



MUNICIPAL IPP PROJECT PREPARATION & PROCUREMENT MANUAL

ENABLING MUNICIPAL ENERGY PROCUREMENT











TABLE OF CONTENTS

Ack	nowledgements	5
Glos	ssary & Acronyms	7
	ABOUT THIS MANUAL	10
Y	1.1 Objectives of the Municipal IPP Manual	11
	1.2 Outline of the Municipal IPP Project Cycle	12
	1.3 The Modules	13
	1.4 Indicative Timeline for Municipal IPP Project Phases	18
7	INTRODUCTION	19
4	2.1 Rationale for Municipal IPPs	20
	2.2 Procurement Models for Municipal New Generation Capacity	21
	2.3 Introductory Principles and Key Concepts	27
3	MODULE 1: Municipal IPP Project Preparation Phase	32
	3.1 Introduction	33
	3.2 Stage 1: Planning and Municipal Readiness Assessment	33
	3.3 Stage 2: Feasibility Study	46
	3.4 Stage 3: Feasibility Study Approvals	75
Z	MODULE 2: Municipal IPP Project Procurement Phase	78
	4.1 Introduction	79
	4.2 Stage 1: Procurement Preparation Activities	82
	4.3 Stage 2: Procurement Design Concepts	85
	4.4 Stage 3: Preparation of Bid Documentation	89
	4.5 Stage 4: Procurement Process	_110
5	MODULE 3: Municipal IPP Implementation Phase	118
	5.1 Introduction	119
	5.2 Stage 1: PPA Contract Management Plan	
	5.3 Stage 2: Periodic review and amendment of PPA	121



ACKNOWLEDGEMENTS

This Municipal Independent Power Producer (IPP) Manual has been made possible from a grant awarded to the University of Pretoria and its partners, Pinsent Masons Africa LLP, Kim Adonis Consulting, and Cornerstone Infrastructure Advisors by the Government of the United Kingdom of Great Britain and Northern Ireland acting through the Foreign, Commonwealth & Development Office in terms of its South Africa-UK Partnering for Accelerated Climate Transitions (UK-PACT) Project.

UK-PACT is an initiative by the UK Government to provide funding for technical assistance and capacitybuilding for projects supporting South Africa's Just Energy Transition. UK-PACT has been partnering with South Africa since June 2020 to support the acceleration of a just transition and low-carbon economic recovery after the COVID-19 pandemic. The project funded by UK-PACT which gave rise to this Municipal IPP Manual is part of a focus on municipal energy generation, and in particular, support required to increase the ability of municipalities to procure energy independently and implement a just energy transition. A special thanks goes to the UK-PACT team, ably facilitated by Deney van Rooyen, Sarah Corry, and Alesia Burnazi, whose generous support, both in terms of their time and financial resources required to make this work possible, is sincerely appreciated.

The lead counterpart in the South African government is the South Africa Local Government Association (SALGA). SALGA is established to represent, promote, and protect the interests of local governments and although membership by municipalities is voluntary, SALGA plays a critical role in identifying issues that constrain the effectiveness of local government and implementing measures so that local government can meet its constitutional mandate.

Our thanks go to Dr Silas Mulaudzi, (SALGA: Specialist in Sustainable Energy) who provided us with the necessary guidance and insights to make this Manual fit for purpose. We also thank the various municipalities and other entities, including eThekwini Metropolitan Municipality, Greater Tzaneen Local Municipality, Laingsburg and Langeberg Local Municipalities, City of Cape Town Metropolitan Municipality, the Government Technical Advisory Centre of the National Treasury, and the UK-PACT team who voluntarily gave of their limited time and whose inputs have been invaluable in drafting this Manual. The result is a Manual that is practical, accessible, and relevant to a broad range of stakeholders, from municipal officials and their advisors, to potential IPPs and other external parties engaged in municipal IPPs.

Finally, to the various public and private sector stakeholders who participated in reviewing drafts of this Municipal IPP Manual, we thank you for your time in sharing your perspectives and expertise. With these inputs, this Manual seeks to achieve a balanced view of those interested parties involved in the Municipal IPP Project Cycle.

Disclaimer: This Manual is intended to be an educational tool which offers guidance to users and municipalities when procuring power through the preparation and implementation of their municipal Independent Power Producer (IPP) process. This Manual must not be construed, interpreted, or relied upon, whether expressly or implicitly, as legal or financial advice. Users of this Manual are advised to seek independent legal counsel and advice at each stage of the Municipal IPP Project Cycle.

Whilst all due care has been taken in connection with the preparation of this Manual, UK Pact, as well as all other parties involved in the creation of this Manual, makes no representations or warranties that the content in this Manual is, or will be, accurate, current or complete. UK Pact, and its officers, employees and advisors will not be liable with respect to any information communicated which is not accurate, current or complete.



Return to Table of Contents

GLOSSARY & ACRONYMS

Abbreviation Description

> Bid Adjudication Committee BAC

BAFO Best and Final Offer

B-BBEE Broad-Based Black Economic Empowerment

BEC Bid Evaluation Committee

BW **Bid Window**

CBAM Carbon Adjustment Mechanism

The Construction Industry Development Act, No 28 of 2000 published CIDB Act

under GNR 1161 in Government Gazette 21755 of 17 November 2000

C&I Commercial and Industrial

СМР Construction Measurement Period

CPI Consumer Price Index

Means, as applicable, any code in respect of electricity generation,

Codes dispatch, scheduling, communications, distribution, or transmission as published by NERSA from time to time

CoGTA Co-operative Governance and Traditional Affairs

CODs Commercial Operation Dates

Constitution The Constitution of the Republic of South Africa Act 108 of 1996

> cos Cost of Supply

CSP Concentrated Solar and Power CTA Common Terms Agreement

Development Bank of Southern Africa established in terms of section **DBSA** 2 of the Development Bank of Southern Africa Act No. 13 of 1997

DEA Department of Environmental Affairs

DG Distributed generation

The Department of Energy and Electricity in the DoEE

National Government of South Africa

DWS Department of Water and Sanitation

Environmental Authorisation FΔ

EIAR Environmental Impact Assessment Report

EAT Equivalent Annual Tariff

ED Economic Development

Electricity Regulation Amendment Act

The Electricity Regulation Amendment Act, 2024

EPC Engineering Procurement and Construction

Electricity Pricing Policy published under Government Notice FPP 1398 in Government Gazette 31741 on 19 December 2008

The Electricity Regulation Amendment Act, No 38 of 2024 published ERA under GNR 5139 in Government Gazette 51100 of 20 August 2024

Eskom Eskom Holdings SOC Limited

EU European Union Financial Close FC

GHG Greenhouse Gas

GWh Gigawatt hours International Accounting Standard: Provisions, IAS 37 Contingent Liabilities, and Contingent Assets ICT Information, Communication, and Telecommunications IDC Industrial Development Corporation IDP Integrated Development Plan IFRS 9 International Financial Reporting Standards: Financial Instruments IFRS 16 International Financial Reporting Standards: Leases IPP Independent Power Producer **IPPs** Independent Power Producers IPPO IPP Office IPPPP Independent Power Producers Procurement Programme Integrated Resource Plan issued and gazetted by the IRP Minister to give effect to National policy kVA Kilovolt-amperes kW Kilowatt LED Local Economic Development National Environmental Management Act, No 07 of 1998 published NFMA under GNR 1540 in Government Gazette 19519 of 27 November 1998 This manual providing guidance to municipalities to Manual procure new generation capacity from IPPs MCDM Multi-Criteria Decision Making Municipal Bidding Documents issued by National Treasury from time MBDs to time for purposes of standardising the procurement documentation issued by a municipality as part of its supply chain management The Local Government: Municipal Finance Management Act, No 36 of 2003 MFMA published under GNR 176 in Government Gazette 26019 of 13 February 2004 MFMA Circular No. MFMA Circular No.71 titled "Financial Ratios and Norms" 71 (Financial Ratios issued on 17 January 2014 in terms of the MFMA and Norms) MFMA Circular No.118 titled "Legal Framework for Procurement of New MFMA New Generation Generation Energy Capacity by Municipalities and Municipal Entities" Capacity Circular issued on 14 June 2022 in terms of section 168(1) of the MFMA The Minister responsible for electricity in the Minister National Government of South Africa MIPPP Municipal Independent Power Producer Procurement MoA Memorandum of Agreement Ministerial Determination A determination made in terms of section 34 of the ERA by the Minister The Local Government: Municipal Finance Management Act, Municipal Asset Transfer 2003 Municipal Asset Transfer Regulations published under Regulations or MATR GNR 878 in Government Gazette 31346 of 22 August 2008 Municipal Regulations on Debt Disclosure published under Municipal Debt Disclosure Regulations GNR 492 in Government Gazette 29966 of 15 June 2007 Municipal IPP Project Cycle The phases of a MIPPP programme as described in this Manual The Local Government: Municipal Systems Act, 2000, Municipal Municipal Planning and Performance Planning and Performance Management Regulations published Management Regulations under GNR 796 in Government Gazette 22605 of 24 August 2001

Government Technical Advisory Centre

GTAC

	ĭ	ز
	Ċ	
	ā)
	ř	Ú
	0	
	C)
()
Ċ	ĭ	
	r	٦
	Ì	
	a	
1	0)
	a	J
H		
	c	١
	ì	5
	_	
	۲	
	Ξ	7
	Ξ	j
	0	þ
-	า	ŕ
		Ī

	The Local Government: Municipal Finance Management Act,
Municipal PPP Regulations	2003, Municipal Public-Private Partnership Regulations published
	under GNR 309 in Government Gazette 27431 of 1 April 2005
Municipal SCM Regulations	The Local Government: Municipal Finance Management Act, 2003, Municipal Supply Chain Management Regulations published
Municipal SCM Regulations	under GNR 868 in Government Gazette 27636 of 30 May 2005
	The Local Government: Municipal Structures Act, No 117 of 1998 published
Municipal Structures Act	under GNR 1650 in Government Gazette 19614 of 18 December 1998
Municipal Systems Act	The Local Government: Municipal Systems Act, No 32 of 2000 published
MVA	under GNR 1187 in Government Gazette 21776 of 20 November 2000 Megavolt-amperes
MW	Megawatt
NDCs	Nationally Determined Contributions
NDP	National Development Plan
NDF	National Energy Regulator Act, No 40 of 2004 published under
NERA	GNR 340 in Government Gazette 27458 of 6 April 2005
NERSA	The National Energy Regulator of South Africa a regulatory
NENSA	authority established in terms of section 3 of the NERA
New Generation	The Electricity Regulations on New Generation Capacity
Capacity Regulations	published in terms of the ERA in Government Notice R399 in
NMD	Government Gazette 34262 of 4 May 2011, as amended Notified Maximum Demand
NPV	Net Present Value
NTCSA	National Transmission Company of South Africa
OEM	Original Equipment Manufacturer
O&M	Operations and Maintenance
PAIA	Promotion of Access to Information Act, No 2 of 2000 published under GNR 95 in Government Gazette 20852 of 3 February 2000
PAJA	Promotion of Adminstrative Justice Act, No 3 of 2000 published
PAJA	under GNR 96 in Government Gazette 20853 of 3 February 2000
PPA	Power Purchase Agreement
PPPFA	Preferential Procurement Policy Framework Act
PPP	Public-Private Partnerships
PV	Photovoltaic
RE	Renewable Energy
REIPPPP	Renewable Energy Independent Power Producers Procurement Programme arising from determinations issued by the Minister in terms of Section 34
RFP	Request for Proposal
RFQ	Request for Qualification
SALGA	The South African Local Government Association
	The supply chain management policy of a municipality or a municipal
SCM Policy	entity issued and implemented in terms of section 111 of the MFMA
SME	Small and Medium-sized Enterprises
SPV	Special Purpose Vehicle
StatsSA	Statistics South Africa
SSEG	Small Scale Embedded Generation

TETs

WSP

Technical Evaluation Teams

Water Service Provider



1.1. OBJECTIVES OF THE MUNICIPAL IPP MANUAL

Unlike Public-Private Partnerships (PPPs) where a detailed and rigorous feasibility study is regulated both under primary statute, regulation, and supporting guidelines, there is very little to no guidance available for municipalities when embarking on the procurement of new generation capacity into their distribution networks through an IPP model. The National Treasury has published the MFMA New Generation Capacity Circular which sets out various scenarios for municipal IPPs, however little is available in terms of the practical steps that need to be undertaken by a municipality when assessing the feasibility of a municipal IPP.

The purpose of this Manual is to provide guidance to municipalities when engaging in the process of designing, preparing, procuring, and implementing a process for purchasing generated electricity from an IPP. The history of municipal IPP procurement in South Africa shows that while there is a strong interest by municipalities to increase their energy resilience by concluding a PPA with IPPs, there are only a few examples of success. To provide municipalities with the guidance needed to increase the success of their procurements when seeking to procure power from an IPP, this Manual details key steps to be followed by municipalities throughout the Municipal IPP Project Cycle

The Manual applies generally to all municipalities and is not limited to any particular type of municipality. However, it is important to note that not all municipalities are suited to procuring electricity from an IPP. It is a complex process and because purchasing electricity from an IPP demands that both the IPP and its financiers underwrite or financially support the project, it requires municipalities to undertake a rigorous feasibility study before embarking on the procurement of electricity from an IPP. These preparation activities lie outside of any regulated environment, but the guidance and advice contained in this Manual is intended to aid municipalities in the critical first stages of any IPP procurement and throughout the Municipal IPP Project Cycle.

Although this Manual is written in a manner so as to be accessible across a range of disciplines within a municipality, the Manual presupposes that those officials and advisors engaging with it have a working understanding of electricity planning and provisioning, as well as supply chain management processes.

1.2. OUTLINE OF THE MUNICIPAL IPP PROJECT CYCLE

This Manual is structured in line with the below Municipal IPP Project Cycle, which comprises of three key Modules, each divided into Stages and Sub-stages. These include:

Module 1 Municipal IPP Project Preparation Phase, which is made up of the following three stages:

STAGE 1: Planning and Municipal Readiness Assessment comprising three sub-stages: Initial Preparatory Activities; Municipal Readiness Assessment and Feasibility Study Planning

STAGE 2: Feasibility Study consisting of various sub-stages culminating in a Final Feasibility Study Report; and

STAGE 3: Feasibility Study Approvals comprising preliminary stakeholder engagement and municipality consent to proceed to procurement or decision not to proceed;

Module 2 Municipal IPP Project Procurement Phase, which is made up of the following four stages:

STAGE 1: Procurement Preparation Activities:

STAGE 2: Procurement Design Concepts;

STAGE 3: Preparation of Bid Documentation; and

STAGE 4: Procurement Process.

Module 3

Municipal IPP Contract Management Phase, which is made up of the following two stages:

STAGE 1: PPA Management Plan; and

STAGE 2: Periodic Review of PPA and Amendment of PPA.

Figure 1: Outline of the Municipal IPP Manual

Municipal IPP Project Cycle MODULE 1 **MODULE 2 MODULE 3** Municipal IPP Project Municipal IPP Municipal IPP Project Procurement Phase Implementation Phase **STAGE 1** STAGE 1 STAGE 1 **Procurement Preparation Activities** PPA Contract Management Plan Planning and Municipal Readiness Assessment STAGE 2 STAGE 2 STAGE 2 **Procurement Design Concepts** Periodic Review and Amendment of PPA **Feasibility Study** STAGE 3 **STAGE 3** Preparation of Bid Documentation Feasibility Study Approvals STAGE 4 **Procurement Process**

1.3. THE MODULES

MODULE 1:

Project Preparation Phase

STAGE 1

Planning and Municipal Readiness Assessment

STAGE 2

Feasibility Study

STAGE 3

Feasibility Study Approvals

Module 1 sets out a framework of initial processes or preparatory steps that a municipality should engage in before it determines to procure electricity through a municipal IPP. There are three stages to the Project Preparation Phase.

STAGE 1: Planning and Municipal Readiness Assessment

The Manual outlines the initial preparatory activities required to identify and assess the appropriateness of a municipal IPP as opposed to other forms of electricity procurement. These include aligning the proposed municipal IPP with the municipality's (Integrated Development Plan) IDP; where required, setting aside budget for technical studies, and ensuring the administrative head of the municipality, the municipal manager or his delegate supports the proposed IPP. This is a checklist which, to a greater or lesser extent may be relevant to a municipality.

The next step is for a municipality to undertake a Municipal Readiness Assessment. This step is an extremely helpful indicator of the readiness of a municipality for a municipal IPP before committing the expenditure required to engage in a full feasibility study. This section canvasses the key indicators of municipal readiness from a technical, financial, and human capacity perspective, as well as a high-level assessment of the socio-economic benefits that an IPP may bring. The Municipal Readiness Assessment is a preliminary evaluation of a municipality's suitability to procuring electricity from an IPP before engaging in the Feasibility Study.

It's advisable for a municipality to undertake certain preparatory activities before commencing the Feasibility Study including, among other things, the appointment of a project manager; if necessary, applying for funding for a transaction advisor to support the Preparation and Procurement Phases, and procuring and appointing a multidisciplinary transaction advisor.

STAGE 2: Feasibility Study

The Feasibility Study consists of various sub-studies, each building on the next as follows:

1. A Project Inception and Needs Assessment: This is a confirmation of the need being addressed by the proposed municipal IPP and includes undertaking a status quo assessment and defining the outputs of the proposed IPP project; confirming that the proposed municipal IPP project is in alignment with the municipal strategic objectives, provincial strategies





and national government policies; a re-confirmation of the socio-economic characteristics and challenges within the municipality; re-assessing the municipal capacity and commitment to undertake the proposed IPP project; and where relevant, updating the risk management plan prepared during the Municipal Readiness Assessment.

- A Stakeholder Engagement Plan which identifies key stakeholders and describes their impact and influence over the project and sets out a plan for consultation and communication.
- 3. A Technical and Financial Solution Options Analysis: This includes an in-depth technical, financial, and socio-economic analysis followed by a comparative analysis evaluating the advantages and disadvantages of each technical solution option as well as the risks to and benefits for the municipality as measured against the municipality's strategic objectives. This study culminates in a recommendation of the most optimal technical solution option based on a multi-criteria decision matrix.
- **4.** An Economic Development Assessment: This report reviews various economic impacts of an IPP on the local municipal economy as well as on end-users in the municipality. Part of this report is also to Propose an economic development scorecard for an IPP with suggested categories of assessment and related targets over a defined period as well as penalties for failing to meet targets / outputs.
- **5.** A Legal and Regulatory Assessment: This report should confirm the capacity and authority of the municipality to procure new generation capacity from an IPP and list all relevant approvals and consents relating to the purchase of electricity from an IPP as well as the applicable procurement process under local government laws. The report should also comment on regulated issues impacting the terms of the PPA such as curtailment or unavailability of the network under the Codes; and any case law impacting the terms of the PPA.
- **6.** A Procurement Plan outlining a procurement process that is aligned with the municipality's SCM policy, institutional issues such as the structure and appointment of different committees (specification, bid, and adjudication), a procurement timetable for the key milestones and approvals and a governance framework in respect of managing the procurement process and decision-making.

The above assessments and plans are consolidated into a single Feasibility Study Report which identifies the preferred IPP technical solution options and confirms the municipality's ability to satisfy the legal, financial, and technical requirements of such procurement.

STAGE 3: Feasibility Study Approvals

In the final stage of the Project Preparation Phase, and before commencing the Project Procurement Phase, a municipality should consider making the draft Feasibility Study Report available to stakeholders identified in the stakeholder engagement plan for written feedback, where this would be considered beneficial and inclusive. The municipality should, where desirable, update the Feasibility Study Report with feedback.

Where the Feasibility Study Report recommends a municipal IPP procurement, the municipality should submit the Feasibility Study Report to the municipal manager for submission to municipal council for approval. If municipal council confirms that the Feasibility Study Report aligns with the municipality's IDP, the municipal manager may approve procurement of the proposed Municipal IPP.

MODULE 2:

Project Procurement Phase

MODULE 2
Municipal IPP Project
Procurement Phase

STAGE 1

Procurement Preparation Activities

STAGE 2

Procurement Design Concepts

STAGE 3

Preparation of Bid Documentation

STAGE 4

Procurement Process

Module 2 provides guidance on the Municipal IPP Project Procurement Phase, which is split into four stages, each of which builds on the previous stage. To increase the prospects of a successful procurement it is important that municipalities prepare thoroughly and plan their procurement with a clear focus on the outcome and an intention to finish the process with an onboarded IPP. It is for this reason that we have dedicated three of the four procurement stages to the preparatory activities prior to engaging the market.

