concessions, the new legislation makes direct and indirect transfers of the concession subject to prior governmental approval, along with other forms of assignment of participation interests, directly or indirectly, in concession agreements, including the transfer of shares or other forms of participation of the holder of concession rights.

As for the petroleum products sector, transfer of facilities in the corresponding value chain is subject to prior authorisation from the Minister of Natural Resources and Energy, who is bound to grant it if the licensee does not obtain, after the transaction, more than a 30 per cent market share of the relevant petroleum products market.

III TRANSMISSION/TRANSPORTATION AND DISTRIBUTION SERVICES

i Vertical integration and unbundling

Shortly after the independence of the Republic of Mozambique from Portugal in 1975, EdM was granted, by Decree Law No. 38/77, a quasi-monopoly in the generation, transmission and distribution of energy, with the exception of off-grid generation and other existing concessionaires (notably the Cahora Bassa dam, albeit not in operation at the time). The result was a fully integrated vertical system in the electricity sector until the adoption of the Electricity Act. Nowadays, the sector is still bundled to some degree, as EdM still holds a single concession for distribution and sale of electricity. It is the main transmission concessionaire, as well as the national transmission grid operator, through the provision set out in Decree No. 43/2005 of 29 November, as unbundling requirements in this sector do not exist under Mozambican law.

With regards to oil and natural gas, there is also no formal bundling or concentration of the upstream industry, notwithstanding the fact that ENH is a party to all concessions in the upstream sector.

Recent efforts towards the implementation of networks for distribution and sale of natural gas have been made, and the law determines that concessions must be unbundled. Concessions for suppliers of natural gas are further subject to an exclusivity period, after which third parties may sell natural gas to end consumers.

ii Transmission/transportation and distribution access

Operators of storage, transport, transmission and distribution networks are obliged to provide access to these networks and to practise non-discriminatory treatment of third parties.

In the electricity sector, the Electricity Act provides for the mandatory granting of access to third parties to electrical networks. Decree No. 42/2005 of 29 November (the National Transmission System Regulation) establishes that transmission concessionaires must enter into agreements for the transmission of electricity to any generation and distribution concessionaire, and to any final consumer that requires connection to the grid. Likewise, distribution concessionaires must guarantee the supply of electrical energy to all consumers who have the capacity to ensure payment for their respective connections. Connection may be refused only in certain cases; for example, where the supply is in medium or low voltage and the requested capacity may cause damage to the distribution grid, or if the applicant is declared insolvent or bankrupt. Distributors also have the obligation to install new lines whenever so required (as long as a minimum consumption per 100 metres of new distribution lines is assured). Access to transmission and distribution grids must be made in a non-discriminatory fashion regarding quality of service and agreed-upon tariffs.

Pipelines and petroleum product facilities must also transport, store, unload or handle hydrocarbons or fuels from third parties without discrimination, as long as there is available capacity and no insurmountable technical issues exist. Furthermore, capacity must be increased if such an operation does not affect the integrity of the facilities and as long as those third parties provide the necessary funding. Access to natural gas distribution networks, on the other hand, is subject to rules for negotiated access to be enacted by the Minister of Natural Resources and Energy. In any case, all activities must be conducted with transparency and without discrimination against third parties.

Network providers in distribution and transmission of energy, as well as distributors of natural gas, are granted rights over a predetermined area. The law is not clear, however, on whether the rights are exclusive.

Finally, competition concerns have definitely played a role in the rules concerning third-party access to energy networks. Council of Ministers' resolutions regarding energy policy mention tackling competition issues, which necessarily implies dissipating the negative effects of 'bottlenecks' for consumers by giving suppliers ease of access to electricity and natural gas networks. A general provision on the matter has been implemented by the Competition Act regarding the abuse of a dominant position.⁵

iii Terminalling, processing and treatment

Storage, processing and treatment of oil and natural gas, as well as the storage of petroleum products, are subject to licensing of the activity and registration of the respective facilities (see Section II.ii, above). There does not appear to be any specific regulation on liquefied natural gas facilities.

