SOUTHERN AFRICA GLOBAL COMPETITIVENESS HUB

Technical Report:

Regional Licensing Framework for Cross-border Power Projects in the SADC Region

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Preface

The Southern African Development Community (SADC) region, and especially the Southern African region, has experienced unprecedented economic growth the last decade or so. This has somewhat lessened due to the recent recession, but is expected to continue as soon as the effects of the recession is something of the past.

Unfortunately, investment in electricity infrastructure needed for continued growth has lagged far behind with the region desperately struggling to find solutions to the looming power crises facing it. South Africa, by far the largest regional player and for long an exporter of surplus power, faces serious generation constraints and it is unlikely that it will have significant surpluses available for export for the foreseeable future.

Increasingly, regional countries need to look elsewhere for additional power. Whilst many of the regional countries are blessed with abundant natural resources, not all of these are necessarily the most cost effective or rational to exploit. Governments are also realising that the private sector will have to play a significant role in realising very costly new generation projects, as opposed to the old model where vertically integrated state owned entities were responsible for new generation and transmission capacity. Accordingly, independent power producers (IPP's) are actively encouraged with many potential projects on the drawing board.

Due to the distribution of resources in the region, coupled to the relatively small size of internal markets, many of these IPP's would need to sell to other regional countries or off-takers in order to ensure viability. In many cases the target market, due to its size, would be South Africa, although other smaller regional opportunities also exist.

Whilst a regional energy market – the South African Power Pool (SAPP) – is operational, trade presently takes place between utility members only and is limited. Due to the uncertainties involved in SAPP trades, there is a common understanding amongst financiers and IPP developers that at this point in time most IPP's will need to sell the bulk of its output directly and not via SAPP, especially over the short to medium term.

The legal and regulatory environment in the region is not presently geared towards facilitating cross—border electricity trade. Whilst most countries have electricity or energy regulators, these mostly post-date the utilities with the effect that historic regional trade is mostly left to these to "self-regulate". Legislation is often of a high-level and do not contain the detail to make things work.

The target audience of the paper is the regional electricity and energy regulators. The purpose of this paper is to investigate cross—border electricity trade from a licensing perspective in order to determine uniform licensing principles that can be applied by electricity or energy regulators to cross-border transactions.

The paper will be delivered in two parts. Part One deals with the regional history and issues impacting on regional power trade, and suggest some high-level

principles to be applied in the issuing of cross-border licences (import and export licences).

Part Two will be completed after receiving stakeholder inputs on Part One and doing an international comparison of best practices. This will include further refinement of the principles as well as pro-forma import and export licences that can be adapted for use by individual regulators.

Care needs to be taken in applying the suggested principles in that any licensing regime is built on and bound to the underlying policy and legal framework that apply in that country. For example, if security of supply is a particular issue in a country it can be expected that this will be reflected in the licence where in other countries (and licences) it may be less of an issue. Similarly, if an external IPP is allowed to sell directly to a large end-consumer price approvals may be less of a concern than if sales were made to a single buyer that in turn has captive customers. Due to the importance of the South African market for potential IPP's the South African regulatory regime and Government policy features prominently and to some extent serves as the basis for cross-border licences.

1 Introduction

The Southern African Region, led by South Africa, is developing at a rapid pace. Over the past ten years the region has experienced significant economic growth in a stable political and social environment.

Eskom, South Africa's national utility and one of the largest in the world, has for many years had surplus capacity with the result that since the 1980's no significant new generation has been commissioned in South Africa or the region.

However, this is set to change with South Africa rapidly running out of capacity, with resultant spill-over effect on other countries in the region. Not only have these economies been growing with a resultant increase in demand, but some of these countries for historical reasons will still depend on continued electricity supplies from Eskom over the short to medium term. Hence as the need for power in South Africa increases, the likelihood for regional deficits also expands.