STAGE 1: Procurement Preparation Activities

This initial stage is for a municipality to undertake a number of key preparatory activities so to give the procurement process the greatest possibility of success. Some procurement preparation activities can be undertaken internally within the municipality, whereas other activities require the assistance of a duly appointed transaction advisor. The key procurement preparation activities to be undertaken by a municipality prior to the onboarding of a transaction advisor include confirming internal delegation of authority to the project officer and SCM Unit within the municipality; the appointment of a transaction advisor; the appointment of members to Bid Committees; the coordination of affiliated government departments in anticipation of IPP project consents and related project agreements; and if relevant, commencing the engagement or procurement for grid strengthening.

STAGE 2: Procurement Design Concepts

As a first step after its appointment, the transaction advisor should undertake a review of the feasibility study outputs and specifically the output specifications and procurement plan, as this forms the basis of what needs to be procured and helps inform the next stage, being the design of the procurement document. The transaction advisor should also consider the design of the procurement process and develop the relevant procurement documentation.

In designing a suitable procurement process for a municipal IPP, consideration should be given to several concepts, including:

- 1. Whether to engage in a *competitive tender process versus direct procurement model* a municipality is required by law to follow a competitive tender process in procuring a municipal IPP given the contract value of the procurement. Deviations from a competitive tender process are permitted but only in exceptional and limited circumstances.
- 2. Whether to structure the procurement in a *single or two-staged tender process* There is no requirement in the Municipal SCM Regulations for a municipality to conduct a two-stage procurement process when procuring goods and services. The more recent approach has been to dispense with a prequalification phase due to the additional time it would add to the procurement process, and opting instead to follow a one-stage combined Request for Qualifications and Proposals.
- 3. To consider whether there should be bid price disclosure i.e. an *open envelope approach or a sealed bid process* Municipalities need to weigh up the benefits of price disclosure and transparency in an open bid tender process against a sealed bid process which prioritises the confidentiality undertaking provided by bidders at bid submission that they have not discussed their bids with competitors.
- 4. Whether to invite a single bid versus multiple bids A municipality's decision on whether to issue a single bid for a single municipal IPP, or multiple bids across multiple rounds of bids or bid windows will depend on a number of factors including the maximum size of the procurement programme in respect of capacity; and the maximum and minimum sizes of individual projects.
- 5. Whether to issue a technology-specific versus technology-neutral tender The decision on whether or not to be technology specific or technology neutral may be informed by a number of factors and should have been informed by the work undertaken during the Feasibility Study.

STAGE 3: Preparation of the Bid Documentation

Once the procurement structure or design is decided, it will be necessary to prepare high quality, bankable Bid Documentation. This includes preparing a combined Request for Qualification and Proposal. The structure of the Request for Proposal (RFP) will in large part be dependent on the decisions above related to the design of the procurement.

Generally speaking, the RFP should be structured into the following sections:

- 1. General conditions of bidding including response schedules and standard bidding documents: The general conditions part of the Bid Document should cover topics such as (i) Bid Notice and Invitation to Bid, (ii) Definitions; (iii) Eligible bidders, Documentation Fee, and Registration; (iv) Bidder Briefing sessions and briefing notes; (v) Bid Guarantee and Preferred Bidder Guarantee; (vi) Bid evaluation and submission response format; (vii) Bid Validity Period; and (viii) any other pertinent information.
- 2. Project Background (Terms of Reference) and Timelines: The RFP should include a section, either in the General Conditions section (Part A) or as a separate section which describes in more detail the proposed municipal IPP Project, its key players and governing laws, any salient features of the procurement including specifying the technology, total procurement size and minimum and maximum sizes of individual projects that are eligible to submit a bid response. This section should also set out an outline of the intended procurement process and timelines i.e. a timetable with deadlines for each stage of the RFP process.
- 3. Bid Qualification Criteria: All bid responses will be assessed against thresholds set for various qualification criteria, to determine whether they are compliant bids. Qualification criteria should cover all relevant facets in the development of an IPP project. In broad terms, projects that qualify for comparative evaluation are those that are technically, financially, and legally qualified, in addition to demonstrating that bidders have sufficient experience, commitment and resources, to execute the project as submitted. Each bid submission must therefore meet or exceed all prescribed thresholds (per criterion) to be considered a compliant bid.
- 4. Bid Evaluation and Scoring: All compliant bids proceed to the second stage in which they are subject to a comparative evaluation. The Preferential Procurement Policy Framework Act (PPPFA) prescribes the split in scoring of compliant bids between price and specific goals (ED) on a 90/10 preference points system. Where a municipality receives more compliant bids exceeding the maximum capacity provided in the RFP, a comparative evaluation of compliant bids will be done in accordance with transparent comparative evaluation criteria.
- **5.** Project Agreements: The RFP should include a set of Project Agreements. These typically include the following agreements: A Power Purchase Agreement (PPA) concluded between the seller IPP and the buyer

municipality; where the generation facility connects to the transmission grid a Transmission Connection and Use of System Agreement between the IPP and the National Transmission Company of South Africa (NTCSA) as the transmitter; Where the generation facility connects to the distribution network, a Distribution Connection and Use of System Agreement between the IPP and the distributor, either the municipality or NTCSA; a Direct Agreement between the IPP, the municipality as buyer, the guarantor, and the lenders to the IPP; and an implementation agreement or specific agreement with the party offering the credit support in respect of the municipality's payment obligations under the PPA.

STAGE 4: Procurement Process

The procurement process applicable to a municipal IPP follows the same regulated process as all other municipal supply chain management processes, which prescribes different levels of competition depending on the value of the good or services being bought. On this basis, municipalities are required to follow a competitive open process regulated under the MFMA and its SCM policy as all electricity procurement will exceed R200 000.

The key stages in the procurement process and key activities in each stage include:

- 1. Issue of RFP and bidders to commence bid preparation: Activities include (i) establishing a digital bid portal or platform for access to all bid documentation RFP, etc., and for publications of all bidder communications throughout the procurement process; (ii) levying a Bid Document fee, where municipal manager deems appropriate; (iii) holding a bidder briefing session (discretionary only); (iv) Bidders completing a bid registration form; and (v) addressing bidder clarifications through briefing notes.
- 2. Bid evaluation: Activities include (i) receipt of bids before clear cut off time and bids to be received through either bid portal only, or hard copies; (ii) specification of opening of bids in public if appropriate; (iii) Bid evaluation committee (comprising technical evaluation teams per discipline) evaluating bid responses; (iv) municipality issuing clarifications to bidders, as required; (v) Bid Adjudication Committee adjudicating bid evaluation recommendations and selecting preferred bidder(s); and (vi) Bid Adjudication Committee (BAC) obtaining municipal council resolution to appoint preferred bidder(s);
- **3.** *Preferred Bidders:* Activities include (i) notifying preferred bidder(s) of their appointment, issuing a formal letter including any conditions that the BAC

recommended and as approved by the municipal council; (ii) requiring preferred bidder(s) to conclude a Preferred Bidder Undertaking setting out various conditions and obligations to be met by the preferred bidder within the period prior to commercial close; and (iii) notifying unsuccessful bidders;

- **4.** Preferred Bidder(s) Pre-Commercial Close: Activities include (i) securing all necessary consents and permits for its project; and (ii) the Preferred bidder concluding all supporting project agreements;
- 5. Municipality Pre-Commercial Close: Activities including (i) updating / undertaking a Cost of Supply Study based on final agreed tariff for submission and approval by National Energy Regulator of South Africa (NERSA); (ii) complying with the process under section 14 of the MFMA and Municipal Asset Transfer Regulations if land is to be made available to the IPP by the municipality; (iii) where required, the municipality and Department of Energy and Electricity (DoEE) securing the Minister of Finance concurrence to the Implementation Agreement; (iv) where required, obtaining Minister of Energy and Electricity approval in terms of Reg 5(2) of the New Generation Capacity Regulations; and (V) conducting a section 33 public participation process;
- **6.** Contract Award / Commercial Close: Activities including (i) obtaining municipal council resolution approving the conclusion of the PPA and other Project Agreements; and (ii) signing the PPA between IPP and municipality and other project agreements; (iii) concluding the preferred bidders price making any allowable adjustments provided for in the RFP.
- 7. Pre-Financial Close: Activities including (i) the IPP finalising any outstanding permits and licenses for the Project, including registration of generating activities with NERSA, and (ii) the IPP finalising all land arrangements, including servitude agreements, lease agreements or sale agreements if not already concluded earlier.
- **8.** Financial Close: Activities including the IPP concluding Financing Agreements and attending to conditions precedent fulfilment so that financing is available to commence construction of the generation facility.

MODULE 3: Project Contract Management Phase

MODULE 3

Municipal IPP

mplementation Phase

STAGE 1

PPA Contract Management Plan

STAGE 2

Periodic Review and Amendment of PPA

Module 3 details the various activities that the IPP and the municipality need to undertake jointly upon reaching Commercial Close to ensure the smooth and efficient implementation of the PPA. Some of the processes are statutorily prescribed under the MFMA, and others will be managed in terms of the PPA.

STAGE 1: PPA Contract Management Plan

A PPA Contract Management Plan should be prepared by the municipality prior to contract award and the preferred IPP bidder(s) should be closely involved in the development of such plan. The plan must demonstrate a municipality's capacity to implement and monitor IPP performance of obligations under the PPA and provide a management tool to guide contract management activities and resources of both parties for the contract term.

STAGE 2: Periodic Review and Amendment of PPA

The provisions of the PPA must allow for a periodic review of the PPA once every 3 years. This review should not impact the tariff adjustments provided in the PPA or agreed with NERSA, provided that it does not exceed the tariff benchmarks issued by NERSA.

Furthermore, if during the term of the PPA it is necessary to amend any of its provisions, the municipality must observe the requirements in section 116(3) of the MFMA which include a public consultation process and the municipal council having been provided with reasons for such amendment or change.

1.4. INDICATIVE TIMELINE FOR MUNICIPAL IPP PROJECT PHASES

The figure below provides an estimate of the typical timeline of the key phases of the full Municipal IPP Project Cycle. This timeline is indicative only and will be dependent on a number of factors including the underlying technologies that will be procured.

procured.						
dule 1 MUNICI	PAL IPP PROJECT PREPARA	ATION PHASE				
Planning and Municipal Readiness Assessment	Feasibility Study	Feasibility Study Approvals				
	6 - 10 months					
Period from	JECT PROCUREMENT PHAS Procurement Preparation to					
Procurement Preparation Activities and Procurement Design Concepts	Preparation of Bid Documentation and Issue of RFP	Time for bidder to prepare and submit bid				
1 - 2 months	3 - 6 months	4 - 6 months				
Bid Evaluation and appointment of preferred bidder(s)	Pre-Commercial Close activities	Commercial and Financial Close				
2 - 3 months	3 -	6 months				
construction	PERIOD UP TO COMMERCIA	AL OPERATIONS DATE				
IPP construction p	eriod	COD				
	12 - 24 months					
OPERATING PERIOD						
PPA Term - Operating Period						
	15 - 25 years					
Total period	d from first identifying strategy to first 31 - 57 months	t electrons flowing				



2.1. RATIONALE FOR MUNICIPAL IPPS

The rationale for municipalities procuring electricity from IPPs is rooted in a number of key drivers to meet local government objectives in respect of energy resilience and a just energy transition to generated and storage capacity from renewable and clean fuel sources, as outlined below.

2.1.1. The need for South Africa to transition away from a national energy supply largely reliant on fossil fuels

Local Government has a responsibility in their energy procurement to support the National Government's objective for South Africa to transition away from a national energy supply sourced from Eskom and still largely reliant on fossil fuels, and in particular coal to generate electricity.

South Africa ranks as the world's 18th highest emitter of greenhouse gas (GHG). This is predominantly driven by a heavy reliance on coal which is the primary source of electricity production. The South African government has made commitments through its Nationally Determined Contributions (NDCs) to reduce emissions by 17% in 2025 and a further 12% by 2030. This will require a significant shift in the structure of the South African economy over the next decade, necessitating a transition to a low-carbon economy that will be enabled by renewable energy generation as an essential foundational step.

The European Union's (EU) Carbon Adjustment Mechanism (CBAM) will apply its definitive regime from 2026, where it will put a fair price on the carbon emitted during the production of carbon intensive goods that are entering the EU, to encourage cleaner industrial production in non-EU countries. If municipalities do not contribute to reducing carbon through their procurement of electricity from IPPs, then large industrial and commercial customers within the municipality will look to generate their own electricity, which will result in a loss of revenue to the municipality, which could have a critical impact on the financial sustainability of municipalities.

2.1.2. Energy Resilience

The second driver is to enable a municipality to meet its strategic objectives in respect of energy resilience and diversify its energy supply. Energy Resilience speaks to security of supply as well as cost of supply.

In addition to the need to transition to a low-carbon economy, South Africa has experienced an electricity supply crisis which had a significant impact on the economy including municipalities who were compelled to mitigate the risk of an electricity supply shortfall and consider diversifying their electricity supply. The electricity crisis was occasioned in large measure by the structure of the electricity supply industry in South Africa which has historically been vertically integrated with the national utility, Eskom, being responsible for the bulk of generation electricity (90%) alongside IPPs and small-scale embedded generation (SSEG). The national utility also owns and operates the transmission network.³

The electricity generation landscape underwent a significant transition between 2012 and 2020, firstly with the establishment of the Renewable Energy Independent Power Producers Procurement Programme (REIPPPP) which saw the entrance of IPPs with Eskom as a single buyer. The REIPPPP model is well understood by IPPs and lenders alike. Secondly, various amendments were made to the ERA including lifting the generation licensing threshold which saw a proliferation of private power producers with private off-takers or buyers. The liberalisation of the electricity sector converged with the unbundling of Eskom Holdings into three subsidiaries: Generation, Transmission (NTCSA), and Distribution.4

A further motivation for diversifying electricity supply is the cost of electricity – the average price increases from Eskom has well exceeded Consumer Price Index (CPI) over the last number of years and it is expected to follow this trend over the short to medium term. Where a municipality enters into a long term PPA with an IPP, which typically escalates with CPI, this will provide the municipality with price certainty over a long period of time.

In addition, with the further liberalisation of the market under the Electricity Regulation Act (ERA) which contemplates trading markets allowing customers to purchase electricity on a day ahead short-term basis will also offer municipalities some alternatives in their electricity supply and will result in more competitiveness in electricity pricing. An electricity trading market is, however still in its infancy, and the implication for municipalities is not yet clear.

- 1 European Commission, 2024, GHG emissions of all world countries. Available here.
- 2 Republic of South Africa, 2021, South Africa: First Nationally Determined Contribution Under the Paris Agreement. Updated September 2021. Available here.
- **3** Energize, 2023, A look at municipal electricity markups in South Africa. Available <u>here</u>.
- **4** See the Roadmap for Eskom in a Reformed Electricity Supply Industry published by the Department of Public Enterprises in 2019. Available here. (Accessed on 30 August 2023)

Procuring electricity from IPPs therefore offers municipalities a path to increasingly lessen their reliance on Eskom generated power, which derives from unclean sources, and in turn bring down the prohibitive cost of purchasing electricity from the national utility. For the reasons as set out above relating to energy resilience, IPPs also offer municipalities with security of supply at a predictable and manageable cost.

2.2. PROCUREMENT MODELS OF MUNICIPAL NEW GENERATION CAPACITY

2.2.1. Introduction

There are a number of benefits for a municipality to procure new generation capacity from IPPs, however, this is not the only procurement model for doing so. An important preliminary question, which will guide the strategic and planning focus of municipalities in their IDPs, is which electricity supply model or models is best suited to address a municipality's particular demands, over the short to long term.

National Treasury has issued a circular delineating between different models for municipalities procuring new generation capacity. The MFMA New Generation Capacity Circular distinguishes between different scenarios for the procurement of new generation capacity by municipalities.

The following scenarios are identified:

- SCENARIO 1: Municipal Independent Power Producer Procurement (MIPPP) with a Ministerial Determination;
- SCENARIO 2: MIPPP in which the municipality is both procurer and buyer;
- SCENARIO 3: MIPPP based on PPP requirements;
- SCENARIO 4 & 5: MIPPP based on developing and operating own power plants; and
- · SCENARIO 6: MIPP from an unsolicited bid.

The approach under this Manual is to focus on the procurement of an IPP applying Scenario 1 and Scenario 2 of the MFMA New Generation Capacity Circular.

Applying the scenarios identified in the MFMA New Generation Capacity Circular, broadly speaking, the procurement model to be applied by a municipality will be dependent on the municipality's requirement in relating to the ownership of the generation facility. Depending on which party owns the generation facility, this will affect the application procurement framework. The table below demonstrates this concept:

Table 1

Owner of Generation Facility	MFMA New Generation Capacity Scenario	Municipal Procurement Framework
IPP	SCENARIO 1: MIPPP with a Ministerial Determination	Municipal SCM Policy
	SCENARIO 2: MIPPP in which the municipality is both procurer and buyer SCENARIO 6: MIPP from an unsolicited bid	
Municipality	SCENARIO 6: MIPP from an unsolicited bid SCENARIO 3: MIPPP based on PPP requirements	Municipal SCM Policy
	SCENARIO 4 & 5: MIPPP based on developing and operating own power plants	
User (Residential, Commercial Industrial) in jurisdiction of municipality	SSEG No scenario	Municipal PPP regulations (where relevant)

As demonstrated above, the defining feature of municipal electricity procurement is the party in which ownership of the generation facility vests. This determines both the procurement framework as well as the contracting structure that applies to the model of municipal electricity procurement. Using ownership as a determining criterion, there are three possible models for municipal electricity procurement, each with a number of variants. These models and accompanying variants are illustrated in Figure 4 and further described in this section.

2.2.2 Models of Municipal Electricity Procurement

2.2.2.1. Municipal IPP Model

The Municipal IPP Model has the following defining features:

- **a.** Ownership in the generation facility will always vest in an IPP and there is no intention for the generation facility and related infrastructure to transfer to the municipality.
- **b.** The applicable regulatory framework is the Municipality's Supply Chain Management Policy for the procurement of a supply (electricity). Where the New Generation Capacity Regulations apply, the requirement is that the Minister approve the procurement of new generation capacity including by municipalities.
- **c.** The applicable contracting framework for all Municipal IPPs is (i) a Power Purchase Agreement and (ii) a grid connection and use of system agreement between IPP and municipality; and (iii) if necessary, an amendment to the electricity supply agreement between Eskom and the municipality to account for wheeled energy.
- **d.** The Municipal IPP Model is Scenarios 1 and 2 of the MFMA New Generation Capacity Circular. It could also be structured so that a district municipality procures electricity from an IPP for purposes of on selling of electricity to the local municipalities within its area of jurisdiction. Alternatively, the procurer could be a municipal entity established by a number of parent municipalities for purposes of on selling to its parent municipalities.

2.2.2.2. Municipal Own Generation Model

- **a.** Ownership in the generation facility will vest in the municipality. There is no IPP from which the municipality procures generated electricity, rather a generation facility owned by the municipality and operated by it or a third party is embedded within its distribution grid.
- **b.** If the generation facility is funded from the municipal budget, then a municipality will apply its SCM Policy to engagement in two procurements: (i) for a design and construction contractor to design and / or construct the generation facility, and (ii) for the operation and maintenance of the generation facility on a performance-based services basis. Under this model, the municipality retains the greatest risk, but there is no third party selling the municipality generated capacity. This is Scenario 4 and 5 of the MFMA New Generation Capacity Circular.
- c. If the design and construction of the generation facility is funded by a third party, then the municipality must apply its SCM Policy and the Municipal PPP Regulations. Under the Municipal PPP Regulations, a PPP applies to a private party performing a municipal function (such as the construction and operation of a generation facility) for or on behalf of a municipality. Ownership of the generation facility vests in the municipality as the generation facility is likely to be built on municipal land. At the end of the PPP term (whether as a result of early termination or expiry), the private party is required to hand over the generation facility to the municipality. The private party funds the design and construction of the generation facility, which is paid back to the private party by the municipality through a unitary payment over the term of the PPP Agreement. The PPP model is distinct from the IPP model in that the emphasis under a PPP is not on the electricity output of the generation facility (as is the case for an IPP), but rather the private party delivering both a service (the supply of electricity) and the related infrastructure (a generation facility) to the municipality over the term of the PPP Agreement. This is Scenario 3 of the MFMA New Generation Capacity Circular.
- d. The Municipal Own Generation Model may be structured in a manner where a district municipality builds, finances and operates a generation facility and on-sells generated capacity to local municipalities in its area of jurisdiction.
 Alternatively, a district municipality may conclude a PPP agreement with a private party to on-sell generated capacity to local municipalities in its area of jurisdiction.