Article 19(3)(b) of the Competition Act establishes that the following is considered an abuse of a dominant position: the refusal by a company to grant to any other company, for adequate compensation, access to a network or other essential infrastructure that the first company controls as long as the other company cannot, for legal or practical reasons, operate as a competitor of the company that controls the assets at issue. This provision is not applicable if the company that controls the assets at issue demonstrates that such access is impossible under reasonable conditions.

iv Rates

As a general rule, rates for transport and distribution of energy are mostly determined by bilateral contracts rather than regulated tariffs (which are only set for the sale of electricity, natural gas and fuels to the end-consumer). There are, however, standards that some concessionaires must consider when setting the fees for the rendering of their services.

Nonetheless, the Electricity Act in the electrical sector establishes a 'transit tariff' for third-party use of transmission and distribution facilities, which is not regulated. The National Transmission System Regulation determines that contracts entered into with transmission concessionaires must set rates that:

- *a* assure non-discriminatory treatment of consumers;
- b assure the coverage of costs consistent with 'standard costs';
- c stimulate new investment in the expansion of electrical systems;
- d induce the use of electrical systems; and
- *e* minimise the costs for expansion or use of electrical systems.

As for distribution, rates are fixed with generation and energy supply concessionaires. For the latter, a tariff for use of the distribution system must be set.

Oil and gas pipelines are subject to tariffs set in the relevant concession agreement and are based on the following principles:

- a the tariff is to contemplate total reserved capacity for the infrastructure;
- b the tariff shall include the cost of capital and operational costs; and
- c the tariff shall take profitability into account, which must not exceed the designated rate of return.

Petroleum product storage facilities are subject to 'non-discriminatory' and 'commercially acceptable' terms in the setting of use rates. In oil re-exporting services (in bunkers), rates must be fair, competitive and non-discriminatory, taking into account the prices charged in other terminals in Southern Africa.

Natural gas distribution network rates are set by concessionaires, subject to the rules of negotiated access set by the Minister of Energy.

v Security and technology restrictions

Energy legislation in Mozambique takes into account several security policy concerns, such as:

- a fuel supply security and safety;
- b theft of energy and theft and vandalism of power lines; and
- c energy supply and network security.

As regards supply security and safety of hydrocarbon fuels supply (e.g., petrol), the Petroleum Products Regulation addresses safety concerns regarding petroleum product facilities by imposing several obligations on their respective owners, such as:

- a the obligation of distributors to keep a permanent deposit of 6 per cent (or 3 per cent, in the case of LPG) of the fuels acquired for sale in the previous 12 months, as well as 'operational reserves' of the aforementioned fuels;
- b the mandatory decommissioning of redundant petroleum product facilities;
- c specialised works on petroleum products' facilities being conducted or supervised by licensed oil technicians;

- d the obligation to be subject to a five-year inspection obligation on petroleum product facilities; and
- e the prohibition on causing or allowing oil or petroleum product spills.

The Energy Strategy expressly issues recommendations for tackling the problem of theft and vandalism in the electricity networks, notably by advocating greater involvement of local communities in distribution and transmission power lines projects. Notwithstanding the foregoing, the Electricity Act establishes the theft of electricity or power lines as a crime.

Security of electricity supply is also a relevant concern in energy policy and the National Transmission System Regulation provides relevant rules on this subject. First, capacity of transmission and distribution networks must be adequate in relation to expected consumer demand. Solely regarding the distribution grid, the National Transmission System Regulation obliges distribution concessionaires to ensure service quality and supply of energy through the grid may only be interrupted under certain conditions. Finally the operator of the National Transmission System, as the coordinator of the electricity grids in Mozambique, has the obligation regarding the overall management of the system's quality, security and continuity of supply.

IV ENERGY MARKETS

i Energy market rules and regulation

There are no organised markets for the sale of energy commodities in Mozambique. The import and export of electricity is subject to a concession, to be granted according to the terms of concessions for the generation, distribution or transmission of electricity (see Section II.ii, above).

With regards to petroleum products, imports of LPG, gasoline, jet fuel and diesel are aggregated through IMOPETRO, a company under both state and private ownership, and customers of this entity must be holders of generation or distribution licences. In exceptional cases (e.g., to 'defend the country's economic interests') imports may be made through a duly licensed distributor and only if and when local production does not meet demand.

ii Contracts for sale of energy

The sale of electricity and natural gas in Mozambique takes place exclusively through bilateral agreements between generators and suppliers.

iii Market developments

As mentioned above, the electricity market is expected to undergo a regulatory overhaul, and statutes for petroleum operations and the fiscal treatment thereof were approved by parliament in August 2014. These statutes define new rules regarding state participation in oil and gas projects, introduce local content obligations and introduce changes to royalties and taxes payable for the production of oil and gas. One change worth noticing in particular is the government's obligation to 'allocate' to the Mozambican market a quota of at least 25 per cent of the oil or gas, or both, produced and sold in Mozambique.