The net effect is that for the considerable future the whole region desperately needs a considerable increase in generation capacity to meet the growth in demand. Whilst the key market for such power will probably remain South Africa, regional countries will also need to address much increased local demand and attract new investors. Regional countries are becoming increasingly more attractive to power-hungry investors as surplus capacity in South Africa disappears. The potential for sales in and to regional countries (either in the form of in-country sales, power sales via the Southern African Power Pool (SAPP), or direct sales between neighboring regional countries) are becoming increasingly attractive.

Governments are looking more and more towards Independent Power Producers (IPPs), or combinations of IPPs and state owned utilities, to meet the demand for new electricity generation. In South Africa, for example, Government policy dictates that 30% of all new generation capacity must come from Independent Power Producers. In Botswana, a big IPP Project is being planned, aiming to sell the majority of its power to Eskom.

In this changing environment there is a need for a uniform regional cross-border (import and export) licensing framework. However, this is perhaps not as simple as it sounds.

Any licensing regime is subject to the policy, legal and regulatory regime to which it owes its existence. With a few exceptions, most of the regional countries have reasonably modern electricity legislation that establishes regulators to oversee the ESI and most legislation provides for a broad-based licensing regime dealing with different categories of licences. Nevertheless, the electricity market and infrastructure ownership regimes mostly pre-dates the regulatory regimes and most countries effectively still have vertically integrated state owned monopolies as the preferred ESI market and ownership model. Whilst most regulatory regimes provide for the issuing of import and export licences, the regulatory focus of regional regulators have been more towards protecting the rights of the end consumer with not too much emphasis on import and export activities. This is set to change with

the increasing regional interdependence on electricity trade to make up for own shortfalls or introduce new generation and the increased focus on enticing private sector participation in the ESI.

Hence it is important that regional regulators give some thought to common licensing principles that should underpin import and export licences. Ideally the region should adopt the same or similar principles, as this will enhance regional trade in electricity.

The Southern African Development Community (SADC) region is blessed with a multitude of different legal systems, languages, customs and ideas of what the ESI market should look like. This ranges from subscribing to competition (e.g. on the generation side) to insisting that vertically integrated monopolies remain the best option. It is glaringly obvious that licences for these different market structures would look very different and that it is presently impossible to design a “one shoe fits all”- approach.

However, what is possible is to suggest what general principles should underlie import and export licences based on what is perceived to be the most likely market scenarios and the most likely markets. In order to do so, a brief synopsis of the prevalent ESI regional policies, planning, market structure, governance and regulatory processes are given. From this the most likely market options will be distilled, with resultant recommendations on appropriate licensing principles.

2 Background to the SADC ESI

2.1 Industry Policy and Planning

ESI policies are generally in line with international practices and trends. Whilst policy updates are being done regularly in a few countries, there are a lot of inconstancies between what is stated as part of the policy and what is actually implemented. Some policies also seem to be too ambitious and not realistic given the capacity constraints and the relative size of the markets. Typically, for example, policies endorse compulsory third party access to transmission infrastructure whilst in practice no access rules or wheeling charges exist or the very same Government endorses a vertically integrated monopoly with little scope for competition.

In most countries energy planning is the responsibility of government, utility and regulators. However, in most cases there is no clear role differentiation. There are overlaps between various institutions (e.g. government, regulator and utility) and also between planning and implementation.

Most planned projects are too big and ambitious for local country markets with most countries not having the capacity to fund or guarantee loans required to finance these plans.

SAPP (the Southern African Power Pool) has had a list of “imminent” power projects which has remained virtually unchanged over the past decade with implementation dates shifting year after year. The lack of project development and implementation skills on the side of governments are viewed as one of the major

problems in the region. Also, the lack of ability to raise or guarantee project funding as most of the power projects are very capital intensive.

South Africa has recently embarked on an Integrated Resource Plan (IRP) process for the ESI in that country. Interestingly, the IRP will underpin all new generation projects with only projects on the IRP list being able to be built as only these projects will qualify for cost-pass through when PPA's are concluded between the IPP and the purchaser of the energy. This illustrates the extreme importance of getting planning right as wrong assumptions will lead to the non-development of projects or the late development thereof.