2.2.2.3. Municipal Small Scale Embedded Generation Model

The SSEG model has the following features:

- **a.** Ownership of the embedded generation facility remains vested in the SSEG end-user or customer. Although ownership remains with SSEG customer, the municipality must sign off on an SSEG system commissioned to provide electricity into its distribution network.
- **b.** There is no procurement process of SSEG by the municipality, however, the municipality needs to take certain steps to facilitate the feeding in of excess generated power into its distribution system. This includes introducing an SSEG policy or amending its electricity by-laws to reflect SSEG installation requirements and introducing net-billing tariffs or export credits to compensate SSEG customers for exporting electricity into the grid.

- **c.** For the SSEG customer there is no licensing requirements under the ERA as SSEG operating under 1MW are exempted under Schedule 2 of the ERA from registration and licensing.
- **d.** There is no specific contractual arrangement, as there is already a contractual nexus between the municipality and the SSEG customer for the provision of municipal services.

The above three models are not intended to be exhaustive and there are other models which may arise as the electricity market matures and the electricity supply options increase. For purposes of this Manual, however, the focus is on the Municipal IPP Model and not the Own Generation Model or the SSEG Model, and in particular the baseline Municipal IPP Model where a municipality procures and purchases generated capacity from an IPP for import into its local distribution grid.

Below is a schematic of the electricity procurement models and their respective variant.

Table 2

MFMA New Generation Capacity Circular Reference	Model Variants	Ownership of Facility and Land	Applicable Law	Contractual Form and Parties
Municipal IPP Models				
BASELINE MODEL & VARIANT #1: Scenario 1 and 2 of the MFMA New Generation Capacity Circular. VARIANT #2: Scenario 6 of the MFMA New Generation Capacity Circular.	BASELINE MODEL: Municipality procures electricity for supply to end-users in its area of jurisdiction. VARIANT #1: DISTRICT IPP MODEL: District municipality procures electricity and on-sells to local municipalities in its area for supply to their end-users. VARIANT #2: MULTI- USER IPP MODEL: Two or more local municipalities establish a municipal entity (in which they hold shares). Municipal entity procures electricity and on-sells to parent municipalities.	Ownership of the generation facility vests in IPP. Where generation facility located within municipal area, municipal-owned site may be leased to IPP in terms of the MFMA and MATR. If the generation facility is located outside of the procuring municipality's area of jurisdiction, it will need to be wheeled over other networks / grids.	MFMA; Section 84(1)(c) of the Municipal Structures Act (as it relates to district municipalities) Municipal Systems Act (establishment of municipal entity) Municipal SCM Regulations; Municipality SCM Policy; ERA; and New Generation Capacity Regulations under Scenario 1 of MFMA New Generation Capacity Regulations.	BASELINE MODEL: PPA between IPP and municipality. VARIANT #1: PPA, EITHER BETWEEN: a. District municipality and IPP with back-to-back PPAs between district municipality and local municipalities; OR b. Separate PPA between IPP, district municipality and each local municipality. VARIANT #2: PPA, EITHER BETWEEN: a. IPP and municipal entity with back-to-back PPAs between municipal entity and parent municipalities; OR b. Separate PPA between IPP, municipal entity and each parent municipality. Grid connection and use of system agreement between IPP and municipality if facility is connected to municipal distribution system, with the possibility of wheeling to the municipality if the facility is located outside of the system owned by the buyer municipality. Amendment to the electricity supply agreement between Eskom and the municipality to account for the wheeled energy where relevant.

MFMA New Generation Capacity	Model Variants	Ownership of Facility and Land	Applicable Law	Contractual Form and Parties
Circular Reference	ale			
Own defleration flode	715			
Own Generation Mode BASELINE MODEL: Scenarios 4 and 5 of the MFMA New Generation Capacity Circular. VARIANT #1: Scenario 3 of the MFMA New Generation Capacity Circular. VARIANT #2: Scenario 5 of the MFMA New Generation Capacity Circular. VARIANT #3: Scenario 6 under the MFMA New Generation Capacity Circular.	BASELINE MODEL: Own Use and Enduser Supply Model: Municipality or its municipal entity constructs a generation facility for own use and end-user supply in its area of jurisdiction. VARIANT #1: Municipal PPP Model: Municipality procures electricity for supply to end-users in its area of jurisdiction. VARIANT #2: District Own Use Model: A district municipality constructs a generation facility for own use and on-sale to local municipalities within in its area of jurisdiction. VARIANT #3: Multi- User Own Use Model: A municipal entity in which two or more local municipalities hold shares and / or a metropolitan municipality and surrounding district municipality hold shares. Municipal entity constructs a generation facility for use by the parent municipal entity and end-user supply in its	BASELINE MODEL: Ownership vests in the municipality or the municipal entity. Municipality responsible for all site enablement activities. VARIANT #1: Ownership vests in municipality and Private Party transfers asset to municipality at end of PPP Agreement term. Municipally owned site made available to Private Party in terms of MFMA and PPP regulations, MATR not applicable. Municipality response for site enablement. VARIANT #2: Ownership of generation plant vests in the district municipality which may also own the land on which the generation facility is located or conclude a long-term lease agreement with the local municipality which owns the site. District municipality responsible for all site enablement activities. VARIANT #3: Ownership vests in the municipal entity.	Municipal SCM Policy.	BASELINE MODEL, VARIANT #2 & VARIANT #3: Two main agreements being: a. Standard form construction contract in terms of CIDB Act and regs concluded between municipality or municipal entity and contractor. b. Operations and Maintenance agreement between municipality or municipal entity and O&M contractor. VARIANT #1: PPP Agreement between Private Party and municipality. VARIANT #2: PPA between district municipality and local municipalities falling within its area of jurisdiction. VARIANT #3: PPA between municipal entity and parent municipalities.

enablement activities.

MFMA New Generation Capacity Circular Reference	Model Variants	Ownership of Facility and Land	Applicable Law	Contractual Form and Parties	
Small Scale Embedded Generation Model					
None	None	OWNERSHIP: Of facility (PV panels, etc. remains with SSEG customer, however municipality must sign off on an SSEG system commissioned to provide electricity into the distribution network.	No procurement of SSEG but municipality to issue an SSEG policy and amend its electricity by-laws to reflect SSEG installation requirement. SSEG are exempted under Schedule 2 of ERA from registration and licensing subject to obligations on the municipality.	Agreement between SSEG customer and municipality for municipal services.	



2.3. INTRODUCTORY PRINCIPLES AND KEY CONCEPTS

Throughout the Manual we will be referencing terminology and concepts applicable to the electricity sector and in particular new generation capacity. This section summarises the key introductory concepts relating to procuring electricity from an IPP for municipal officials navigating their way through the Manual and provides a short synopsis of the main constructs used in the Manual. It is structured in a question-and answer format for ease of access and to keep the answers clear and succinct.



What is an Independent Power Producer or IPP?

An IPP is a special purpose vehicle or ring-fenced entity established with the intention of designing, building, financing, and operating a generation facility for purposes of generating electricity which it sells to customers referred to as off takers.

An IPP is defined in the New Generation Capacity Regulations as "any person in which the government or any organ of state does not hold a controlling ownership interest (whether direct or indirect), which undertakes or intends to undertake the development or creation of new generation capacity pursuant to a determination made by the Minister in terms of section 34 (1) of the Act".

This definition restricts IPPs to those undertaking the development of new generation capacity following a Ministerial Determination issued in terms of section 34(1) of the ERA. This is a narrow definition and predates the liberalisation of the electricity sector in more recent years, where there has been a proliferation of IPPs generating electricity for private customers outside of a Ministerial Determination.

Given the relaxation in the licensing regime for generation capacity, the definition of IPP can now be extended to any independent power producers undertaking the generation of electricity, irrespective of whether this is pursuant to a Ministerial Determination or not.



What is a Power Purchase Agreement or PPA?

A PPA is the contractual arrangement between a municipality and an IPP which regulates the terms on which an IPP will make capacity or generated electricity available to a municipality – when, for how long, and the cost of supply.

The PPA is the electricity sales agreement, and its duration will depend on a number of factors. Where the IPP established a generation facility for the sole purpose of supplying electricity to a municipality as its sole off taker or customer, the duration may be for a longer term so that the IPP can recover its capital costs of designing and building the generation facility and supplying the equipment required to generate electricity and therefore operate the facility.

There, may however be other arrangements where a municipality is one of a number of off takers or customers of an IPP. These PPA arrangements may be for a shorter duration.

Where any PPA locks a municipality into an arrangement of longer than 3 (three) years, the municipality will be required to comply with the public participation process under section 33 of the MFMA.

What technologies are included in new generation capacity?

The term "new generation capacity" is used under the New Generation Capacity Regulations. Section 2 of the Regulations (Application of the Regulations) refers to the following technologies:

- **a.** New generation capacity derived from renewable energy sources and cogeneration;
- **b.** Base load, mid -merit load and peak load new generation capacity, and energy storage; and
- c. Cross border projects.

New generation capacity expressly excludes new generation capacity derived from nuclear power technology. The procurement of nuclear power is not regulated under the ERA.

Poes the municipal power to reticulate electricity extend to the generation of electricity?

The ability of municipalities to distribute electricity and then on-sell to its customers is constitutionally mandated. Schedule 4 Part B of the Constitution lists the local government matters over which a municipality has executive authority (the exercise and performance of which must be overseen by the national and provincial governments). Included in the list of local government matters over which a municipality has executive authority is "electricity and gas reticulation".

The Constitution does not give further direction as to what is included in electricity reticulation. However, the ERA includes a definition for "reticulation" which includes both the activities of distributing electricity and the trading of electricity as well as any "services associated therewith". Distribution is a technical term and refers to the conveyance of electricity through a distribution power system that operates at or below 132kV. To reticulate electricity, municipalities are also required in terms of the ERA to hold distribution licenses.

Municipalities play a significant role in the distribution of electricity in South Africa. Acting mostly as intermediaries, municipalities buy the bulk of their electricity from Eskom and then resell it to businesses, homes and other institutions. The significance of the electricity reticulation role played by municipalities is borne out in the manner in which reticulation activities are regulated both under the Municipal Systems Act as well as the ERA.

An important question is whether municipalities are legally permitted to generate electricity for supply into their distribution grids. The Constitution speaks only of municipalities having the executive authority to administer the reticulation of electricity, but this does not include generation. This is borne out in ERA which separates out different activities of generation, transmission, and distribution for purposes of licensing such activities. That said, the Constitution and the Municipal Systems Act give municipalities the right to do anything "reasonably necessary for or incidental to" the effective performance of a municipal function and the exercise of its executive powers.⁵ It follows that a municipality's right to generate electricity itself including purchase generated electricity (from an IPP) is "reasonably necessary for or incidental to" the effective performance of its electricity reticulation function.

?

Is the purchase of electricity by a municipality the performance of a municipal service as contemplated in the Municipal Systems Act?

A municipal service is defined in the Municipal Systems Act and refers to a service that a municipality in terms of its powers and functions provides for the benefit of the local community irrespective of whether such a service is provided by the municipality or an external party and irrespective of whether or not fees, charges or tariffs are levied in respect of such a service.

Electricity reticulation and all the activities related to the functions of a municipality as an electricity distributor form part of the original powers and functions of municipalities as contained in Schedule 4 Part B of the Constitution.

When the municipality reticulates electricity, it does so for the benefit of the local community, in return for which it collects charges from end users or customers. Accordingly, electricity reticulation constitutes a "municipal service". This view is supported by section 28 of the ERA.

⁵ Section 156(5) of the Constitution and section 8(2) of the Municipal Systems Act.

While most municipalities still provide electricity reticulation services through an internal mechanism, that is a division or department within the municipality, there are examples of where this function has been delegated to a municipal entity. For example, City of Johannesburg, a metropolitan municipality has concluded a service delivery agreement with its wholly owned municipal entity, City Power to manage its electricity reticulation services for its municipal jurisdiction including electricity purchase.

The generation and purchase of electricity, however, does not form part of the electricity reticulation functions of a municipality. Rather, the supply of electricity is incidental to the proper performance of most municipal services, but it is not in itself a municipal function as contemplated in the Constitution, and as envisaged in the definition of "municipal service".

The generation of electricity or the purchase of capacity and generated electricity is therefore not a municipal service to which Chapter 8 of the Municipal Systems Act applies.

?

Can all municipalities regardless of their category procure electricity through an IPP?

Chapter 7 of the Constitution regulates local government as one of the three branches of government and the functions and systems contained in the national government legislation regulating municipalities all derive their authority from the Constitution.

Municipalities are regulated by five (5) main pieces of national legislation: the Local Government: Municipal Structures Act 117 of 1998, the Local Government: Municipal Electoral Act 27 of 2000, the Local Government: Municipal Systems Act 32 of 2000, the Local Government: Municipal Finance Management Act 56 of 2003 and the Local Government: Municipal Property Rates Act 6 of 2004.

The Constitution together with the Municipal Structures Act classifies local government into three categories of municipalities: Category A municipalities or metropolitan municipalities; Category B municipalities or local municipalities and Category C municipalities also referred to as district municipalities.

The above classification of municipalities does not alter the Constitutional powers and functions of a municipality. Rather it impacts whether such powers and functions are shared between different categories of municipality. Unlike a metropolitan municipality which does not share its powers and functions, in the case of a district municipality and the local municipalities within the area of the district municipality, their powers and functions are divided as set out in Chapter 5 of the Municipal Structures Act.

Section 84(1)(c) of the Municipal Structures Act gives a district municipality the function and power to procure bulk supply of electricity which includes the transmission, distribution, and where applicable the generation of electricity. Local municipalities are excluded from procuring bulk electricity supplies for more than its municipal area.

Based on the above, all municipalities can procure electricity from an IPP, however, district municipalities can also procure electricity from an IPP for the local municipalities in its area of jurisdiction, but not a metropolitan municipality which has exclusive powers to procure electricity from an IPP.

?

Does a municipality need to follow the same process when procuring new generation capacity from an IPP as it does when purchasing electricity from Eskom under a bulk electricity supply agreement?

Eskom is an "organ of state" as defined in terms of section 239 of the Constitution. When a municipality or a municipal entity purchases power from an organ of state such as Eskom then in terms of section 110(2) of the MFMA, the municipality is not required to comply with Chapter 11 of the MFMA relating to supply chain management or procurement by municipalities. In other words, in terms of the MFMA, municipalities are not required to go through a competitive procurement process in purchasing electricity from any organ of state such as Eskom. The same exemption does not apply to parties who are not organs of state, such as IPPs. Where a municipality or municipal entity procures power from an IPP, it will need to follow a regulated procurement process.



What is the IRP and how does it relate to Municipal IPPs?

The IRP refers to the Integrated Resource Plan issued by the Minister and in terms of section 4(a)(iv) of the ERA and is the national government policy which NERSA is required to implement in its decision making.

The IRP is published by the Minister to determine the country's long-term electricity demand and details how this demand should be met in terms of generating capacity, type, timing, and cost.

Section 10(2)(g) of the ERA provides that an applicant for a licence must provide proof of compliance with any IRP applicable or provide reasons for any deviation for the approval of the Minister. Due to recent changes to Schedule 2 of ERA, IPPs are required only to register their generation activities with NERSA. As the requirement in section 10(2)(g) of ERA relates to license applications and it is not a registration requirement, there is no need for an IPP to demonstrate compliance with the IRP or to apply to the Minister to approve a deviation.



What licensing requirements are applicable to IPPs selling electricity to a municipality?

Section 7 of ERA requires all person operating a generation facility to do so in terms of a license issued by NERSA in accordance with the ERA unless exempted from having to hold a generation licence in terms of Schedule 2 to the ERA.

Schedule 2 of ERA exempts the operation of a grid connected generation facility that generates and supplies electricity to one or more customers from obtaining a licence in terms of section 7 of the ERA. Instead, a generator which operates a grid connected generation facility that either does not import or export electricity onto the network (no wheeling); or that delivery of electricity to one or more customers (a municipality) through wheeling, is required to be registered with NERSA in accordance with section 9 of the ERA. Therefore, IPPs selling energy to a municipality are exempt from the obligation to obtain a generation licence in terms of section 7(2) of the ERA and instead are required to register the activity with NERSA.



How is the setting of electricity tariffs regulated by NERSA?

The municipal base tariff for electricity reticulation is regulated by NERSA, whose functions include regulating prices and tariffs. NERSA has an obligation, when determining distribution licence conditions relating to prices, charges and tariffs, to ensure that the municipality is able to recover, at least, the full amount of the costs incurred by it in certain listed categories.

In terms of section 15(1) of ERA the licence conditions and the revenues, tariffs, and prices must enable an efficient licensee to recover the full cost of its licensed activities, including a reasonable margin or return. Other license conditions may include that the licensee municipality give end users proper information regarding the costs that their consumption imposes on the licensee's business; avoid undue discrimination between customer categories; and permit the cross-subsidy of tariffs to certain classes of customers.

Cross subsidies between different "classes" of customers are permitted, but the tariffs must be transparent regarding the costs of the consumption so that customers are able to make informed decisions and can therefore also see whether, and to what extent their tariff is subsidised by other tariffs or, vice versa. Discrimination between different "categories" of customers is permitted, provided that this does amount to 'undue' discrimination.

NERSA issued the Electricity Pricing Policy (EPP) which provides direction from the national government on principles for the formulation of electricity prices. The EPP provides that all municipalities may apply one set of tariffs within the relevant area of jurisdiction of the municipality as well as recognising that a base tariff is established by NERSA and where municipal surcharges on electricity are introduced in terms of the Municipal Systems Act, this will be regulated through the norms and standards for electricity surcharges. Section 35(4)(r) of ERA empowers the Minister, in consultation with the Minister of Finance, to make norms and standards for the setting of reticulation tariffs. In practice, as soon as Eskom's prices for municipal bulk purchases have been fixed for the following year, NERSA issues electricity tariff guidelines for the given financial year which advises municipalities of a guideline increase that NERSA has

30

calculated. In addition to the guideline, NERSA reviews the municipal tariff benchmarks. The purpose of the guideline increase is to assist municipalities in the preparation of their budget and the benchmarks are used to evaluate the municipal tariff applications to ensure that the tariffs are cost reflective.

In line with the principles of ERA, the EPP also provides for principles of a tariff structure that should apply to all generators and states that the pricing structures for electricity purchases from generators should reflect the underlying cost of supply of the generator that would produce satisfactory financial performance over the short, medium and long-term assuming a competent and prudent operator, as contained in the PPA or based on a regulatory methodology.

The EPP requires that municipalities undertake cost of supply studies at least every 5 years and when the licensees structure changes (such as customer base, energy purchase and sales) which could arise if the volume of electricity purchased from IPPs increases. As set out in the below chapters of this Manual, the guidance is for municipalities to commission a thorough cost of supply study so as to facilitate NERSA approval of any updated tariffs applied for following a Municipal IPP procurement.

?

Is there any limit to the tariff than at IPP can sell electricity to a municipality?

There is no statutory limitation on the tariff that an IPP can sell energy to a municipality. The EPP states that RE may come at a higher cost, but this would have to be reasonably capable of justification and should generally not cause the municipal tariff to rise significantly above the benchmark rise set by the NERSA annually.

Although there is no statutory limit to the IPP's tariff, various statutory processes ensure that the tariff remains affordable. For example, if the PPA resulting from the Municipal IPP procurement is for a term of longer than 3 years (which is expected to be the case), then the PPA would be subjected to general scrutiny as part of the public participation process under section 33 of the MFMA. As part of this review, it would be necessary for the total financial obligations of the municipality for the term of the PPA and the impact on the tariff to be modelled. Moreover, a municipal council will need to consider as part of its decision to approve the PPA principles such as value for money, reasonably incurred costs, prudence, financial sustainability, and transparent pricing.





MODULE 1

MUNICIPAL IPP PROJECT PREPARATION PHASE

1

MODULE 1

Municipal IPP Project Preparation Phase

STAGE 1

Planning and Municipal Readiness Assessment

STAGE 2

Feasibility Study

STAGE 3

Feasibility Approvals

2

MODULE 2

Municipal IPP Project Procurement Phase

STAGE 1

Procurement Preparation Activitie

STAGE 2

Procurement Design Concepts

STAGE 3

Preparation of Bid Documentation

STAGE 4

Procurement Process

(3)

MODULE 3

Municipal IPP Implementation Phas

STAGE

PPA Management Plan

STAGE 2

Periodic Review of PPA and Amendment of PPA

INTRODUCTION

The proliferation of IPPs after the relaxation of the generation licensing regime and the liberalisation of the electricity sector in South Africa has opened up the opportunity for municipalities to find alternative electricity sources to supply their grids. For municipalities looking to commence with investigations to procure new generation capacity from IPPs, Module 1 serves to provide guidance as to the preparatory activities the municipality should undertake.