V RENEWABLE ENERGY AND CONSERVATION

i Development of renewable energy

Mozambique has seen timid, yet steady, development in renewable energies, notably solar energy. In this regard, it is worth noting that a few solar power plant projects are under development and construction and that, also, a solar panel factory sponsored by the Mozambican Electricity Fund is currently operating in the city of Matola, next to Maputo.

The Council of Ministers enacted the Policy for the Development of New and Renewable Energies. Its main objective is to promote greater access to clean energy through the equitable, efficient, sustainable and culturally sensitive use of new and renewable energy.

Additionally, the Regulation that Establishes the Tariff Regime for New and Renewable Energies was approved by Decree No. 58/2014 of 17 October. This statute sets out feed-in tariffs remunerating the electricity generated by: (1) biomass power plants; (2) wind farms; (3) mini-hydro power plants; and (4) photovoltaic power plants with an installed capacity of up to 10MW and that comply with eligibility requirements defined in the diploma.

ii Energy efficiency and conservation

The aforementioned Renewable Energy Development Policy also approaches energy-efficiency issues but, as in the area of renewable energy, no rules or policies have yet been enacted to promote it.

iii Technological developments

Encouragement of greater technological developments in the field of renewable energies has recently taken place through the creation of a laboratory for photovoltaic energy, the first in the field of renewable energies in Mozambique.

VI THE YEAR IN REVIEW

Key events in the energy sector in 2016 for Mozambique included:

- a the enactment of the legal framework regarding atomic energy (providing for the possibility of using ionising radiation for non-military use);
- b the creation of ARENE, as the new energy regulatory authority (see Section II.i, above);
- c the announcement of the development and construction of the second largest solar power plant in Sub-Saharan Africa (in the province of Zambézia);
- d the approval of the concessions of the floating LNG marine terminal (to service the exploration of natural gas in Area 4 of the Rovuma Basin); and
- e the acquisition by Exxon Mobil of a 25 per cent indirect participation in Area 4 of the Royuma Basin from ENI.

VII CONCLUSIONS AND OUTLOOK

The Mozambican energy sector faces a multitude of challenges, outlined throughout this chapter:

a the country's infrastructure is not sufficient to meet demand, which is reflected in the fact that large areas of the country are without electricity or natural gas, and electrical power distribution networks are outdated;

- because of the inefficient power purchase arrangement with South African utility company Eskom, Mozambique still has to 'import' electrical energy from its own hydroelectric power plant in Cahora Bassa; and
- Mozambique's oil and gas findings require a stable governance structure, and experienced participants in the oil and gas industry, for commercial development of the findings to begin. The enactment of the new Petroleum Act and the approval of corresponding regulations (including regulations specific to projects located in the Rovuma Basin) may aid the achievement of this goal.

These problems are being tackled, but most are very capital-intensive. Electrification of rural areas, promoted by the Mozambican Electricity Fund by way of small distribution networks, off-grid projects and small renewable energy generation, and the various electricity generation projects that are being planned for this decade, are both examples of how the country is dealing with some of these issues.

Once these obstacles are finally overcome, Mozambique, with its abundant natural resources and strategic geographical position in the region, will doubtless stand poised to become one of the key players in the sub-Saharan Africa energy market.

Appendix 1

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Paula Duarte Rocha is a partner at Henriques, Rocha & Associados, member of MLGTS Legal Circle as Mozambique Legal Circle. Engaged as a legal assistant, she had started her career even before completing her law degree. She then became a legal assistant to a partner at Pimenta, Dionísio & Associados. From 2000 to 2002 she provided multidisciplinary legal consultancy at the tax and legal services department of PricewaterhouseCoopers, cooperating with national and foreign investors. She was also an associate lawyer and senior legal adviser at MGA Advogados & Consultores.

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