2.2 Industry Structure

The SADC region is characterised by mostly vertically integrated monopolies that are involved throughout the ESI value chain, as demonstrated by the following:

Country	Legal Power Sector Reforms (new legislation)	Do Regulators Exist	Sector Organization
Angola	Yes	Yes	Monopoly vertical integrated utilities for Tx and Dx GEN-MU+IPPS
Botswana	Yes (amendments)	No	Monopoly vertical integrated utility
DRC	No	No	Monopoly vertical integrated utility +private regional supply concessions
Lesotho	Yes	Yes	Monopoly vertical integrated utility for Tx and Dx +GEN
Madagascar	Yes	Yes	Monopoly vertical integrated utility +Gen-MU+IPPS
Malawi	Yes	Yes	Monopoly vertical integrated utility
Mauritius	Yes	No	Monopoly vertical integrated +IPPS
Mozambique	Yes	Yes	Monopoly vertical integrated utility + IPP+ITC
Namibia	Yes	Yes	Monopoly vertical integrated utility + REDs
South Africa	Yes	Yes	Monopoly vertical integrated utility+Dx Municipalities +ITC +REDs
Swaziland	Yes	Yes (New	Monopoly vertical

Country	Legal Power Sector Reforms (new legislation)	Do Regulators Exist	Sector Organization
		regulator appointed 2009)	integrated utility
Tanzania	Yes	Yes	Monopoly vertical integrated utility +IPPs
Zambia	Yes	Yes	Monopoly vertical integrated utility+ IPP+ITC
Zimbabwe	Yes	Yes	Monopoly unbundled utilities +IPPs

Tx Transmission
Dx Distribution
GEN Generation
RED Regional Electricity Distributor
MU Municipality
ITC Independent Transmission Company

2.3 Power Sector Governance

Power sector governance and management is normally the responsibility of a ministry of energy, either as a stand alone ministry or combined with water or other natural resources, and in some countries under the public utilities ministry.

All the countries within the SADC region have introduced some form of power reforms in the past fifteen years. However, most of the reforms have not been successfully completed. Thirteen out of fourteen SADC member states have enacted new power sector legislation and introduced the possibility of some private sector participation in power. Most have introduced some kind of regulatory oversight in the form of energy or electricity regulatory authorities.

Some countries had envisaged fully liberalized and unbundled utilities but most have had resistance to implementation of the approved market structures.

The extent and payoff of the reforms have thus far been limited and in all countries the national utilities retain dominant market positions; serving as single buyers and maintaining own generating plants. No country has fully adopted the ‘standard’ reform model that is, unbundling, privatizing and wholesale and retail competition.

While policies generally all subscribe to market reform, they have not been implemented and are still to achieve the fully desired results of an adequate and efficient industry. Private sector participation is either temporary or limited to management contracts, or marginal through IPPs that are typically contracted to the state owned national utility.

Electricity sector reform processes were basically initiated in the 1990s with new electricity legislation enacted in most countries aiming at attracting private sector participation in electricity generation and distribution. Most countries established

electricity regulators to regulate the ESI. There is also an ongoing process in most countries aimed at transforming the regulators from electricity regulators to energy regulators and in some cases to multi-sector regulators.

However, there has been no full vertical unbundling of the ESI, with all the national power utilities essentially remaining monopolies and keeping the same powers and responsibilities regarding generation, transmission and distribution that they have always had.

As part of reform, most of the power utilities have changed status from *sui generis* statutory bodies to corporates wholly owned by government. Whilst this has brought a change in status and often tax and dividend benefits to the relevant government, it has also led to a removal of more direct government influence and oversight.

2.4 Market Models

The market model that best describes the structure of the sector in the region is the vertically integrated monopoly where vertical integration exists between the services of generation, transmission and distribution. However, there are nine countries which have more players in the ESI apart from the national utility, mainly in the generation in the form of IPPs, albeit on a small scale.

The region also has a few independent transmission companies with limited scope of activity e.g. Mozambique Transmission Company (MOTRACO) and the Copperbelt Energy Corporation (CEC). Mauritius and Tanzania have the highest contribution within the energy mix supplied from IPPs.