The Feasibility Study Stage lies at the heart of the Municipal IPP Project Cycle. It is a complex process that demands municipalities to be clear on its requirements and objectives before undertaking the procurement of an IPP. The rigorous nature of a feasibility study should not discourage municipalities, but rather helps them decide what solution is best suited to meeting the need for diversified sources of electricity supply.

Module 1: Municipal IPP Project Preparation Phase provides guidance to municipalities on three main stages in the preparation of a Municipal IPP, as follows:

- **STAGE 1:** Planning and Municipal Readiness Assessment comprising three sub-stages: Initial Preparatory Activities; Municipal Readiness Assessment, and Feasibility Study Planning;
- STAGE 2: Feasibility Study consisting of various sub-stages culminating in a Feasibility Study Report; and
- **STAGE 3:** Feasibility Study Approvals stage comprising preliminary stakeholder engagement and municipality consent to proceed to the Procurement Phase.

2 STAGE 1: PLANNING AND MUNICIPAL READINESS ASSESSMENT

2.1. INITIAL PREPARATORY ACTIVITIES

A preliminary question is how a municipal IPP project gets identified. This inquiry usually originates from a more general strategic inquiry by the municipality into its energy resilience, whether in terms of improving security of supply or cost of supply or both.

Once a municipality determines the strategic need to improve or better its energy resilience as part of its deliberations, it should undertake the following activities to reflect that determination:

- · Ensure its IDP is aligned with its objectives to investigate options for procuring new generation capacity; and
- Secure adequate budget to procure technical specialist studies to undertake parts of a Municipal Readiness Assessment.

The support and buy-in of the municipal manager as the accounting officer of the municipality is also essential prior to commencing the Municipal Readiness Assessment.

2.1.1. Alignment with municipality's IDP

The IDP is the municipality's strategic plan that should include its long-term vision, outlining the council's development priorities and objectives, as well as its strategy in respect of energy resilience. The strategic objectives should be measurable by setting specific targets in respect of quantification and timelines. The municipal strategic objectives detailed in the IDP may be supplemented by other studies undertaken by the municipality and municipal resolutions which should also be considered.

IDPs are therefore the principal strategic planning instrument which guides and informs all planning and development, and all decisions with regard to planning, management and development, in the municipality and are therefore required under Chapter 5 of the Municipal Systems Act to be adopted by the council of the municipality. As the principal planning document, the Municipal Systems Act requires municipalities to undertake all their functions in a manner that is consistent with their IDP.

The municipality's strategic objectives can span several areas that include (not exhaustive):

- Ensure sufficient electricity supply to meet demand;
- Provide access to affordable electricity;
- Provide reliable energy and minimise the impact of load shedding or load curtailment;
- Increase economic development through procuring electricity from IPPs;
- Combat climate change and set targets to reduce Greenhouse Gas emissions.

Because it outlines the strategic intent of the municipality, an IDP is the business plan of a municipality, identifying shortages or gaps in its service delivery and recommending an implementation plan on how to overcome or eliminate any such shortage or gap and within a clear time period. Where there is a deficiency in a municipality's electricity supply this is likely to negatively impact many of its activities, from the provision of municipal services to its positive obligations to take steps to promote greater socio-economic development in its area of jurisdiction.

The municipality should have a clear strategic intent which specifies the objectives it is trying to meet in respect of energy resilience and procuring power from IPPs, specifying what the municipality will achieve by when and also identifying the directorate responsible for driving the execution of the strategy.

Where there is misalignment between the municipality's IDP insofar as it relates to plans to enhance energy resilience and the intention to procure more electricity through an IPP, a municipality must amend its IDP so as to bring it in line with this intention.

What must be amended under its IDP to ready a municipality for a municipal IPP?

STEP 1: Does the municipality's IDP contain its strategic objectives in respect of energy resilience, and does it set out a plan on how the municipality intends to achieve its strategic objectives including procuring electricity from IPPs?

If the municipality's IDP does not specify the key aspects in respect of its strategic objectives in respect of energy resilience and specifically its intention to investigate procuring electricity from an IPP, then it may be required to prepare an amendment to its IDP.

STEP 2: What should a municipality include in its IDP to identify and plan for a municipal IPP?

- Identify its key strategic objectives in respect of energy resilience;
- 2. The strategic objectives should be measurable by setting out clear outputs and outcomes. Electricity may be identified as a top (10) ten municipal priority; and
- 3. In the section of the IDP setting out the outputs, outcomes and deliverables, over the next (3) three years, it may include that:
 - i. The municipality shall commence with investigations within a defined timeline to assess how procuring electricity from IPPs can contribute to its strategic objectives specifying measurable outcomes;
 - **ii.** The strategy of the municipality is to develop a master plan for new generation capacity including capacity generated by an IPP; and
 - **iii.** Subject to undertaking a feasibility study, to develop a municipal IPP programme or engage in a municipal IPP project.

STEP 3: Process for amending a municipality's IDP

The Municipal Systems Act requires a municipal council to annually review its IDP and where changing circumstances so demand, the municipal council may amend its IDP.7 The process for a municipality amending its IDP is set out in Regulation 3 to the Municipal Planning and Performance Management Regulations.

⁶ Section 35(a) of the Municipal Systems Act.

⁷ Section 34(b) of the Municipal Systems Act

Process for Amending a Municipality's IDP (Reg 3 of the Municipal Planning and Performance Management Regulations)

Only a member or committee of a municipal council may introduce a proposal for amending the municipality's IDP in the council. The rationale for the proposed amendment must be motivated in a memorandum and aligned with the framework of the IDP. The amendment to an IDP plan must be adopted by the council in accordance with its rules and orders.

A municipal council may only adopt an amendment to its IDP if:

- All council members are given reasonable notice.
- The proposed amendment has been published for public comment for a period of 21 days.
- If the municipality is a district municipality, the
 district municipality has consulted with all the local
 municipalities in its area and taken all comments
 submitted to it by the local municipalities in that
 area into account before it takes a final decision on
 the proposed amendment.
- If the municipality is a local municipality, it has consulted the district municipality in whose area it falls on the proposed amendment and has taken all comments submitted to it by the district municipality into account before it takes a final decision on the proposed amendment.

2.1.2. Budgeting for specialist studies

Apart from aligning its IDP to the envisaged municipal IPP procurement, one of the preliminary considerations is for a municipality to identify if it has the internal expertise necessary to undertake the Municipal Readiness Assessment, particularly the demand assessment and grid capacity assessment. Where these skills already reside within a municipality, it is likely to have some if not all of the data available for these assessment studies. However, where a municipality does not have internal technical experts who can conduct these assessments, or if it does have these skills

internally but nevertheless requires additional support from external consultants, then the municipality needs to identify budget to procure such experts so that it may complete the Municipal Readiness Assessment. Practically speaking, this entails either identifying budget in the municipality's existing budgets or if no or insufficient budget is available, ensuring that such budgets are built into the municipality's next budget cycle. Determining the quantum for an adequate budget may be done in consultation with organisations like SALGA who may have available benchmark pricing relating to such activities.

Caution against Irregular Expenditure and Unauthorised Expenditure

Municipalities should ensure that the budget identified for technical experts to perform the technical strategic demand assessment and grid capacity assessment is correctly allocated in accordance with budgeting prescriptions contained within the MFMA.

If a municipality incorrectly applies budget for these technical experts from a vote unrelated to the procurement, or allocated budget that has been appropriated for a different purpose, this will be regarded as "unauthorised expenditure" under the MFMA.

Similarly, the MFMA regards expenditure incurred by a municipality or municipal entity in contravention of a requirement of its SCM Policy as "irregular expenditure".

Apart from receiving a qualified audit report from the Auditor General, Chapter 15 of the MFMA sets out the consequences of financial misconduct, which includes instances where an accounting officer (the municipal manager), the chief financial officer a senior manager or other official with authority makes or permits an unauthorised, irregular or fruitless and wasteful expenditure. These are criminal offices and carry serious penalties under the MFMA, including under circumstances where a municipal official acted negligently.

2.1.3. Role of the Municipal Manager as Accounting Officer

Any intention to investigate the possibility of procuring electricity from an IPP requires the buy-in of the municipality's most senior administrative official - the municipal manager. As the municipal functionary responsible for procuring and subsequently contracting with an IPP, her or his agreement and support is necessary.

The municipal manager's role throughout the Municipal IPP Project Cycle includes the following key tasks:

- Providing strategic direction and vision throughout the Municipal IPP Project Cycle
- Building and securing support for the municipal IPP programme or project
- **3.** Undertaking and overseeing the stakeholder engagement process
- 4. Issuing delegations to the internal municipal team (including the project manager) tasked with the IPP project
- **5.** Allocating adequate financial and human resources to the IPP project

2.2. MUNICIPAL READINESS ASSESSMENT

Where a municipality has satisfied itself that the above initial preparatory activities have been satisfied the municipality's SCM Unit or technical planning department (whichever is authorised as delegated by the municipal manager) must prepare or procure the preparation of a Municipal Readiness Assessment. There may be a need to appoint specialists, particularly a technical expert to adequately address the issues forming part of the readiness assessment.

The key areas that need to be considered as part of the Municipal Readiness Assessment are:

- 1. An assessment of the municipal electricity demand;
- 2. Assessment of the municipal distribution grid;
- **3.** An energy resource availability assessment and preliminary identification of viable energy sources;
- 4. A preliminary assessment of the financial impact of procuring electricity from one or more IPPs as indicated by the technical assessment of potential energy resources;

- 5. An assessment of the municipal financial standing;
- **6.** A review of the municipality's available staffing resources and potential future capacity to procure and manage the PPA with an IPP; and
- **7.** An assessment of the socio-economic context of the municipality in relation to the proposed municipal IPP.

The purpose of the Municipal Readiness Assessment is to:

- Gather detailed information on the readiness criteria;
- Provide an indicative framing of the proposed scope of the Feasibility Study; and
- Either identify any gaps or weaknesses that may hamper the municipality's ability to successfully implement the proposed municipal IPP project or confirm the municipality's in principle readiness to procure an IPP and therefore support the decision to conduct a detailed feasibility study.

Procurement of experts for Municipal Readiness Assessment

For procuring specialists such as a technical expert, the municipality should apply its SCM Policy as it relates to procuring of consultants.

In doing so, municipalities should note the following:

- Consultants should only be engaged when the necessary skills and / or resources to perform a project / duty / study are not available and the accounting officer cannot be reasonably expected either to train or to recruit people in the time available;
- The work undertaken by a consultant should be regulated by a contract;
- In procuring consulting services, the municipal manager (or his / her delegate) should satisfy himself / herself that the procedures to be used will result in the selection of consultants who have the necessary professional qualifications; the selected consultant will carry out the assignment in accordance with the agreed schedule, and the scope of the services is consistent with the needs of the Municipal Readiness Assessment; and
- The municipality will monitor and evaluate contractor performance and outputs against project specifications and targets and take remedial action if performance is below standard.

2.2.1. Electricity Demand Status Quo Assessment

A municipality might have various reasons to procure additional electricity, which needs to be informed by the strategy outlined in the IDP. One of the first steps as part of the Municipal Readiness Assessment is to conduct an electricity demand status-quo assessment of the municipality's electricity demand and supply.

In conducting a status-quo assessment the following data sets need to be collected and analysed:

- Aggregated electricity consumption data within the municipality over the past 5 years;
- Disaggregated electricity consumption data based on sectors (e.g.: industrial, commercial, residential, etc.);
- Aggregated electricity consumption data for sectors listed above; and
- Analyse collection of sources of supply such as Eskom supply, SSEG, distributed generation (DG) (or any other) that are present within the municipal network.

2.2.2. Grid assessment

Further to the electricity demand status quo assessment, grid data must be collected and analysed.

The following steps need to be considered as part of grid assessment:

- Conduct a detailed assessment of the municipal distribution network that collates grid schematics, history of maintenance data, electrical infrastructure upgrades, historical power quality, and estimated life of electrical assets.
- 2. Assess load profiles and historic notified maximum demand (NMD) across nodes where municipal network connects to Eskom grid.

If individual node demand or aggregated demand exceeds 5MVA-10MVA, then there may be potential to pursue an IPP model. Even if node demands do not exceed NMD, depending on the municipality's strategy as articulated in its IDP (relating to cost reduction, GHG reduction, or reducing reliance on Eskom) new generation capacity may need to be procured.

2.2.3. Preliminary Energy Resource Availability Assessment

In order for a municipality to determine the various energy technology options in the Feasibility Study, a high-level energy resource assessment needs to be conducted.

This assessment would need to include the following activities:

- Determine the type of sectors that need to be focussed on based on the municipality's IDP strategy, i.e. industrial or commercial or residential or a combination of these;
- 2. Determine the load type that needs to be supplied based on the municipality's IDP strategy, i.e. baseload or peak load, or a combination of these;
- **3.** Determine the energy type that needs to be procured based on the municipality's strategy as set out in the IDP, i.e. reduction of GHG, reduction of cost or any other possible combinations of strategic factors;
- 4. Depending on the geographical location of the municipality, the availability of renewable (or other) resources may be varied. For example, high level solar and wind resource maps can be used to determine solar and wind availability, whereas biomass or biogas resources are dependent on the type of municipality;
- **5.** If local municipal energy resources are not conducive, conventional wheeling can be considered as an option; and
- **6.** The outcome of the energy resource availability assessment will narrow and inform the nature of technologies that need to be assessed in detail at the Feasibility Study stage.

2.2.4. Preliminary assessment of financial impact of procuring electricity from one or more IPPs

Once the preliminary technical assessments have been undertaken and potential technical solution options identified against the municipality's strategic objectives in its IDP, a high-level financial assessment can be undertaken to provide the municipality with an indicative view of the financial impacts of the potential technical solution options.

The high-level financial assessment should determine the estimated cost of supply of the specific technical solution option based on benchmarks available in the market (e.g. the DoEE publishes the prices of preferred bidders under the IPPPP) to assess the potential impact this may have on the municipality's blended cost of supply to users. This will assist in guiding the municipality to frame the scope of the technical solution options in the Feasibility Study.

2.2.5. Municipal financial standing assessment

The municipality's financial standing is one of the most important determining factors for the successful implementation of procuring electricity from IPPs. The creditworthiness of the municipality will be a key factor that will be assessed by the private sector before participating in a municipal IPP procurement process.

During the Municipal Readiness Assessment, the following high-level financial indicators must be assessed to establish if there are any red flags that may render the municipal financial standing inadequate to underpin a long term PPA where a single project or a municipal IPP procurement programme:

- 1. Does the municipality have a clean audit opinion issued by the Auditor General – if the answer is no, the reason for the qualified audit opinion needs to be considered and assessed whether it would hamper the municipality in procuring power from IPPs;
- 2. What is the municipality's history of collecting their outstanding debt on municipal accounts and does the municipality have a good payment record in respect of their Eskom accounts?
- **3.** An assessment of the municipality's performance in consideration of the key ratios outlined in National Treasury MFMA Circular No. 71 (Financial Ratios and Norms) needs to be undertaken with a focus on the ratios contained in Table 3.

Table 3: Key Ratios to Assessment Financial Performance

Key Ratios	Description
Collection Rate	This ratio indicates the municipal collection of its debtors. The norm stipulated is 95% and where the actual result falls below this norm the municipality should implement corrective measures as it may impact the successful implementation of procuring power from IPPs as it could impact the bankability of the PPA.
Net Debtor Days	This ratio reflects the municipality's average period for issuing invoices and collecting municipal debts. A higher number of net debtor days may indicate liquidity risks. Where the actual results are higher than the norm it may negatively impact the successful implementation of procuring power from IPPs.
Capital Cost (Interest Paid and Redemption) as a % of Total Operating Expenditure	This ratio indicates the cost required to service borrowing and the norm is between 6% to 8%.
Debt (Total Borrowings) / Total Operating Revenue	This ratio provides assurance that sufficient revenue will be generated to repay liabilities or the affordability of the total borrowings. Depending on the accounting treatment of entering into a long-term PPA this may impact the municipality's ability to incur further debt.
Distribution Losses – Electricity Distribution Losses	A ratio exceeding the norm could indicate various challenges, for example, deteriorating electricity infrastructure or poor management of the networks affecting the municipality which would require further analysis to determine the reasons for such losses. In addition, the root causes should be addressed to ensure the municipality will be able to procure power from IPPs.

4. Does the municipality have sufficient financial resources and budget allocated for paying transaction advisers appointed for the Feasibility Study and the Procurement Phase? If not, it needs to be considered how the municipality will fund the relevant phase for which funding has not yet been allocated?

2.2.6. Staff resource capacity review

Experience on complex infrastructure projects and in particular PPPs has demonstrated that without a duly mandated project lead who is appropriately skilled and experienced to manage a project through its various phases, projects flounder, falling into distress, and risk reaching contract award. Procuring an IPP is complex and requires a dedicated and experienced project champion to guide the municipality through each of the Phases of the Municipal IPP Project Cycle. While a project manager does not act alone and is often aided by a team of specialist transaction advisors appointed by the municipality, it is critical to have a single person responsible for leading the municipal IPP project on behalf of the municipality.

A municipality should at this preliminary stage assess whether it has the necessary capacity in the form of a suitable project manager to lead the municipality through the process, applying a two-step inquiry:

- **STEP 1:** Define the role of a project manager and the skills and experience required to lead the municipality through the Municipal IPP Project Cycle; and
- **STEP 2:** With reference to the above, determine whether the requirement is fulfilled through an internal or an external candidate.

The table below provides guidance on the considerations a municipality should apply to each of the above two steps.

Table 4: Steps in appointing a suitable project manager

Inquiry	Considerations			
STEP 1: Defining the role and requirements of the project manager				
What is the role of the project manager?	The project manager is responsible for coordinating activities across a number of disciplines and driving the municipal IPP project through each of the Phases and sub-stages of the Municipal IPP Project Cycle.			
What skills, competencies and experience should a project manager possess?	A project manager should have a combination of hard and soft skills, hard skills relating to knowledge-based competencies, and soft skills in relation to stakeholder engagements. Some of the knowledge-based competencies of a			
	suitable project manager are the following:			
	Technical know-how and experience of the electricity sector, renewable energy solutions, and understanding of the management of municipal distribution systems;			
	Accounting competence and possibly municipal budgeting and managing allocations to capital projects;			
	Project finance, bankability, and lending into government projects on a limited recourse basis;			
	Structure and governance processes applicable to municipalities; and			
	Conversant in the statutory and legal requirements related to supply chain management,			
	and specifically infrastructure procurement including PPPs.			
	The soft skills or competencies of a prospective project manager include:			
	Strong managerial skills and a track record of leading and managing successful teams of internal personnel and external consultants;			
	Strong communication skills and in particular experience managing internal senior management and municipal councillors as well as external stakeholders and communities on municipal projects; and			
	Ability to manage challenges and successfully achieve outcomes in a public sector environment.			

Inquiry	Considerations	
STEP 2: Considering the job requirements and the associated skills and experience, a municipality must consider whether the requirement is fulfilled through an internal or an external candidate		
In selecting an internal candidate that fulfils the job description, a municipality should not appoint an official who would be required to manage both their existing functions as well as perform the functions of a project manager. The task of managing an IPP project requires a dedicated project manager.		
External Candidate	Where there is no suitable internal candidate, a municipality will need to scope the role and allocate necessary budget. The available financial resources to secure such a candidate needs to be considered and benchmarked outside of the remuneration scales of municipal officials.	

The outcome of the above inquiry is for the municipality to:

- 1. Draft a job specification describing the role, competencies, and experience of the IPP project manager.
- 2. Prepare a resources on-boarding plan for the Municipal IPP project manager, describing:
 - **i.** Where appropriate, an internal advertising process to be undertaken to provide qualified municipal officials with an opportunity to apply for the project manager position;
 - ii. The process of advertising externally for a suitable candidate, and
 - iii. Commencing a budget allocation process to cater for the anticipated remuneration of the project manager.

2.2.7. Socio-economic context assessment

An assessment of the socio-economic context of the municipality is an important input into the Municipal Readiness Assessment. Given the overall socio-economic context of the country and the accompanying challenges that are faced, this assessment will provide important context relating to the specific socio-economic challenges within a municipality. Specific socio-economic goals will be contained in a municipality's IDP. As such, the assessment at this stage is to gauge in broad terms whether an IPP project could help to meet the municipality's IDP challenges and objectives.

Table 5 provides key indicators that could be assessed in order to determine whether the socio-economic context of the municipality, and in particular, the challenges that are prevalent. This will enable the municipality to link back to their objectives and socio-economic imperatives contained within their IDP.

Table 5: Key Indicators to the Assess Socio-economic Context and alignment with the municipality's SED goals

Theme	Key Indicators		
Population Aim: To understand the size and density of the population within the municipality. In particular, population trends over a period of time will also enable forward planning.	Size of the population (both currently, as well as the historical trends) Population density (i.e. the number of people per square kilometre) The rate of in-migration into the municipality from other parts of South Africa and from other countries		
Population Demographics Aim: To understand the composition of the municipal population. This will provide insight into the characteristics of the population and could provide important linkages to the design of the Economic Development requirements.	 Population by race Population by gender Population by age (some specific metrics that would be helpful include the percentage of the population that are classified as youth and working aged population) Dependency ratio (i.e. the percentage of people in the population who are dependent on grants) 		
Household Characteristics Aim: To understand the characteristics of households. An important indicator here is the average income of households as well as the share of their income that is spent on electricity as this gives an indication of the average level of affordability.	 Number of households Average number of people per household Number of child-headed households Average annual / monthly income per household Composition of household expenditure (this will include the average share of income that is spent on electricity) 		

Theme	Key Indicators		
Access to Basic Services Aim: To understand the challenges / gaps with respect to accessing basic services, in particular, access to electricity. This will feed into the assessment of the level of energy security that the population has. In addition, it will help in identifying the vulnerable groups who are challenged with energy insecurity.	 Percentage of households with access to electricity Percentage of households who reside in formal / informal dwellings Percentage of households with access to piped water Percentage of households with access to waste removal 		
Labour Force Characteristics Aim: To identify the population groups where unemployment is prevalent, and to understand the level of income earned by those who are employed.	 Percentage of the population that is employed Percentage of the population that is unemployed Demographic composition of unemployed people (i.e. by race, gender and age) Average annual / monthly income 		
Educational and Skills Levels Aim: To understand the relative levels of education and skills levels within the population. Again, this will be an important input into the design of the Economic Development requirements for the IPP, specifically as one seeks to create employment and skills development initiatives within local communities.	Percentage of the population that has: No schooling Primary schooling Secondary schooling Matric Tertiary schooling Percentage of the population that fall into the following skills levels: Unskilled Semi-skilled Skilled		
Composition of the Municipal Economy Aim: To understand the driving forces within the municipal economy, including which sectors in the economy employ the most people.	 Gross Value Added (GVA) trends over time (i.e. is the economy growing) GVA by sector over time (i.e. which sectors are the drivers of the economy, and which are in decline) Employment by sector (i.e. which sectors are the most labour intensive and employ the largest number of people) 		

Helpful Resources to Access Economic Data

There is a plethora of potential sources of economic data. However, it is important to exercise caution when accessing economic data to ensure credibility and consistency, which will also enhance the ability to use these statistics as the foundation for proper planning.

Statistics South Africa (StatsSA) is the official provider of statistics and provides a vast range of economic data that spans across all of the themes mentioned in the table above. StatsSA offers an interactive data platform which can be accessed using the following <u>link</u>.

StatsSA data can also be accessed online through a platform called <u>Wazimap</u>. This website is a free resource that provides a range of StatsSA data in an easy-to-access format which is arranged primarily through a geographic lens i.e. at national, provincial and municipal level.

There are also a range of private service providers who provide economic data through a subscription fee service. Some of these include <u>S&P Global Market Intelligence</u> and <u>Quantec</u>.

2.3. MUNICIPAL READINESS REPORT AND DECISION TO PROCEED TO A FEASIBILITY STUDY

The outcome of the Municipal Readiness Assessment is to provide a municipality with a preliminary overview on its ability to procure electricity from an IPP and a basis on which to engage in a detailed Feasibility Study.

The Municipal Readiness Assessment is not designed to apply a complex decision-making matrix to arrive at a decision on the municipality's readiness. The assessment is a simple test of comply / partially comply / doesn't comply with the measured assessment criterion – there are no category scoring or weightings applied. Rather the assessment is designed to highlight areas that need to be improved prior to going out on procurement if the municipality is to successfully onboard an IPP. Resolving the factors which underlie a municipality's failure to pass one of the criteria at this early stage will position a municipality more favourably in the proceeding stages of the Municipal IPP Project Cycle and mitigate the risk of potentially a failed procurement.

The dashboard below provides a basic methodology for determining a municipality's readiness for engaging an IPP.

Table 6: Framework for Municipal Readiness report

Category of Assessment	Measured Assessment Criterion	Meets / Partially Meets / Doesn't Meet
Technical Demand Assessment	The electricity demand status-quo assessment of the municipality demonstrates sufficient electricity demand to justify the appointment of a utility scale IPP.	
Technical Grid Assessment	 The municipality's grid schematics, history of maintenance data, electrical infrastructure upgrades, historical power quality, and estimated life of electrical assets would support the connection of an IPP. The municipality's load profiles and historic NMD across nodes where the municipal network connects to Eskom grid would support an IPP connection. An individual node demand or aggregated demand exceeds 5MVA-10MVA. 	
Preliminary Energy Resource Availability Assessment	Based on a high-level energy resource assessment, there are energy technology options for an IPP to export new generation capacity into the grid.	
Cost of Supply of technology options	Based on financial benchmarks, the municipality is able to assess the estimated cost of supply of the specific technical options and the potential impact this may have on the municipality's blended cost of supply to users.	
Municipality's Creditworthiness	 Does the municipality have a clean audit opinion issued by the Auditor General. Does the municipality have a good history of collecting their outstanding debt on municipal accounts and a good payment record in respect of their Eskom accounts. Does the municipality meet the key ratios outlined in National Treasury MFMA Circular No. 71 (Financial Ratios and Norms). 	
Financial Resources	The municipality has sufficient financial resources and budget allocated for paying transaction advisers appointed for the Feasibility Study and the Procurement Phase.	

Category of Assessment	Measured Assessment Criterion	Meets / Partially Meets / Doesn't Meet
Staffing Resources	 The municipality can identify a suitable project manager to lead the municipality through the Municipal IPP Project process. The municipality has the necessary internal resources (suitable secondees) to support the full Municipal IPP Project process. 	
Economic development goals and alignment with IDP outcomes	The IPP project broadly meets the municipality's economic development goals as articulated in its IDP.	

The Municipal Readiness Report, once completed, should be tabled with the municipal council accompanied by a memorandum signed by the municipal manager supporting the outcome in the Municipal Readiness Assessment Report. While there is no express statutory requirement for the municipal council to approve a Municipal Readiness Report, given a municipal council's significant powers under local government legislation to approve and oversee matters of the municipality, particularly those contained in the municipality's main policy documents, the IDP, it is preferable that a municipality do so before advancing to the Feasibility Study stage.

2.4. FEASIBILITY STUDY PLANNING

To manage delays in completing the Feasibility Study for an IPP project as well as ensure an accurate outcome that provides the required benchmark against which the municipality will select and appoint an IPP, a municipality needs to undertake a number of preliminary activities as outlined below.

2.4.1. Appointment of IPP Project Manager

The appointment of an IPP project manager is required to steer the Municipal IPP Project Cycle process. As noted in 2.2.6, the project manager may be appointed through an internal mechanism, which may take the form of a secondment or a permanent re-designation of a municipal official. Where the project manager is an external appointment the terms of such appointment will need to be made clear in any job description.

The project manager of an IPP project will be responsible for:

- Planning, co-ordinating and actively managing the different phases of the Municipal IPP Project Cycle;
- Regularly reporting to the senior management in the municipality including the municipal manager, the chief financial officer, and other senior management officials;
- Working closely with the supply chain management unit within the municipality;
- Where required, presenting reports and other outcomes of the progress of the project

through the various -stages of the Municipal IPP Project Cycle, to the municipal council;

- Where required, liaising with key government stakeholders; and
- Directing the work of the transaction advisors and managing their contract;

At a minimum the project manager should be appointed for the full duration of the Municipal IPP Project Cycle and into the first few years of the Contract Management Phase after contract award, so as to ensure continuity. The municipal manager must also provide the project manager with the necessary delegations of authority to enable the project manager to make day-to-day decisions relating to the project in a seamless and time-efficient way.

2.4.2. Application for Project Preparation Funding

Not all municipalities will be able to find the budget required to fund a team of specialist transaction advisors across a number of disciplines. Because transaction advisors are mostly professionally trained, they require being remunerated commensurate to their expertise and which may stretch an already constrained municipal budget.

To alleviate the cost of specialist consultants, there are a number of project preparation facilities available to qualifying applicants including municipalities.

Below are examples of project preparation facilities available to project sponsors including municipalities which are usually awarded on the basis of an application which is evaluated against specific eligibility criteria.

Table 7: Project Preparation Facilities

Facility	Description
National Treasury Project Development Facility (PDF)	 The Project Development Facility (PDF) is a single-function trading entity, created within National Treasury. The PDF provides grant funding to municipalities for the purpose of paying moneys for services rendered by transaction advisors for the development of municipal service partnerships to which the MFMA and Municipal Systems Act (MSA) apply. The PDF replaced the support that was previously provided to municipalities by the Municipal Infrastructure Investment Unit. The scope of assistance that the PDF can provide to municipalities covers a range of projects. It will consider applications for funding for the preparation of feasibility studies and procurement of service providers under the Municipal Systems Act or private parties under the Municipal PPP Regulations. It will therefore also likely cover the costs of feasibility studies and procurements for Municipal IPPs. It should also be noted that in certain cases where a municipality does not have the internal capacity to manage a PPP process and appoint a project manager with suitable qualifications, the PDF will consider funding the costs of procuring a project manager who is responsible for managing the PPP process. By extension, this is also likely to apply to Municipal IPP processes. The criteria for funding, and the application process for PDF funding is set out more fully in MFMA Circular No. 37 of 16 August 2006.
DFI Project Preparation funding facilities	 A number of development financing institutions (DFIs) offer project preparation funding as part of their development mandates. Municipalities are encouraged to engage with DFIs like the Development Bank of Southern Africa (DBSA), Industrial Development Corporation (IDC), and World Bank to assess the availability of project preparation funding facilities and to gain a thorough understanding of the funding landscape, eligibility criteria, and application processes.

2.4.3. Appointment of Transaction Advisors

Part of the planning for a Feasibility Study is for the municipality to appoint a multi-disciplinary team of experts to assist it through the various phases of the Municipal IPP Project Cycle. The appointment process will follow the procedure contained in the Municipality's SCM Policy as noted in 2.1 above.

Module 3 (Project Inception) Stage 2

Procuring an Advisor of the *Municipal Service Delivery and PPP Guidelines* also provides helpful guidance to municipalities on how to go about procuring an advisor and importantly, preparing the tender document, including the competency requirements that the team should meet.

Some of the key tasks to be included in the scope of work of the transaction advisors should include:

- 1. Undertaking a feasibility study addressing the topics and criteria set out below and supporting the municipality through its internal decision-making process, including support with internal and external stakeholders;
- 2. Supporting the municipality through the Municipal IPP Procurement Phase by, among other things:
 - i. Developing procurement documentation including the RFP and the PPA;
 - ii. Developing evaluation frameworks and templates including designing evaluation criteria and drafting evaluation reports for final decision making;
 - iii. Drafting evaluation criteria for Economic Development;
 - iv. Leading negotiations with key parties and ensuring that the project is affordable and bankable;
 - v. Engaging with various key government stakeholders where needed by the municipality; and
 - vi. Ensuring that commercial and financial close is reached with lenders and the preferred bidder.
- 3. Reviewing and updating the relevant municipal energy policy to align with its IDP.

Apart from defining a clear scope of work against which a transaction advisory team should price its proposal, a municipality should explicitly set out the competency and expertise requirements of the team. For an IPP project, a municipality should

look to appoint a diverse team of transaction advisors with expertise in the fields of technical, finance, economic development, legal, and environmental sectors. The team should also ideally demonstrate experience of working in the procurement of new generation capacity such as advising on IPPPPs run by the IPP Office, or by C&I customers.

Below are some considerations relating to expertise and experience that a municipality should include as evaluation criteria when drafting its transaction advisor tender document.

Table 8: Experience and Expertise for Transaction Advisory Team

Workstream	Experience and Expertise
Technical Transaction	Thorough knowledge and previous experience of working across a range of new generation capacity technologies and power generation plants;
Advisory Team	Knowledge and understanding of the international and South African power generation sector;
	• Experience having undertaken feasibility studies on large and multi-stakeholder power generation projects;
	Thorough knowledge of the South African electrical grid code;
	Knowledge, expertise and practical experience in designing technical qualification and evaluation criteria for government and / or private sector infrastructure investment programmes; and
	Knowledge of monitoring and evaluation of the implementation of technical requirements in various sectors.
Financial	Proven experience in the following areas:
Transaction	Providing financial transaction advisory services in the power generation sectors;
Advisory Team	Undertaking feasibility studies for large infrastructure projects;
	Developing the commercial aspects of large infrastructure project
	procurement documents and legal agreements;
	Proven experience in designing qualification and evaluation criteria and financial
	evaluation of the bids submitted in the electricity and or energy sector;
	Undertaking value for money assessments; and
	Proven experience in preparing for and implementing Financial Close activities for project finance projects.
Legal Transaction	Thorough knowledge of South African electricity regulation and procurement legislation;
Advisory Team	Knowledge, expertise and practical experience in developing procurement documents and power purchase agreements for government and / or private sector programmes in the electricity and or energy sector;
	Proven experience in designing qualification and evaluation criteria for government and / or private sector infrastructure investment programmes in the electricity and or energy sector; and
	Thorough knowledge and practical work experience in the South African
	electricity generation or supply and broader energy sector.
Economic	Thorough knowledge and practical work experience in the South African
Transaction	electricity generation or supply and broader energy sector;
Advisory Team	A deep understanding of the South African socio-economic context;
	Thorough knowledge of Economic Development requirements and their application for renewable energy projects;
	Knowledge, expertise and practical experience in designing economic development qualification and
	evaluation criteria for government and / or private sector infrastructure investment programmes;
	Knowledge, expertise and practical experience in designing and / or implementing
	local content or local industry development criteria for government and /
	or private sector infrastructure investment programmes; and
	Knowledge of, and practical experience in, assessing the economic viability of
	energy, infrastructure, social and / or human development projects.

2.4.4. Preparation of Data Room

It is recommended that the Municipality prepare a comprehensive data room of relevant information that may be required during the Feasibility Study stage. The data room should contain all the relevant project information and will ensure an efficient and effective kick-off of the Feasibility Study and status quo assessment and enable potential gaps and red flags to be identified early in the Feasibility Study process.

Typical information that may be appropriate to include in the data room during the Feasibility Study is set out below:

- · Municipal Readiness Assessment Report;
- Any relevant technical studies undertaken independently by the municipality or as part of the Municipal Readiness Assessment;
- Relevant parts / excerpts of the Municipality's IDP;
- Extracts from any council resolutions relevant to the municipality's intent to commence with investigation to procure power from IPPs;
- Historical hourly load or supply data for each supplier at each supply point;
- A spatial map of the municipality's electricity distribution network;

- Invoices indicating the current cost of supply for each supplier at each supply point over a minimum of the last twelve months;
- Tariff structure applicable to the municipality;
- · Latest municipal annual financial statements;
- · Municipality organogram;
- The municipality's updated SCM Policy;
- Dates of all internal municipal mayoral committee and council meetings with information as to when submissions to these meetings must be made covering the period of the Preparation and Procurement Phases;
- Electricity Supply Agreements in place with all suppliers.

Note: This list is not exhaustive, and further information may be required.

3 STAGE 2: FEASIBILITY STUDY

3.1. INTRODUCTION

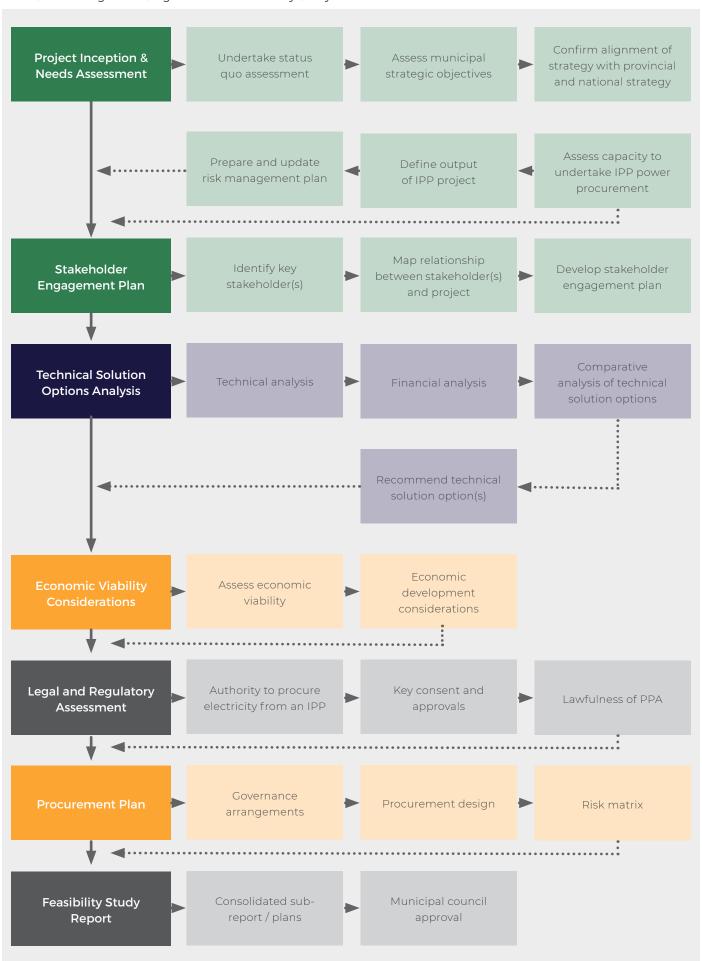
The primary purpose of the feasibility study is to determine the best technical solution options for delivering new generation capacity into the municipality's distribution system. Depending on whether the municipality intends to procure a single or multiple IPPs across several technologies or a single prescribed technology, the Feasibility Study will have investigated the technical solution options analysis, the financial impact of each technical solution option, as well as the economic impacts and legal viability of such solution options. Importantly, the Feasibility Study culminates in one or more recommended technical solution options for procuring electricity from an IPP in a manner consistent with the municipality's IDP. The secondary purpose of the Feasibility Study is to start drawing together the various planning tools needed for a successful Procurement Phase of the preferred technical solution options. This takes the form of a Procurement Plan and a Stakeholder Engagement Plan including a communications protocol and risk management plan.

The Feasibility Study Report should comprise at a minimum, the following sections:

- Project Inception and Needs Assessment: The purpose of this introductory section is to set the baseline for the municipality's electricity needs and confirm its strategic objectives;
- Stakeholder Engagement Plan: The stakeholder engagement plan is to be developed as part of the Feasibility Study and needs to identify key stakeholders in the Municipal IPP Project Cycle and formulate an engagement strategy at different Phases of the Municipal IPP Project Cycle. The Municipal IPP Procurement Phase culminates in a section 33 MFMA process being undertaken which is a prerequisite for contract award. As a result, active management and involvement of a broad community of internal and external stakeholders needs to be meticulously planned and comprehensively set out in the Stakeholder Engagement Plan;
- Technical Solution Options Analysis: This section includes a detailed analysis of the technical solution options and the associated financial impacts or cost of supply of each technical solution option;

- Economic Viability Considerations Analysis: This section identifies the economic impacts of the proposed IPP and formulates the socio-economic elements or categories that an IPP should comply with in implementing the project;
- Legal and Regulatory Assessment: This section sets
 out the key legal and regulatory requirements that
 a municipality must consider to ensure that the IPP
 procurement process is lawful, and the PPA resulting
 from contract award is valid and enforceable; and
- Procurement Plan: An essential part of the Feasibility
 Study is developing the procurement plan which provides
 a roadmap of how to undertake the Procurement Phase.
 The Procurement Plan should address, among other
 things, institutional governance arrangements as well as
 the design of the procurement phase and include a risk
 register with associated mitigations.

Table 9: Flow Diagram of Stages in an IPP Feasibility Study



3.2 PROJECT INCEPTION AND NEEDS ASSESSMENT

The introductory section of the Feasibility Study requires a clear statement of the strategic intent of the municipality and how the proposed IPP project gives effect to the municipality's strategy in its IDP, particularly in respect of energy resilience. A secondary objective of this section is to inform the high-level output specifications which provides the guiding principles upon which the technical solution options are identified and developed.