In countries like South Africa, Namibia and Madagascar, the distribution function is also provided through local government structures, municipalities, urban and rural councils.

The national power utility typically has been declared or acts as the single buyer of electricity and sells in bulk, in some cases directly to end consumers and in others to large customers (mines, smelters and municipalities).

In most countries legislation allows for private participation. In a number of countries distribution concessions have been awarded in the last couple of years and supply and distribution concessions for small off grid systems.

Effectively the concept of a single buyer linked to utility dominance and monopolies in ownership, use of infrastructure and sales of electricity have meant that no significant IPPs have been established to date, with the exception of Mauritius and Tanzania.

No SADC state has fully liberalized or deregulated the electricity supply industry.

2.5 Regulatory and Licensing Regimes

Most of the SADC countries have established sector regulators with executive functions. Legislation is generally modern and typically also provides for third party access. However, legislation is mostly of an enabling nature rather than prescriptive with most of the detail largely absent. This is a huge problem as on the surface the legislation and policies seem to be conducive to private sector involvement but underneath there is no real substance.

Mozambique has a different regulatory model (National Electricity Council) with commissioners which form an advisory board with no executive powers except regarding the arbitration of disputes and the monitoring of the performance of industry players. This institution is envisaged to convert to an executive regulatory body in future.

The Democratic Republic of Congo (DRC) does not have a regulator and Botswana is working on various legal and institutional reviews aimed at facilitating the establishment of a multi-sector regulator (water and electricity).

The regulatory institutions remain fairly weak as the most regulators have not been established for long, and are hindered by a lack of capacity and adequate funding. Some of the longer established ones have been plagued by skills flight, lack of autonomy and intervention. Lack of capacity also affects government ministries.

Most of the existing regulatory frameworks do not require review or approval of power purchase agreements and it also omits any requirement in terms of regulatory review or approval of imports and exports of electricity.

In most countries the regulatory authorities are responsible for industry oversight in the following areas:

- Granting of licenses;
- Approval of tariffs;
- Approving and monitoring investment plans;
- Market oversight and rules (in theory);
- Establishing technical and minimum service levels; and
- Monitoring and enforcing compliance with regulation.

Where regulators do not exist, it is the responsibility of the relevant ministries to grant licenses and provide the oversight functions for the ESI.

Licenses provided for in authorizing legislation are typically:

- Generation;
- Transmission;
- Distribution (Wires);
- Supply or Trading;
- Import; and
- Export.

3 Trading in the Region

3.1 SAPP

SAPP was established in 1995 through a SADC treaty to optimise the use of available energy resources amongst the countries in the SADC region and to support each other during emergencies. At the time there was a significant electricity surplus, and one of the ways of dealing with this surplus was by encouraging trade between members.

Initially SAPP membership was limited to utilities owned by the respective members, but SAPP has recently opened its membership for IPPs and independent transmission owners. SAPP is a voluntary market based on the loose-pool principle. It caters for both long- and short-term contracts, providing increased scope for reduction in supply costs to participating members. Underlying successful trade members need to:

- Co-ordinate and co-operate in the planning and operation of their systems to minimize costs while maintaining reliability, autonomy and self-sufficiency to the degree they desire; and
- Fully recover their costs and share equitably in the resulting benefits, including reductions in required generating capacity, reductions in fuel costs and improved use of hydroelectric energy.
- Co-ordinate and co-operate in the planning, development and operation of a regional electricity market based on the requirements of SADC Member States.

The SAPP Coordination Centre (SAPP-CC) was established in Harare, Zimbabwe, at the beginning of the year 2000. This centre co-ordinates short and long term energy sales. A Short Term Energy Market (STEM) administered by the SAPP – CC staff commenced operation in April 2001 allowing participants to trade energy on a day ahead basis between themselves through bilateral arrangements. Through financial assistance from Norway a competitive market along the same principles as the Nordic power market is presently being established. Through this market it is envisaged that a more flexible trading system will be established accommodating trading at the pool with varying demand profiles and varying prices, and provide the necessary basis for the development of subsequent financial markets.