The Project Inception and Needs Assessment should include the following steps:

- STEP 1: Undertake a status quo assessment
- **STEP 2:** Confirmation that the proposed IPP project aligns with the municipal strategic objectives in the IDP
- STEP 3: Confirm alignment of municipal objectives with provincial strategies and national government policies
- **STEP 4:** Assess the socio-economic characteristics and challenges within the municipality
- STEP 5: Assess municipal capacity and commitment to undertake the proposed IPP project
- **STEP 6:** Define and specify the outputs of the proposed municipal IPP project
- STEP 7: Prepare a Risk Management Plan for the Preparation and Procurement Phases of the IPP project

STEP 1: Undertake a status quo assessment

This stage should begin with undertaking a status quo assessment which will lay the groundwork for a successful Feasibility Study by providing essential context and allow the municipality to identify potential gaps, issues, and opportunities and will confirm that the project planning is based on accurate, up to date and comprehensive information.

The status quo assessment requires that the municipality review the Municipal Readiness Assessment Report and any other available information that may be relevant to the project and:

 Confirm that the assumptions and findings in the Municipal Readiness Assessment Report are still accurate and based on current information;

- 2. Identify whether there are any gaps or risks that may influence the scope of work to be undertaken during the Feasibility Study; and
- 3. Where it is found that some assumptions need to be updated that may influence the intended scope of work to be undertaken as part of the Feasibility Study or where gaps have been identified, these need to be documented, and the scope and approach of the Feasibility Study should be updated to take account of the proposed amendments.

STEP 2: Confirmation that proposed IPP project aligns with the municipality's strategic objectives in its IDP

A municipality will have developed strategic objectives and intent in respect of meeting such objectives through an IPP model at the outset of the Municipal IPP Project Cycle through a possible amendment to its IDP. This is important as it sets clear objectives for the feasibility phase.

The strategic objectives of the municipality in respect of the proposed municipal IPP project should be clearly documented as this forms an important base against which the technical solution options will be developed and measured. The assessment prior to commencing the Feasibility Study should be to confirm whether the proposed municipal IPP project is still aligned with the municipality's strategic objectives.

STEP 3: Confirm alignment of municipal objectives with provincial strategies and national government policies

Provincial and national government are key stakeholders and the proposed municipal IPP project's success will be enhanced by gaining their support.

The following matters must be considered and documented:

- How does the municipality's strategic objectives align to provincial government's strategies on energy resilience?
- How does the intended project contribute to the implementation national government policy?

STEP 4: Assess the socio-economic characteristics and challenges within the municipality

During this stage, the assessment of the socio-economic characteristics and challenges within the municipality developed during the Municipal Readiness Assessment should be further evaluated. This assessment will provide context regarding the existing socio-economic challenges. Information regarding the types of socio-economic indicators that can be used to undertake this assessment is contained in Section 2.2.7.

In addition to understanding the socio-economic characteristics of the municipality, it is also important to assess the challenges posed through existing access to

electricity, including the relative cost of electricity. One aspect that contributes to the socio-economic impact of procuring renewable energy from IPPs relates to the need to provide energy security to both households and businesses. From this perspective, it is important to assess the needs and challenges that households and businesses are currently experiencing.

STEP 5: Assess municipal capacity and commitment to undertake the procurement of power from IPPs

For the proposed municipal IPP project to be successful it is critical that the municipality shows the necessary intent and commits appropriate resources for each Phase of the Municipal IPP Project Cycle. The municipality should, if it has not already done so as part of the Feasibility Study Planning stage, assign responsibility to the appropriate directorate or department within the municipality to take ownership and drive the proposed IPP project together with a project manager.

This assessment should consider the following aspects to the extent not already undertaken as part of the Feasibility Study Planning at 2.4 above:

- Identify the required skills and resources that would be required during each Phase of the Municipal IPP Project Cycle including the Contract Management Phase covering the construction period and operating period under the PPA.
- 2. Provide information on the municipality's project team that has been assigned responsibility for the execution of the project detailing the team member names, their roles in the project, and short biography detailing their relevant skills and experience. This may include a

- dedicated team within the SCM Unit established for the purpose of overseeing an IPP procurement programme.
- **3.** Provide information of the transaction advisors and any other external support structures the municipality may have available to assist in the execution of the project e.g. access to a panel of specialist advisors, access to academic institutions.
- **4.** Identify potential gaps in the municipality's skills and capacity that may be required for the proposed IPP project for each of the Phases of the Municipal IPP Project Cycle and describe how the gap in skills or capacity will be filled or mitigated.
- 5. In addition to human resources identify other resources for example information exchange systems, such as SCADA systems, that will be required to manage the operation of an IPP plant, after achieving grid compliance with the municipal distribution network. Such systems will have to be in line with the standards and systems used by the national system operator in order to exchange real time information.
- **6.** Quantify the potential budgetary impacts as a result of the required resources to implement the project (for clarity this is in reference to the additional budgetary impacts and not referring to the cost of purchasing electricity from the IPP this financial assessment will be undertaken in the Technical Solution Options Financial Analysis).
- 7. Confirm that the municipality has allocated sufficient funds in their budget or has received sufficient funds in the form of grants or subsidies from central or provincial government or other sources like development financing institutions.

STEP 6: Define and specify the outputs of the proposed IPP project

Once the municipality's strategic objectives have been identified, the project can be defined and the outputs of the proposed IPP project need to be specified to guide the identification of possible technical solution options that would contribute to meeting these objectives.

This is one of the most important steps of the Project Inception and Needs Assessment as the information gathered and decisions made to inform the output specifications in the Feasibility Study will impact every subsequent step of the project. However, scoping and project definition is an iterative process.

In a typical IPP project, the IPP will be responsible for the design, finance, build, operation and maintenance of the generation plant and the procurement will substantially be driven by the output specifications which allow for an optimal risk transfer to the IPP.

Defining the activity through specifying the outputs requires the municipality to assess what it needs to achieve and therefore the outputs specifications should where possible specify:

- 1. The key strategic objectives the municipality is trying to achieve with the proposed IPP project such as load shedding reduction vs cost of supply reduction vs diversification of supply vs reduction in GHG emissions etc.;
- 2. The technologies that should be considered;
- **3.** The maximum contracted capacity or percentage of electricity supply the municipality would like to procure from an IPP;
- **4.** Whether the proposed municipal IPP project should connect to the municipal distribution system;
- **5.** Whether municipal land will be made available for the proposed IPP project;
- **6.** Any points of supply or any service interface expectations; and
- 7. High-level B-BBEE and socio-economic objectives.

Where some of the specifications are not yet known these should be considered as part of the technical solution options analysis.

STEP 7: Prepare a Risk Management Plan for the Preparation and Procurement Phases of the IPP project

Undertake a preliminary identification of key project risks which are to be incorporated into a risk management plan or project risk register. The risk management plan should be reviewed, updated, and maintained throughout the IPP Preparation and Procurement Phases.

3.3. STAKEHOLDER ENGAGEMENT PLAN

As part of the Feasibility Study, a municipality must develop a comprehensive stakeholder engagement plan, the purpose of which is to identify key stakeholders and set out an engagement strategy on how to consult with identified stakeholders at different Phases of the Municipal IPP Project Cycle.

Certain engagements are mandatory in that they are statutorily prescribed, whereas other engagements are optional, but recommended to ensure that the views of all affected parties are considered. For example, section 33 of the MFMA identifies specific stakeholders both in government and in the local community that the municipality serves. These stakeholders need to be identified and included into a project communication strategy. It is recommended that in developing the Stakeholder Engagement Plan the municipality devise and implement an effective project communication strategy for engaging with key stakeholders throughout the project cycle. The process for developing a stakeholder engagement plan is as follows:

STEP 1: Identification of Key Stakeholders

Key stakeholders should be identified and classified:

- Internal stakeholders: Those within the municipality –
 During the project preparation and feasibility phase,
 internal stakeholder management is critical to gain the
 necessary support for the project within the municipality
 and ensure the necessary resources are allocated.
- External stakeholders:
 - Other government departments;
 - Other spheres of government;
 - · Electricity users within the municipality;
 - IPP project developers; and
 - · Financial institutions.

STEP 2: Describe the nature of each relationship and the project's impact on each stakeholder and also the stakeholder's impact and influence over the project

The stakeholder mapping is important to identify the project stakeholders and the impact they may have on the project. This will allow the municipality to identify which stakeholders will have a high or low interest and impact on the project.

Return to Table of Contents

STEP 3: Develop a consultation or communication plan

The plan should detail how and when an appropriate level of consultation will take place during the Municipal IPP Project Cycle, and how the views and contributions of key stakeholders will be incorporated. The stakeholder engagement plan should also include the results of any consultation the municipality has already undertaken prior to the Feasibility Study, and any required agreement obtained from other government stakeholders.

3.4.TECHNICAL SOLUTION OPTIONS ANALYSIS

3.4.1. Technical Analysis

A full technical feasibility analysis will need to be undertaken to determine the vital technical steps that contribute to the Feasibility Study Report, aiding the municipality in setting out possible technical solution options.

The technical analysis will require the following sets of updated information (since being provided under the Municipal Readiness Assessment):

- 1. The composition of the municipality's current electricity supply comprised of Eskom, any existing IPPs, SSEGs, DGs, wheeling sources (if any);
- **2.** Connection points of each of the above sources onto the municipal network;
- 3. The layout of the municipal grid; and
- 4. The aggregated and disaggregated profile of the municipality's supply and demand, across connection points, based on consumer type and based on supplier type.

Based on the above information, the technical analysis should consider the following:

- STEP 1: Assess current supply demand patterns
- STEP 2: Load and grid profile analysis
- STEP 3: Identification of technical options
- STEP 4: Determine total capacity to be procured via IPP model
- STEP 5: Determine individual cap on single project
- STEP 6: Conduct load flow analysis based on single project caps

STEP 1: Assess current supply demand patterns

This step will be informed by the Municipal Readiness Assessment but should be revisited under the following circumstances if:

- **1.** Strategic direction within the IDP has been revised after the Municipal Readiness Assessment;
- 2. A new industrial or commercial consumer has been connected to the grid after the Municipal Readiness Assessment; or
- **3.** A new supplier in the form of IPP, SSEG, DG or via wheeling has been connected to the grid after the Municipal Readiness Assessment.

If no major changes have happened within the context of the above considerations, the information from the technical strategic assessment in the Municipal Readiness Assessment will suffice.

STEP 2: Load and grid profile analysis

Load and grid profile analysis is required to understand the functioning and load bearing capability of the municipal distribution grid. In order to conduct a load and grid profile analysis, the following sets of information are necessary:

- Obtain hourly, daily and yearly load profiles across
 connection points This information is necessary in
 determining which connection points may be exceeding
 NMD limits, if any. Granular load profiles are vital in
 determining stress points on the municipal grid. These
 load profiles are also important in determining points on
 the grid where new power plants can be connected and
 also determining the size limits of the plants that can be
 connected.
- Obtain hourly, daily and yearly load profiles across consumer types (e.g.: industrial, commercial, residential, etc.). This information is necessary to determine which consumer type needs prioritisation (if any) in line with municipality's IDP strategy. Consumer load profiles are also vital in determining the size of a new power plant that will be better suited for a consumer type.

STEP 3: Identification of technical solution options

Based on a preliminary assessment of technical options in the Municipal Readiness Assessment, conduct detailed resource assessment of energy resource availability within the municipality or from alternate sources. The assessment of technical options should be guided by the municipal IDP based on which the Municipal Readiness Assessment has already been conducted.

- Solar resource assessment can be conducted using information from international or national solar GIS databases.
- Wind resources assessment can be conducted using information from international or national wind atlas sources
- Biomass or biogas resource assessment will need to conducted using local municipal waste inventories.

In the event a municipality may not have the appropriate resource availability, conventional wheeling where electricity generated from a plant outside the municipal grid is wheeled using the transmission grid to consumers within the municipal grid, may be considered.

STEP 4: Determine total capacity to be procured via IPP model

In line with Step 1, Step 2, and Step 3, the total capacity to be procured via the IPP model can be determined. During this process it is vital to take two important factors into consideration. These factors are capacity factors (that varies according to the energy technology type) and apparent power (that varies according to the quality of the grid).

Capacity factor is the amount of time during which a power plant generates power. Because different energy technologies have variable capacity factors, the amount of power generated will vary for power plants that are of equal capacity. The relationship is shown below.



Power generated (in kWh or MWh) = Power plant capacity (in kW or MW) x Capacity factor (yearly hours of plant operation)

Apparent power (in kVA or MVA) is based on the quality of electrical loads at the connection points. Infrastructure that is poorly maintained tends to have low power quality compared to well-maintained infrastructure, thereby affecting the power received. Sizing of power plant capacity therefore needs to consider the power quality of the grid infrastructure.

Usually, the power factor is estimated to be between 0.3 to 0.6, but this need not always be the case. The relationship is shown below



Apparent power (in kVA or MVA) = Power plant capacity (in kW or MW) x power factor

It is important to note that a lower value of power factor, indicates better power quality of electrical load.

STEP 5: Determine individual cap on a single project

In line with Steps 3 and 4, a cap on a single project is based on the municipality's need to diversify and distribute IPP plants across the geography of the municipal area. Industrial activity requires power that is of higher intensity, whereas commercial and domestic activity requires power that is of lower intensity.

Individual project caps also need to consider capacity factor and apparent power characteristics mentioned in Step 4. Caps therefore have to be determined depending on energy technology type and nature of grid infrastructure.

STEP 6: Conduct load flow analysis based on single project caps

The purpose of the load flow analysis of each project is to simulate the behaviour of the grid under varying demand conditions. In order to do so, the following situations need to be considered:

- Analyse hourly load profiles for a full year across each connection point of the municipality without load shedding;
- 2. Analyse hourly load profiles for a full year across each connection point of the municipality during load shedding;
- **3.** Analyse load profiles when each new power plant technology type and cap size identified in Step 5, is connected to the grid and operated in conjunction with Eskom supply; and
- **4.** Analyse load profile for each new power plant technology type and cap size, when connected to grid under load shedding or load curtailment conditions.

The above load profiles can then be used to determine the extent to which the municipality will be able to replace or supplement current supply (from Eskom).

3.4.2. Financial Analysis

The financial analysis is an important part of the feasibility study as it enables the municipality to determine the potential financial impact of the proposed IPP project. The financial analysis should enable the municipality to assess whether the proposed IPP project will be affordable, both from the municipality's perspective as well as end user perspectives and offer value for money.

The financial analysis should where appropriate, consider the following:

- **STEP 1:** Analyse the municipality's electricity revenue and cost recovery
- STEP 2: Analyse the municipality's cost of supply
- STEP 3: Determine the expected cost of supply for each of the potential technical solution options identified
- STEP 4: Determine the blended cost of supply
- **STEP 5:** Determine the nominal and net present value (NPV) cashflow impacts for each of the potential technical solution options identified
- **STEP 6:** Assess the affordability of the technical solution options
- **STEP 7:** Assess the municipality's financial capacity to enter into a long term PPA
- STEP 8: Assessment of the impact of the proposed IPP project on the municipality's financial statements
- STEP 9: Consideration of NERSA approval of changes in cost of supply

STEP 1: Analyse the municipality's electricity revenue and cost recovery

For most municipalities, the electricity service charges, and electricity purchases present one of the most critical and material revenue and cost components on the municipality's financial statements.

An important part of the financial analysis is to undertake a high-level assessment of key financial indicators to determine:

- The margin or profit achieved through the municipal electricity distribution service. This will be an important input in the further evaluation of lost revenue and profit due to unserved energy due to load shedding or other factors undertaken as part of Step 5 below;
- The historical energy losses by comparing volume of electricity purchased versus volume sold;

- The proportion of key intensive energy users making up the electricity service charges to inform the risk or potential impact if there is any change in demand from key customers;
- If there are any budgetary line items or costs incurred that could be eliminated by introducing an IPP for example diesel for diesel generators etc.;
- · The average electricity sales price; and
- The debtors and creditors in respect of electricity purchases and service charges.

This analysis will assist in highlighting any risks that may have influence over the proposed IPP project. It will also inform some aspects of the affordability assessment i.e. potential lost revenue as result of unserved energy due to load shedding that may be reduced through the introduction of an IPP project. It will also provide key information in respect of the assessment of the municipality's capacity to undertake the proposed IPP project.

STEP 2: Analyse the municipality's cost of supply

The municipality's current cost of supply should be analysed as this will form the basis of the comparative financial analysis to determine whether the proposed municipal IPP project will have a positive or negative financial impact on the municipality's cost of supply.

The following aspects should be considered:

- Determine all the sources of electricity supply (e.g. Eskom, neighbouring municipalities, SSEG, IPPs, aggregators, etc.);
- 2. Obtain the energy consumption at each point of supply the consumption volume should preferably be received on an hourly basis over a 12-month period to allow consideration of the time of use charges across a 24-hour period as well as low season and high season tariffs;
- 3. Determine the applicable tariff plan applicable at each point of supply or for each supplier information could be sourced from or verified against invoices e.g. Eskom invoices indicating the various fixed, variable, and time of use tariff components; and
- **4.** Calculate the weighted average cost of supply for the most recent financial or calendar year.



Municipal Electricity Tariffs

Consideration should be given to any expected changes to the municipal tariff structures. At the time of writing this Manual, Eskom had submitted a retail tariff plan for the restructuring of Eskom tariffs to NERSA for consideration on 5 August 2022 where the MunicFlex tariff is proposed to replace the existing MegaFlex Local Authority tariff. The potential impact of any future change to the municipal cost of supply should be considered insofar as information is available.

STEP 3: Determine the expected of cost of supply for each of the potential technical solution options identified

A critical step in the technical solution options analysis is to determine the projected cost of supply for each of the identified technical solution options. It should be noted that the IPP cost of supply will only be known with certainty when the proposed IPP project is put out to tender but the municipality should estimate the IPP price utilising best available and current information for each technical solution option to be evaluated.

Once the technical solution options have been identified the estimated cost of supply of each option must be determined. This can be determined through a combination of utilising benchmarks or constructing a shadow IPP financial model utilising best available assumptions.

Use of Benchmarks

Benchmarks may be available for some technologies based on other IPP projects that have been procured (e.g. REIPPPP, Corporate and Industrial (C&I), other municipal programmes etc.). The benchmarks will provide a guide as to the current range of IPP project prices for specific technologies.

It is however important to take note that benchmarks and the range of prices per technology may be influenced by a number of factors that would need to be considered, including:

- · Location of plant which may impact electricity yield;
- Grid connection cost could depend on the extent of the works that need to be undertaken;
- Credit worthiness of the off-taker and available credit enhancements will impact the cost of funding and price;
- Competitiveness of the procurement especially where it is a programme which may impact pricing;

- · The size of the plant;
- · Risk allocation and tariff structure in the PPA; and
- · Land or lease costs.

Shadow Financial Model

In addition, to, or alternatively to making use of benchmarks an IPP proxy or shadow financial model can be constructed (IPP financial model).

The IPP financial model is a hypothetical financial model utilising assumptions and principles that a typical IPP would rely on in developing an IPP project.

Consideration of Key Assumptions

The following key assumptions should be considered and determined:

- Capital Cost: The capital cost typically includes the
 Engineering Procurement and Construction (EPC) or key
 equipment cost, balance of plant cost, other construction
 and installation cost, cost of grid connection or grid
 strengthening where appropriate, land acquisition or land
 lease cost during construction, development fees, funding
 cost during the construction period, reserve accounts, etc.
- Technical Assumptions: Technical assumptions utilised in the construction of the financial model may include contracted capacity, availability, capacity factor, and energy output which should ideally be provided on an hourly basis over a year. This is important when the blended cost of supply is calculated in Step 4 as the financial model should consider the specific cost of supply which will be displaced by the proposed IPP project which may be at differing time of use tariffs.
- Operating Cost: Which may include cost in respect of
 Operating and Maintenance, major maintenance and
 replacement, feedstock where applicable, insurance, land
 lease, economic and social development, and any other
 appropriate operating costs.
- Funding Cost: Consideration should be given to the
 most likely project and funding structure. IPP projects
 are typically funded under a project finance structure.
 The appropriate debt and equity structure and the
 anticipated cost of capital (i.e. appropriate equity returns,
 key terms of debt financing and key covenants) must be
 determined utilising knowledge of similar projects with
 due consideration to specific project salient features.
- Appropriate Tax and Accounting Assumptions.
- Macro-economic Assumptions: Foreign exchange, base interest rate, and escalation factors.
- Cost of Grid Connection and Wheeling Cost if applicable.