One of the key benefits of the market would be that it could provide more accurate price indicators in a more transparent and predictable manner.

Whilst SAPP certainly has many potential benefits for the region, care should be taken that it is not regarded as the main or only trading mechanism. In fact, since late 2007 no sales have taken place via SAPP due to regional power shortages. In particular, SAPP faces the following challenges:

- It can only facilitate the trade of electricity between a willing buyer and a willing seller – it is not the purchaser or seller of the electricity and hence does not take any price risk;

- Where there are regional shortages and utilities face net deficits, it is doubtful that SAPP will come to its full potential use, as there simply is not a lot of surplus power available to market via SAPP. This would not necessarily apply to off-peak surpluses, but the total electricity thus sold should not be significant;
- SAPP has no statutory or other powers for enforcing standards, new infrastructure development or uniform regional tariff structures;
- Private sector developers (IPP's) would not be able to only sell via SAPP but need a bi-lateral commitment with a credible off-taker

Where SAPP is particularly useful is that it already has rules regarding access to third party infrastructure, wheeling charges and technical and system requirements, which can be incorporated into regional licensing requirements.

3.2 Bi-lateral Trade

Almost all regional trade occurs bi-laterally, i.e. by means of agreements directly between utilities.

Traditionally South Africa has dominated the electricity market in the region with both the largest domestic consumption of electricity as well as the most exports to regional countries.

This is changing, with less and less power being exported as South Africa struggles with its own demand and ageing power stations. In turn this means that regional countries will either have to introduce own new generation or increasingly trade with other regional countries. However, South Africa as the most attractive market for regional sales will remain, thus what happens in South Africa from a regulatory perspective is very important.

Given that most envisaged IPP's (e.g. Mmamabula in Botswana) will also need a firm, credible off-taker in order to get project financing, bi-lateral trade will continue to grow over the short to medium term. In an evolved market the balance may one day shift towards energy markets such as SAPP, but for the time being this option is the most realistic. Accordingly, bi-lateral trade has been identified as one of the cornerstones which import and export licenses need build on. This can either be direct sales (e.g. across the border), or via third parties (wheeling via a third party).

3.3 Special Purpose Vehicles

Some special purposes vehicles have been created in the region to facilitate regional trade in electricity. These include Cahorra Bassa and Motraco, for example. A key ingredient for these types of transactions is agreement between the respective Governments and/or their utilities.

In this sense all of these types of ventures are thus *sui generis*, and not really suitable as candidates for a uniform regional licensing regime. In any event, in the absence of regional statutory authorization to force compliance to regulatory regimes, the only effective way to establish these entities is by agreement.

The envisaged WESTCOR project falls within the same category, with the added complexity of three different languages, and five legal regimes.

4 The SADC

SADC in 2002 accepted a regional energy protocol. This protocol strives to promote regional co-operation in energy, and its objectives are to:

- Strive to harmonies national and regional energy policies, strategies and programs on matters of common interest based on equity, balance and mutual benefit;
- Co-operate in the development of energy and energy pooling to ensure security and reliability of energy supply and the minimization of costs;
- Co-operate in the development and utilization of energy in the region in the following sub-sectors: wood fuel, petroleum and natural gas, electricity, coal, new and renewable energy sources, energy efficiency and conservation, and other crosscutting themes of interest to members;
- Strive to ensure the provision of reliable, continued and sustainable energy services in the most efficient and cost-effective manner;
- Promote joint development of human resources and organizational capacity building in the energy sector;
- Co-operate in the research, development, adaptation, dissemination and transfer of low-cost energy technologies; and
- Strive to achieve standardization in appropriate energy development and application including the use of common methods and other techniques.