Project Finance

Project finance is grounded in the principle that loan repayments are primarily secured by the project's cash flow and in the context of an IPP, electricity sales. The salient features of project finance are:

- Financing is typically limited or non-recourse, i.e. the lenders have recourse to the project company and the assets of the project itself, but they have limited or no recourse to the ultimate owners of the project company;
- The financing of a project company by equity investors and lenders based on the projected contractual cashflows of the project;
- The credit worthiness of the purchaser or off-taker (municipality) is a key consideration in determining the bankability of the project finance structure;
- Lenders may require some credit support, including municipal guarantees and credit support agreements to cover certain risks;
- In a typical project financing, a special purpose vehicle (SPV) is created to own the assets of the project and enter into the financing and project agreements, including the PPA;
- Project finance requires a complex set of highly tailored agreements. This can impose high transaction costs and execution timing delays due to significant coordination of parties to manage complexity.

All assumptions utilised to construct the IPP financial model must be clearly documented in the Feasibility Study.

Sensitivity Analysis

A sensitivity analysis should be undertaken to show the potential impact on the cost of supply in the event that any of the key assumptions vary.

Output

The IPP financial model must be presented on a nominal basis and a detailed narrative commentary on the model is required. It must explain the construction of the model and clearly detail its key assumptions.

The key output of the IPP financial model is the estimated price of electricity or cost of supply for the portion of electricity to be purchased from the IPP for each of the identified technical solution options.

STEP 4: Determine the blended cost of supply

Once Steps 2 and 3 have been completed the blended cost of supply should be determined. This will be determined on the assumption that the proposed IPP project will either displace or add to the electricity being purchased by the municipality from Eskom or other sources and the generation profile of the specific technical solution option should be utilised to model this impact.

From this analysis, the municipality will be able to determine the potential increase or decrease in its blended cost of supply for each of the technical solution options being assessed.

This is a key output of the financial analysis and therefore it is recommended that a sensitivity analysis be undertaken to assess the outcome if some of the key assumptions vary, i.e. the impact of any Eskom tariff restructuring on the municipality's current cost of supply or the impact if the IPP tariff varies to that projected. This will indicate the sensitivity to key assumptions and potential break-even points.

STEP 5: Determine the nominal and NPV cashflow impacts for each of the potential technical solution options identified

In addition to assessing the potential impact on the municipal cost of supply, it is recommended that a further analysis be undertaken to evaluate the projected cashflow impact of the proposed municipal IPP project over the projected term of the PPA to allow the municipality to consider additional factors.

This assessment should be undertaken by determining the projected nominal cashflows over the proposed term of the PPA under a scenario with and without the proposed IPP project for each of the technical solution options identified. The nominal cashflows saving should be discounted utilising an appropriate discount rate and should be converted to a NPV per MWh saving. This will allow the municipality to determine whether the proposed IPP project will result in a benefit or saving.

The NPV assessment considers additional factors that the cost of supply assessment does not, which include:

- Projected escalation of the cost of electricity from all suppliers e.g. Eskom, IPP, and any other supply sources and its impact on the municipality;
- The impact of curtailed energy can be assessed;
- The impact of additional revenue and return on electricity sales for technical solution options that reduce unserved energy can be factored in;
- The impact of other cost items that may be eliminated or reduced, i.e. the cost of diesel for diesel generators can be determined;
- The cost of any indirect expenses should also be considered e.g. if the project results in additional human resources or contract management these costs must be considered in the nominal cashflows;
- The assessment can consider sensitivities in respect of load shedding scenarios projected over the proposed term of the PPA, as it is expected that load shedding will be reduced and ultimately eliminated over the medium term; and
- Assessment of the impact of any cost of guarantees or liquidity support the municipality may need to put in place to support the bankability of the proposed project.

STEP 6: Assess the affordability of the technical solution options

The affordability assessment should be undertaken by considering several factors that may have an impact on the municipality if the proposed IPP project is implemented.

Affordability of electricity tariffs to end users

The Financial Analysis Step 4 described above, determined the potential impact that each of the technical solution options will have on the municipal cost of supply.

Where the analysis indicates that the blended cost of supply including the proposed IPP project will result in an increase to electricity tariffs, the municipality should consider whether the increase will be passed through to consumers and on what basis this will be passed through in consideration of the municipality's tariff structure. This will require a cost of supply study to be submitted to NERSA to support any changes in the underlying structure of the municipal cost of supply.

Where the increase in the cost of supply will be passed through to end users, the municipality must assess whether the increase will be affordable.

STEP 7: Assess the municipality's financial capacity to enter into a long term PPA

The municipality's credit worthiness forms the cornerstone of the PPA and will determine whether alternative credit enhancements need to be considered.

It should be assessed whether the municipality will be able to meet its payment obligations. A PPA creates a long-term payment obligation by committing to purchase a contracted quantity of electricity, whether it be non-dispatchable renewable energy which is typically contracted on a take or pay basis or dispatchable energy where the municipality will be required to make a capacity payment irrespective of whether the energy is dispatched or not.

A key consideration whether a municipality will be able to meet its payment obligation under the PPA is its ability to collect its electricity sales revenues and managing illegal connections and other energy losses. Reference can be made to the assessment undertaken as part of Municipal Readiness Assessment and further expanded where appropriate.

As part of assessing the municipality's credit worthiness an assessment should be undertaken as to whether any credit enhancements should be implemented. When undertaking the Feasibility Study and before progressing to the Procurement Phase the municipality should undertake a market sounding through engagement with commercial lenders and development funding institutions to ascertain their initial view of the municipal credit risk. This will guide the determination of whether credit support or enhancements will be required as well as the magnitude of the credit support.

These may include:

- Required levels of liquidity support for the monthly payment obligation may be required for a set number of months; and
- 2. Required levels of compensation on termination due to municipal default will need to be assessed. The municipality may have to provide a guarantee for a proportion of the termination payment that may be due.





Bankability - what does this mean?

The concept of bankability is critical to a successful procurement process and eventual IPP project.

Bankability is a term used in project finance to describe the likelihood that a project will be funded by financiers.

Bankability is heavily impacted by several factors including:

- 1. Risk allocation of the PPA
- 2. Tariff structure in the PPA
- 3. Credit worthiness of the municipality
- 4. Credibility of the procurement process
- 5. Certainty in the regulatory environment

STEP 8: Assessment of the impact of the proposed municipal IPP project on the financial statements

The accounting treatment for PPAs is complex and the municipality should undertake an assessment of the correct accounting treatment based on the principles captured in the PPA as it can significantly impact the municipal balance sheet, income statement, contingent liabilities, and key covenants.

There are various ways the proposed IPP project can be accounted for in the municipality's financial statements.

Once the preliminary PPA risk allocation has been developed the municipality should determine the impact on its financial statements.

A number of factors that need to be considered in determining the accounting treatment is outlined below, but this does not substitute getting professional advice based on the terms of the PPA:

- The first question is to ascertain if the contract can be interpreted as a lease, thus falling under leasing accounting as set out in the International Financial Reporting Standards (IFRS) 16 accounting standard;
- 2. Whether or not it contains a lease, some PPAs are considered to be financial instruments. This means that they need to be accounted for under derivative accounting (IFRS 9); and
- **3.** If none of these criteria are met, the PPA falls under executory contract accounting International Accounting Standard (IAS) 37. This is the most straightforward and preferable accounting treatment.



Accounting treatment of PPAs

PPAs are complex agreements and understanding the correct accounting treatment for them is important as it can significantly impact the municipality's balance sheet. It is important that the municipality engage with its accountants or auditors to advise on the most appropriate treatment.

The proposed IPP project may also impact on some of the key financial covenants of the municipality as it creates a long-term financial obligation. This may constrain the municipality's ability to offer appropriate guarantees and may also restrict their ability to raise more debt and may even breach the covenants in respect of its existing borrowings or the accepted norms set by National Treasury's MFMA Circular 71. This should be considered in the analysis.

STEP 9: Consideration of NERSA approval of changes in cost of supply

The municipality will need to submit a defensible cost of supply study to support the PPA costs. The need for a cost of supply originates from the EPP which requires that electricity distributors undertake cost of supply studies at least every five years, but at least when significant changes occur in the licensee structure, such as in customer base, relationship between cost components, and sales volumes. This must be done according to NERSA's approved standard to reflect changing costs and customer behaviour.

3.4.3. Economic Development

During the assessment of the technical solution options, the primary economic development considerations that should be considered include:

- The cost-competitiveness of different technical solution options as this will have an impact on affordability for electricity consumers i.e. households and businesses;
- **2.** The ability to procure goods and services locally, therefore the ability to optimise local content;
- 3. The ability to create jobs in the local economy; and
- **4.** The ability to procure from B-BBEE entities and Small and Medium-sized Enterprises.

3.4.4. Comparative Analysis of technical solution options

It is likely that more than one technology solution option may need be assessed based on each options advantages and disadvantage and as assessed against the strategic objectives of the municipality. Alternatively, it is also likely that a combination of technology solution options (with varying capacities) may need to be considered to balance the strategic objectives.

Multi-criteria Decision Making (MCDM)

To recommend one or more preferred technical solution options it is important to undertake a multi-criteria decision assessment across all the technical solution options identified and to examine the risks to, benefits for and effects on the municipality associated with each technical solution

option. Each technical solution option should be evaluated against the municipal strategic objectives confirmed in the Project Inception and Needs Assessment and the extent to which each solution option meets the objectives should be documented.

A MCDM can be qualitative, semi-qualitative, or quantitative in nature. The detail and rigour of the MCDM is based on the preference of the municipality.

General framework of MCDM process

Based on the municipality's strategic objectives - and criteria linked to the objectives - a framework to compare technology solution options can be developed. The general framework using a set of example criteria is as shown. The choice of criteria is only for illustration and is not exhaustive. A general template of the MCDM framework is shown below.

Table 10: General Template for MCDM Framework

Strategic Objective	Technology A	Technology B	Technology C	
Technical				
a) Resource Availability				
b) Power Reliability	Assessment per technology to be undertaken			
c) Reduction in GHG				
Financial				
a) Cost of Supply				
b) Cashflow Impact	Assessment per technology to be undertaken			
c) Other				
Economic				
a) Job Creation	A		wto ko w	
b) Energy Security	Assessment per technology to be undertaken			

The above MCDA framework can be used in a qualitative, semi-qualitative, or quantitative manner. Data requirements and complexity of the analysis will vary depending on the choice of the data types.

Qualitative MCDA framework

A fully qualitative framework can use a rating of High (H), Medium (M) to Low (L), to rate technology solution options against each other in alignment with the municipality's strategic objectives. An example is shown in the table below.

Table 11: Example of Qualitative MCDM Framework

Strategic Objective	Technology A	Technology B	Technology C
Technical			
a) Resource Availability	Low	Medium	High
b) Power Reliability	Low	Medium	High
c) Reduction in GHG	High	Medium	Low

Strategic Objective	Technology A	Technology B	Technology C
Financial			
a) Cost of Supply	High	Medium	Low
b) Cashflow Impact	High	Medium	Low
c) Other			
Economic			
a) Job Creation	Medium	Low	High
b) Energy Security	Medium	High	Low

The above framework needs to be interpreted in the following manner in conjunction with the municipality's strategic objectives:

- 1. If the priority of the municipality is to achieve technical and financial objectives as a primary priority, then technology B will be the advisable choice.
- **2.** If the priority of the municipality is to achieve economic / social objectives as a primary priority, then technology A will be the advisable choice.
- **3.** If the municipality needs to achieve a trade-off between all objectives, then a combination of the technical options will need to be considered.

Semi-quantitative MCDA framework

A semi-quantitative framework can use a rating scale of 1-3 (or 1-5), to rate technology options against each other in alignment with the municipality's strategic objectives. An example using the rating scale of 1-3 is shown in the table below.

Table 12: Example of Semi-Quantitative MCDM Framework

Strategic Objective	Technology A	Technology B	Technology C
Technical			
a) Resource Availability	1	2	3
b) Power Reliability	1	2	3
c) Reduction in GHG	3	2	1
Financial			
a) Cost of Supply	3	3	1
b) Cashflow Impact	3	2	1
c) Other			
Economic			
a) Job Creation	2	1	3
b) Energy Security	2	3	1

The above example provides more distinction to compare criteria within each strategic objective category, and also as a sum total across all strategic categories.

Quantitative MCDA framework

A quantitative framework is more data intensive and time intensive. However, a thorough technical, financial and economic feasibility analysis will provide quantitative data that can be used for a fully quantitative MCDA comparison.

An example of a fully quantitative framework is shown in the table below.

Table 13: Example of Quantitative MCDM Framework

Strategic Objective	Technology A	Technology B	Technology C
Technical			
a) Resource Availability (kms to energy source)			
b) Power Reliability (no: hours / day)			
c) Reduction in GHG (tonnes of GHG)	X	У	Z
Financial			
a) Cost of Supply (R/kWh)			
b) Cashflow Impact (R/kWh)	a	b	С
c) Other			
Economic			
a) Job Creation (Jobs / 1000 people)			
b) Energy Security (Hours of avoided load shedding)			

Actual values can be used as it is to compare technology solution options or can be normalised to achieve further granularity and detail in comparison.

For example, if the criteria-reduction in GHG linked to Technology A needs to be normalised, the normalised value can be achieved in the following manner:

Normalised reduction in GHG value for Tech A = x / (x + y + z)

Similarly, if the criteria-lower cost of supply for Technology B needs to be normalised, the normalised value can be achieved in the following manner:

Normalised lower cost of supply for Tech B = b / (a + b + c)

Likewise, all values can be normalised and compared with each other, after which a single weighted score for each technology option can be calculated. A detailed example of a fully quantitative MCDA can be found in the following example.8

3.4.5. Recommended Technical Solution Options

Based on the outcome of the comparative analysis using a MCDM the recommended technical solution options should be documented, detailing the key technical specification on which the procurement will be based specifying the maximum contracted capacity to be procured from each technology and if appropriate the minimum and maximum sizes of individual IPP projects.

Return to Table of Contents

3.5. ECONOMIC VIABILITY AND DEVELOPMENT CONSIDERATIONS

3.5.1. Assessing economic viability

For large infrastructure projects, it is important to undertake an assessment of a project's economic viability. Financial viability of a project is paramount to success, however, in the case of large infrastructure, there are often economic benefits or costs that are not fully captured by the financial assessment of a project. This is particularly true in the case where infrastructure provides benefits / costs to local communities in the form of positive / negative externalities. Assessing economic viability entails the incorporation of both financial and economic costs and benefits.

Microeconomic methodology is used to assess economic viability and includes two approaches, as follows:

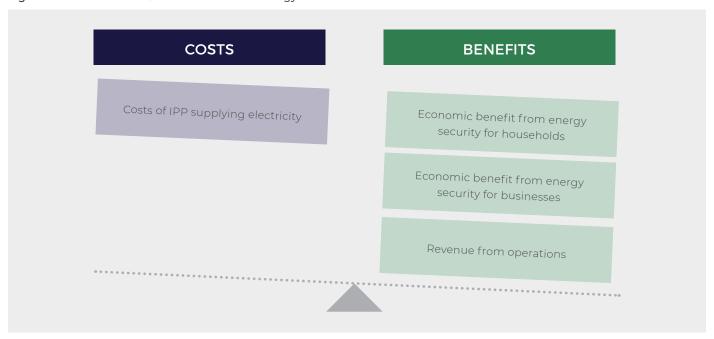
- Cost Benefit Analysis (CBA): This methodology is used when the economic costs and benefits can be clearly articulated and monetised; and
- Cost Effectiveness Analysis (CEA): This methodology is used when the economic benefits and costs are difficult to quantify and are described qualitatively.

National Treasury's *Infrastructure Planning and Appraisal Guideline* of 2022 provides helpful reference material with respect to the methodological approach to undertaking CBAs and CEAs. The steps used within the CBA/CEA methodology are outlined below.

STEP 1: Identifying economic costs and benefits

The financial costs and benefits would typically include costs related to introduction of the IPP as electricity supplier and the cost of its electricity supply. The financial benefits are the revenue that can be generated from the IPP project with consideration to additional revenue that may be derived from reducing unserved energy as result of load shedding. Economic benefits and costs speak to the sources of economic benefit / cost accrued to society from the implementation of the project. The figure below provides an outline of some of the costs and benefits that can be included within a typical framework for undertaking a CBA for an IPP project.

Figure 2: Framework for CBA for Renewable Energy Procurement



STEP 2: Determining which items can be monetised

Determine which costs / benefits can be monetised versus those that will be discussed qualitatively. Costs and benefits for which there are suitable and credible proxies that can be used to quantify economic costs / benefits can be included within the CBA. The costs / benefits for which there are no suitable proxies can only be included within the analysis as a qualitative description.

STEP 3: Monetisation of costs and benefits

Convert costs / benefits into financial values using proxies. Proxies can be identified through desktop research and economic data. The box below provides a definition of a proxy. In the case of renewable energy generation, a proxy for the economic benefit of creating energy security to households and businesses by reducing reliance on the national grid could include the quantification of the disruption costs associated with load shedding.



What is a "proxy"?

In economic appraisal, a "proxy" refers to a substitute measure that can be used to represent or approximate the value of a variable or an outcome that is difficult to measure directly. Proxies are often employed when the direct measurement of a variable is impractical, unavailable, or infeasible due to various constraints such as time, cost, or data limitations.

STEP 4: Calculate key CBA/CEA indicators

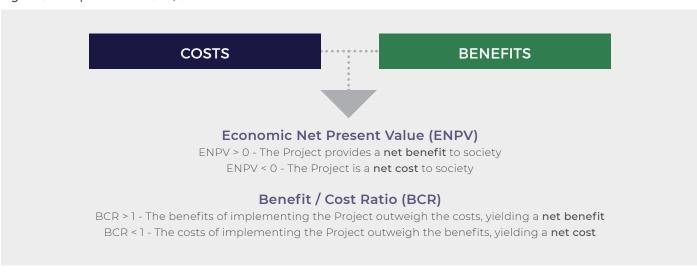
The outcome of a CBA/CEA is the conclusion as to whether a project is economically viable or unviable. In order to make this recommendation / assessment, two key indicators are calculated to provide guidance on the overall outcome regarding economic viability.

These indicators include:

- The Economic Net Present Value (ENPV); and
- The Benefit-Cost Ratio (BCR) or, in the case of a CEA, the Cost Effectiveness Ratio.

The figure below outlines these key indicators and provides interpretations associated with each of them.

Figure 3: Interpretation of CBA/CEA Indicators



STEP 5: Sensitivity analysis

This step entails testing the sensitivity of key assumptions and update the model based on the outcomes of the sensitivity analysis. Once the CBA/CEA model has been designed, it is important to identify specific input variables and assumptions that could have an impact on the overall outcome of the analysis. This step in the analysis enables one to test the robustness of the CBA/CEA results and if necessary, to include additional scenarios and / or considerations within the model. During this step of the analysis, potential risks to achieving specific economic outcomes can be identified and included within the risk assessment of the project.

3.5.2. Economic development considerations

Implementing large-scale infrastructure projects offers government the opportunity to use this procurement as a mechanism to address socio-economic challenges through the design of the economic development component of the bid.

Some of the elements contained in infrastructure procurement requires / incentivises:

- IPPs to have South African entity shareholding in the project company;
- IPPs to create jobs for South African Citizens;
- IPPs to make financial commitments to implement skills development, enterprise and supplier development and socio-economic development; and
- IPPs to procure goods and services from small and medium-sized businesses.

Economic Development through government procurement of goods and services is underpinned by the *B-BBEE Codes of Good Practice*.

This framework identifies seven elements outlined below (note that the metrics below are specifically for the national energy procurement processes mentioned above):

- Job creation: Points are awarded for creating jobs for individuals by gender, race, age, disability and people living within the local community;
- Ownership: Bidders are typically required to have shareholding of a South Africa entity.
 Additional points are awarded for bidders that have shareholding of local communities;
- Management control: Points are awarded for appointing people in management positions by race and gender;
- Local content: Points are awarded for bidders who procure a percentage of the contract value locally (i.e. within South Africa);
- Preferential procurement: Points are awarded for procuring from South African-based entities that are B-BBEE compliant, small- and medium-sized entities and entities owned by Black women;
- Supplier development: Points are awarded for financial commitments made towards supplier development programmes;
- Enterprise development: Points are awarded for financial commitments made to enterprise development initiatives;
- *Skills development:* Points are awarded for financial commitments made to skills development by race and for people with disabilities; and
- Socio-economic development: Points are awarded for financial commitments made to socio-economic development initiatives.

These elements are aimed at enabling economic development that focuses on empowering Black people, Black women, people with disabilities, the youth, people who live in local communities where projects are implemented, and small-and medium-sized businesses. In addition, there is a strong focus on building local capacity to deliver on renewable energy projects; investing in the development of skills; and investment in initiatives that aim to address socioeconomic challenges.