The SADC Energy Protocol establishes a Commission consisting of energy Ministers, senior officials and the technical unit of SADC. The Commission has the following functions:

- Co-ordinate regional energy activities;
- Formulate a coordinated approach to regional energy policy, strategy and plans;
- Facilitate regional energy project conceptualization, initiation, preparation and implementation, monitoring and evaluation;
- Establish and maintain a regional energy data base and facilitate information exchange;
- Liaise with other SADC sectors and with national, regional and international organizations;
- Formulate and implement strategies for human resources development in the energy sector in the Region;
- Establish procedures and criteria for the approval of SADC energy projects;
- Mobilize finance for implementing SADC energy programs and projects;
- Promote research and development in the energy sector in the region;
- Identify and formulate common standards and procedures in energy technology development and application, as well as common information and documentation practices; and
- Provide upon request and in furtherance of the objectives of the Protocol, technical assistance to member states, organizations and communities.

Whilst SADC has a clearly very important role to play in facilitating regional ESI developments, very little real progress has been made over the past few years. This can be largely ascribed to the fact that SADC, other than the European Union (EU) (for example), has no powers to force its members to adhere to any of its regional policies, guidelines or rules unless such member voluntarily accedes thereto. This is a major shortcoming and one of the principal reasons why so little progress has been made towards harmonizing legal and regulatory regional regimes.

4.1 RERA

The Regional Electricity Regulator's Association (RERA) is a voluntary organization whose members consist solely of the SADC regional electricity regulators. RERA is associated to the SADC. RERA has the following three strategic objectives:

- Capacity Building & Information Sharing – to facilitate electricity regulatory capacity building among members at both a national and regional level, for example through information sharing and skills training;
- Facilitation of ESI policy, legislation and regulatory frameworks, harmonize ESI policy, legislation and regulations for cross-border trading, with particular focus on terms and conditions for access to transmission capacity and cross-border tariffs;
- Regional Regulatory Cooperation -- deliberate and make recommendations on issues that affect the economic efficiency of electricity interconnections and electricity trade among members which fall outside national jurisdiction.

The following principles guide the operations of RERA:

- The development in the electricity supply industry (ESI) across the region should be in line with broad international trends in which neighbouring countries form integrated electricity markets;
- There are benefits arising from economies of scale and shared resources which are economic imperatives to pursue the development of greater integration of the electricity systems in Southern Africa;
- The successful regional integration of electricity systems requires clear legal and regulatory frameworks to facilitate – cross-border transactions, regional systems operations and a uniform system of tariffs for use of regional transmission infrastructure; and
- The development of facilitating regulation is essential to harmonize and create market structures that remove barriers to trade and attract investment in the ESI; and

Membership to RERA is open to all ESI regulatory bodies in each country within SADC.

5 High-level Licensing Framework

Based on the above observations, a high-level regional cross-border licensing framework can be designed. It should be remembered that licenses in essence are permissions required under law and not agreements in themselves. Licenses guide the outcome that a regulator expects from a certain activity and thus are

very much aligned to this. In designing licenses, it must always be realized that such a framework will very much depend on the policy and legislation in force in the country at the time. Depending on the regime in force, licenses will also differ. For example, an export license may need to be combined with a generation licensee, or an import license with a supply license. The following preliminary principles have been identified. These are by no means complete and/or final, but are stated in order to elicit comment and stimulate debate[1]:

5.1 Minimum Regulation

A key principle of regulation should be that regulators only regulate what is necessary in the circumstances. For example, if an IPP sells directly to a large customer, there is no need to regulate the prices at which energy is being sold. Hence import and export licenses should only contain what is necessary, and do away with unnecessary trivia. It is not necessary to duplicate a PPA – that is not the purpose of a license.

5.2 Security of Supply

Given the recent shortages in power in the region, security of supply is of particular concern. Accordingly, it can be expected that regulators would want to make sure that the electricity resources that are proposed to be exported are –

a. Not needed locally; or
b. Local buyers cannot (or do not want to) enter into that transaction, based on price, quantity, funding constraints or other key considerations.

Whilst this remains a contentious issue, care should be taken that this is not implemented in such a manner as to stifle regional trade. Ultimate security of supply, after all, is the possibility to obtain supplies from various sources and not be bound to limited options. Generally speaking regulators should follow the Government's stated policy in this regard, especially if the determination of new generation capacity is also vested there.

5.3 Issues of National Concern

Similar to security of supply, but on a different level, it may be understandable that some Governments do not want to import electricity from some countries, do not want to import electricity from projects that do not comply to their own environmental and international obligations, or do not want to import power obtained from certain sources. Once again, this is an area where regulators should preferably follow stated Government policy.

A related issue is making the license conditional on the financial and technical ability of the IPP developer to construct, operate and maintain infrastructure – although this should normally be addressed in the PPA as well as lender criteria in any event.

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[1] Some of these observations are aligned to the principles set out in the Castalia Report, "Manual for Regulating Cross Border Power Trading in the SADC Region", which the author believes is a valuable resource for regulators in the design of licensing regimes.

5.4 Technical Requirements

The license would require compliance (construction, operation and maintenance of facilities) to –

a. The grid codes of both the exporting country (export license) as well as the importing country (import license);
b. Adherence to the directions of the system operator; and
c. Adherence to the directions of the area controller.

A related issue would be the obligation to act in a certain manner during emergencies. It would also include compliance to relevant rules and guidelines issued by the regulator.

5.5 Provisioning of Information

This would address both information supplied during the application, as well as yearly information (statistics) relating to changed circumstances, different risk allocations, project risks etc. Care should be taken that a balance is achieved between information necessary to evaluate the application, and commercially sensitive information. IPP's will generally not provide sensitive commercial information if there is a risk that it may fall into the public domain or is misappropriated in any manner.

5.6 Scope

The activities or scope that the license cover need to be spelled out, for example a generation, supply and export license in the event where an IPP generates in country A, supplies to the local utility in that country and also exports to utility B in country C. In a single buyer environment utility B would normally be the importer (purchase at the border) and not the IPP hence the import license application and conditions would apply to utility B whilst the export license and conditions would apply to the IPP. For generators, the type of source needs to be specified, as well as the maximum output.

5.7 Term

Normally aligned to a) the period of the PPA and/or b) the lifespan of the infrastructure. Useful to provide for automatic renewal if licensee has not transgressed license conditions.

5.8 Changes in PPA's

Pre-conceived changes should not be subject to later approval. This should be set out in the license and/or PPA. However, regulator should be notified of these changes as part of information process.

5.9 Market Regime

Large IPPs would generally need to export the majority of its power into South Africa, as local demand in other countries is relatively small compared to that of

South Africa. This can be done either directly (e.g. from Botswana) or via a third country (used for wheeling the power).

In any event, even for smaller IPPs sales to neighboring or other regional countries would probably be helpful, if not necessary. This implies direct sales to (in most cases) to the single buyer of that country. In turn this means that the regulator would need to vet or approve the PPA concluded in order to ensure that the cost of energy purchases compares favorably to locally produced electricity.

Similarly, where an exporting entity also provides local supplies to captive customers, the regulator may want to convince itself that the prices charged to external customers are not less than that charged to local customers of the same class, in order that local customers do not cross-subsidize external customers.

5.10 Application Fees and Yearly License Fees

The license application fees should relate to the actual cost of processing the license, whilst yearly fees should relate to the cost of monitoring the activities of the licensee.

5.11 Termination

Ideally when PPA terminates, care should be taken to limit regulatory or Ministerial discretion. Consequences of non-compliance to license should not automatically result in termination, pre-approval of changes that re-allocate risk.

5.12 Dispute Resolution

Whilst dispute resolution is often found in licenses, in regional licensing regimes it is not that common based on the fact that licenses are seen as administrative law documents and not based on agreement. Accordingly, should a dispute arise the approach is that the complainant can take the matter on review (procedural aspects) or appeal (merits), or the electricity legislation itself has specific remedies.

6 Draft licenses

Draft pro-forma import and export licenses will be included once this document has been distributed and discussed with role-players and an international comparison made to ascertain international best practice.

In particular, the final Castalia Report and new South African regulations on new generation need to be factored into the document and consultations held with RERA, NERSA and other interested parties.