The Constitutional Role of Local Government in Socio-Economic Development

In advancing socio-economic development in South Africa, local governments play a major role as mandated by Section 152 of the Constitution and the White Paper on Local Government. The Constitution and White Paper emphasise the duty to foster Local Economic Development (LED) as a primary mechanism for jobs creation, poverty alleviation, and community well-being enhancement. The LED policies are integral to addressing societal challenges such as unemployment, inadequate access to basic infrastructure, and essential services.

The NDP 2030, has tasked local governments with the responsibility of infrastructure development initiatives that will lead to economic growth and improved living standards. This includes developing and maintaining infrastructure across transportation, energy, water, and ICT sectors. By prioritising sustainable practices and effective service delivery, local governments contribute directly to inclusivity and sustainable development. Engaging people at the community level is vital to the success of infrastructural projects. Local governments engagement in the decision-making processes, prioritising local needs, and fostering transparent dialogue, will build trust, gender equality, inclusivity, and project acceptance. Capacity building in project management, financial planning, and regulatory compliance further enhances the ability to effectively manage and optimise the benefits of partnerships, thereby contributing to sustainable socio-economic development.

The role of municipalities in facilitating socio-economic development involves the integration of gender equality and social inclusion considerations into every facet of governance and development strategy. Through policy integration, municipalities align their initiatives with NDP 2030's objectives of reducing disparities and enhancing social cohesion, implementing gender-responsive policies to empower women, ensure inclusive service delivery, and foster environments that enable marginalised groups, including persons with disabilities, youth, LGBTQ+ individuals, and rural communities, to thrive. Empowerment programs are vital, focusing on skills development, entrepreneurship support, and social protection measures tailored to uplift marginalised communities. Community engagement initiatives ensure diverse voices are heard, fostering transparency and accountability in decision-making processes. By monitoring progress through gender-disaggregated data and evaluating outcomes, local governments can effectively track development impact, address challenges, and adapt strategies to achieve sustainable socio-economic growth that leaves no one behind, embodying the transformative vision of the NDP 2030 for an equitable and inclusive society.

3.6. LEGAL AND REGULATORY ASSESSMENT

3.6.1. Scope of legal and regulatory issues

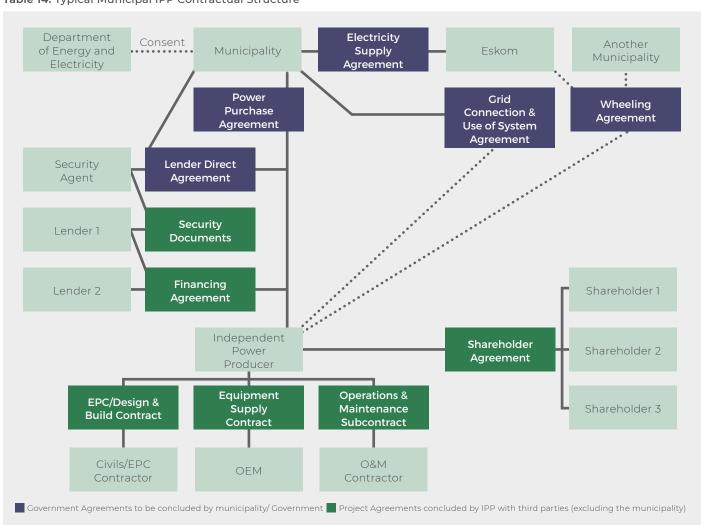
Following the identification of the preferred technical solution options and establishing the economic viability of such solution options, the municipality should conduct a legal and regulatory review of such options to ensure that the procurement and appointment of an IPP on the basis of any of the preferred solution options is valid and lawful and contractually enforceable.

Unlike a feasibility study for a PPP project where many of the project site enablement issues need to be addressed in the legal due diligence review, including whether there are any red flags that would prevent the PPP project from going forward, under the Baseline Municipal IPP Model on which this Manual is based, site related risks are assumed by the IPP. This significantly narrows the issues that would ordinarily form part of the legal due diligence. The issues to be considered as part of the legal and regulatory assessment for an IPP project broadly speaking address risks related to the lawfulness of the IPP procurement process, compliance with statutory approvals and consents, and the enforceability and validity of the PPA. These are discussed in detail below.

3.6.2. Typical IPP contracting structure

To understand how regulatory compliance and contractual enforceability are to be reviewed for purposes of the Legal and Regulatory Assessment, it is necessary to appreciate the matrix of contractual arrangements in a municipal IPP structure. Below is a diagram of a typical municipal IPP contractual structure depicting the key project agreements and the parties to such agreements.





3.6.2.1. Government Agreements

The principal Government Agreements are:

- 1. A *Power Purchase Agreement* between the municipality and the IPP. The contractual "centre" of any IPP is the Power Purchase Agreement which regulates the terms on which an IPP will supply electricity to a municipality, as well as the cost of supply.
- 2. A *Grid Connection and Use of System Agreement* between the municipality and the IPP where the IPP's generation facility is located inside of the area of jurisdiction of the municipality and connects into the municipality's distribution system. Where the IPP's generation facility is located outside of the area of jurisdiction of the Municipality and is connected into the grid of another municipality or Eskom, then the Grid Connection and Use of System Agreement will need to be concluded between the IPP and such other party.
- 3. Similarly, where the IPP's generation facility is located outside of the area of jurisdiction of the Municipality and is connected into the grid of another municipality or Eskom and energy needs to be wheeled over the grids or networks owned and operated by other parties such as Eskom or other municipalities, then an amendment to the *Electricity Supply Agreement* between Eskom and the Municipality will be required or a wheeling agreement concluded between the Municipality and the other municipality to facilitate the wheeling and billing reconciliation process.

3.6.2.2. Project Agreements (excluding the Government Agreements)

Table 15: Main Project Agreements other than the Government Agreements

Type of Project Agreement	Description of Project Agreement	Parties to Project Agreement
Shareholders Agreement	A Shareholders Agreement concluded between the IPP and its shareholders and regulating the way in which the shareholders to the IPP engage, including their share of the equity, requirements for funding the development of the generation facility as well as how distributions will be made, when and how they vote of matter affecting the IPP (voting rights), how and when they may exit / sell shares in the IPP. The IPP is likely to be structured as a special purpose vehicle, that is, an entity established for the sole purpose of giving effect to a PPA. IPPs are generally structured as ring-fenced for profit companies under the Companies Act. The IPP's memorandum of incorporation also sets out its objects which must be aligned with the Shareholders' Agreement. The identity of shareholders in the IPP may include institutional investors, private equity funds and other passive investors as well as the parties performing part of the construction and operations and maintenance activities. Their credibility in terms of understanding the project and track record in IPPs will be an essential determinant of the legal evaluation.	IPP and Shareholders of IPP
Financing Agreements	In order to fund the design and construction of the generation facility, as well as to procure the equipment required to generate electricity, it is necessary for the IPP to secure debt funding. The agreements regulating the provision of senior debt are referred to as the Financing Agreements. These are concluded by the IPP as borrower and a lender which is usually a commercial bank. The lenders will take security over assets for the senior debt provided to the IPP. Security can take the form of cessions in security over the IPP's bank accounts. Security is generally held by a security agent or security company on behalf of the lenders. A distinction is made between senior debt and subordinated debt which will be procured through commercial banks or lenders, and junior debt or equity, which are loans made by the shareholders of the IPP to fund the capital cost of the project. Equity funding can also be provided in the form of a share subscription paid by incoming shareholders into the IPP. The funding requirement for establishing a generation facility is usually comprised of a combination of senior debt and equity or junior debt, all of which are repayable through the tariff charged by the IPP to the municipality for the supply of electricity.	Lenders and the IPP (as borrower)

Type of Project Agreement	Description of Project Agreement	Parties to Project Agreement
EPC / Construction Contract	The IPP will need to procure a contractor to design and build the generation facility. The EPC is usually concluded on the basis of an accepted standard form construction contract (FIDIC silver book, for example) and in respect of an EPC is provided on a fixed price lump sum basis which wraps all the risks transferred to the contractor into the Contract Price. The EPC requires the Contractor to deliver a completed generation facility on time and in the fixed cost. The Contractor is paid on an interim milestone certificate basis which is signed off by the Lenders Technical Advisor in order for the Lenders to release a payment draw under their agreements with the IPP (as borrower).	IPP and Construction Contractor. [Direct Agreement between IPP, Construction Contractor and Lenders]
Equipment Supply Agreement	Where equipment for the generation facility is not included in the EPC's scope and price, the IPP may conclude a separate equipment supply and maintenance agreement with the equipment supplier or Original Equipment Manufacturer (OEM). Warranties on the equipment ensure that the IPP has recourse to the OEM in the event of defects arising during a warranty period.	IPP and OEM
Independent Engineer Agreement	The Independent Engineer's appointment is partially regulated under the PPA and as contained in the IE Agreement. The Independent Engineer plays a critical role in the PPA and particularly in the sign off of the facility for purposes of meeting Commercial Operation Date. The role of the Independent Engineer is to provide an independent unbiased sign off of the generation facility to both the IPP seller and the municipality buyer	Municipality, IPP and Independent Engineer
	that the generation facility is able to meet the generation capacity contracted under the PPA at the Commercial Operation Date. The PPA usually includes a provision allowing the parties (seller and buyer) to each identify between 3 - 5 firms of independent consulting engineers, all of which would qualify to be the Independent Engineer that is required to be	
	appointed under the PPA. The Independent Engineer is appointed by the seller (from the firms identified) and even though the seller is responsible for its cost, the Independent Engineer will act on behalf of and owe a duty to both the seller and buyer equally.	
Operations and Maintenance Contract	The IPP will conclude an operations and maintenance contract in respect of the generation facility for the duration of the PPA. The Operations may be performed by an affiliate or separate ring-fenced SPV of the IPP. For most renewable energy plants, the operations and maintenance is less intensive than for other energy sources such as gas and coal, however, operations are key to the IPPs meeting its KPIs under the PPA. Part of the O&M Contract cost may include a refresh of the equipment usually during the life of the PPA, this is not separately contracted under an equipment supply agreement.	IPP and O&M Contractor

3.6.3. Enforceability of the Government Agreements

The PPA lies at the centre of the relationship between the municipality and the IPP; it is the culmination of the procurement process and the agreement responsible for the delivery of new generation capacity. It is also the primary contractual arrangement for the project and underpins the basis for the repayment of debt. It is therefore essential that the validly and lawfulness of the PPA is beyond reproach both in terms of the procurement process followed to conclude it, as well as in respect of its terms. Risks that could undermine the validity of the PPA therefore need to be considered and an opinion provided on the probability of such risk materialising.

These include:

- 1. Whether the municipality is statutorily authorised to procure new generation capacity. As creatures of statute, a municipality cannot act outside of what the law permits it to do. Where a municipality exceeds its statutory mandate, its acts are invalid;
- 2. Whether the municipality followed a regulated process in procuring new generation capacity. Failure by a municipality to comply with a statutorily prescribed procurement process can result in the PPA being declared invalid;
- **3.** Whether the municipality has obtained all necessary consents and approvals needed to engage an IPP and guarantee its payment commitments under the PPA. A failure to do so renders the municipality's actions unlawful and invalid; and
- **4.** Whether the IPP has obtained all necessary consents and approvals needed to deliver on its obligations under the PPA including licenses and approvals to operate a generation facility.

3.6.4. Authority of the municipality to conclude the PPA

Confirmation needs to be given that the municipality is statutorily empowered to procure new generation capacity. This is because a municipality cannot conclude an agreement for a good or supply including electricity where it is not statutorily empowered to do so. In answering this question, the following inquiries need to be considered:

• Are municipalities statutorily permitted to procure electricity from IPPs? Most municipalities have bulk electricity supply contracts in place with Eskom, but are municipalities permitted to purchase electricity from any licensed generator and does this activity fall within their powers and functions? The municipality needs to procure an opinion that it has the power and competence to purchase electricity from generators including IPPs for purposes of supplying end-users within their area of jurisdiction, and that the signatory of the PPA is duly authorised to bind the municipality to the commitments contained in the PPA.



Guiding Considerations

Chapter 7 of the Constitution regulates local government as one of the three branches of Government and the functions and systems contained in the national government legislation regulating municipalities all derive their authority from the Constitution. Electricity reticulation is part of a municipality's powers and functions. See s156(1) of the Constitution as read with Part B of Schedule 4, section 8(1) of the Municipal Systems Act.

Electricity generation and supply is not part of a municipality's original competence under the Constitution but is reasonably necessary for and incidental to the effective performance of a municipality's electricity reticulation function. See section 156(5) of the Constitution and section 8(2) of the Municipal Systems Act. See also Section 84(1)(c) of the Municipal Structures Act which gives district municipalities the power to procure bulk supply of electricity which includes the transmission, distribution, and where applicable, the generation of electricity.

- Is the municipal signatory duly authorised to sign the PPA? The municipal manager as the most senior municipal official in the administration of a municipality is required to comply with a number of statutory obligations. The general financial management functions of the municipal manager as the accounting officer are set out in section 62 of the MFMA. These obligations include, among other things:
 - A responsibility to ensure that a municipality has and implements a supply chain management policy; and
 - An obligation to take all reasonable steps to ensure that a contract like a PPA procured through such supply chain management policy is properly enforced.

It's not practical for the municipal manager to conclude all contractual arrangements arising from a procurement process, and so the MFMA makes provision for a system of delegation. The municipality must review its delegation framework to confirm that the designated official signing the PPA is authorised to do so where this is an official other than the municipal manager.



Section 79(1) of the MFMA

The municipal manager of a municipality:

- **a.** Must develop an appropriate system of delegation that will both maximise administrative and operational efficiency and provide adequate checks and balances in the municipality's financial administration.
- **b.** May, in accordance with that system, delegate to a member of the municipality's top management (the CFO and other senior managers) or any other official of the municipality:
 - i. Any of the powers or duties assigned to the municipal manager under the MFMA; or
 - **ii.** Any powers or duties reasonably necessary to assist the municipal manager in complying with a specific provision of the MFMA.
- **c.** Must regularly review delegations issued in terms of paragraph (b) and, if necessary, amend or withdraw any of those delegations.

3.6.5. Adherence to municipal procurement process

A failure by a municipality to comply with the required regulated procurement process can result in the PPA being declared unlawful and invalid. The regulated procurement process to be followed by the municipality in procuring new generation capacity must therefore be set out clearly. In The complexity of integrating the local government and new generation capacity procurement frameworks has proven a challenge but work like this Manual seeks to breakdown these requirements and navigate municipalities through the legal terrain.

There have been different interpretations by municipalities as to the correct procurement framework to follow for procuring an IPP. As noted in 3.2 (Models of Municipal Electricity Procurement), the applicable local government regulatory framework varies depending on the party in which ownership of the generation facility vests.

To determine the applicable procurement process, the municipality must review its SCM Policy. While this Policy

should be consistent with the Municipal SCM regulations, municipalities have discretion to deviate from this Regulation and adjust their SCM Policy to meet their particular requirements. Deviations in the procurement process must be considered as part of this inquiry.

At a minimum the following reference documents should be considered:

- Chapter 11, Part 1 (Supply Chain Management) of the MFMA;
- **2.** Municipal SCM Regulations issued in terms of the MFMA:
- **3.** Municipal SCM 'Model' Policy issued by National Treasury to be adopted by the municipality; and
- **4.** National Treasury's standard MBDs to promote and enhance SCM uniformity.



Municipalities to bear in mind...

The process of purchasing electricity from Eskom in terms of bulk supply agreements is known to all municipalities. Bulk supply agreements concluded with Eskom are exempted from a procurement process.

Section 110(2) of the MFMA provides that when a municipality or a municipal entity purchases power from an organ of state such as Eskom, the municipality is not required to comply with Chapter 11 of the MFMA relating to supply chain management or procurement by municipalities. In other words, in terms of the MFMA, municipalities are not required to go through a competitive procurement process in purchasing electricity from any organ of state such as Eskom. Eskom is an "organ of state" as defined in terms of section 239 of the Constitution.

The same exemption does not apply to parties who are not organs of state, such as IPPs.

3.6.6. Land allocation

Unlike in a Municipal Own-Generation Model where the generation facility is owned by the municipality, under a Municipal IPP Model ownership of the generation facility vests in the IPP. For this reason, the legal consequences of site enablement activities need not be explored. Where

however, a municipality takes a strategic decision to allocate a piece of land in its area of jurisdiction for an IPP to build its generation facility so as to fast-track the land-related processes (which often poses the greatest risk to a delay in reaching Financial Close), the municipality needs to do so within a regulated framework.

Summarised below are the steps a municipality would need to take in identifying a suitable site and making it available to an IPP under a long-term lease agreement.

Table 16: Regulated process for allocation of municipal land to IPP

Steps	Actions
STEP 1: Is the identified land intended to be used for the provision of a basic municipal service?	In terms of section 14 of the MFMA, a municipality is prohibited from disposing a capital asset needed to provide the minimum level of basic municipal services. Where a municipality intends to utilise land (a capital asset) to provide a basic municipal service, such land cannot be made available to an IPP.
STEPS 2: What type of land disposal is contemplated?	The type of disposal will determine the process to be followed under the Municipal Asset Transfer Regulations (MATR). Section 14 of the MFMA read with the MATR distinguishes between three types of "disposal" being:
	Permanent disposal or transfer of ownership relating to a sale agreement for such capital asset;
	Any other process applied to a capital asset which results in loss of ownership of the capital asset otherwise than by way of transfer of ownership; and
	A right to use, control, or manage a capital asset for a period exceeding one calendar month without ceding legal ownership in the asset.
	Of the three types of disposal, the third type of disposal, disposing of a right of use through a long-term lease is the most suitable method of disposal of land to an IPP.
STEP 3: What process under the MATR applies to the land disposal through the granting of a right of use?	Chapter 4 of the MATR regulates the granting of rights to use, control, or manage municipal capital assets. Note however that if the right of use, inter alia, confers on the IPP lessee an option to buy or acquire ownership in the land; or the power to use, control, or manage the capital asset as if the IPP is the beneficial (but not legal) owner of the asset, then the process under Chapter 2 and 3 of the MATR relating to transfers of ownership in a capital asset, applies.
STEP 4: What is the outcome of the above MATR Chapter 4 process?	A written lease agreement must be concluded between the municipality and the IPP which at a minimum must include: The period for which the right is granted;
	The amount of compensation payable to the municipality for the granting of the right, and the terms and conditions of payment; and
	The consequences of any termination or expiry of the lease and the removal or decommissioning of the generation facility.

3.6.7. Project consents and approvals

The failure by either the IPP or the municipality to obtain any necessary consent for the project may render the PPA invalid and unenforceable and therefore the legal due diligence must clearly and comprehensively list all required approvals and consents needed for the project, an indicative timeline to obtain such consent as well as the consenting or approval authority from whom the consent is to be provided.

Although an IPP is responsible for procuring the consents related to the operation of the generation facility, it is still necessary for a municipality to know and check what consents are needed by the IPP to ensure that the PPA is enforceable. A municipality can take some comfort in the fact that the lenders will appoint lenders counsel to identify, and review required approvals, but this should not detract from a municipality's responsibility to ensure all required approvals are in place.

Consents to be obtained by the municipality relate to the validity and conclusion of the PPA and any security or guarantees issued to support its payment obligations under the PPA. Identified below are some of the key approvals a municipality may require. This list, however, is not exhaustive.

70

Table 17: Consents and approvals required by the municipality

Approval Authority	Approval Process
Minister of Energy and Electricity for procuring	A municipality may be required to obtain the Minister's approval for purposes of procuring or buying new generation capacity.
new generation capacity	Regulation 5(3) of the New Generation Capacity Regulation, if applicable, provides: A municipality, as an organ of state, may apply to the Minister to procure or buy new generation capacity in
	accordance with its Integrated Resource Plan, and such municipality must -
	Conduct and submit a feasibility study as contemplated in sub regulation (2), where it intends to deliver the new generation capacity project through an internal mechanism as contemplated in section 76 (a) of the Municipal Systems Act;
	Submit proof that it has complied with the provisions of section 120 of the MFMA and the Municipal PPP Regulations, where it intends to deliver the new generation capacity project through an external mechanism as contemplated in section 76 (b) of the Municipal Systems Act; and
	Submit proof that the application is aligned with its IDP.
NERSA approval of the municipality's tariff for electricity reticulation	Municipalities hold a distribution license issued by NERSA. The municipal base tariff for electricity reticulation is regulated by NERSA, whose functions include regulating prices and tariffs. Where the conclusion of a PPA with an IPP affects the municipal base tariff (charged by a municipality to endusers) NERSA approval must be obtained.
	Key statutory provisions include:
	Section 15(1) of ERA: the licence conditions and the revenues, tariffs and prices must enable an efficient licensee to recover the full cost of its licensed activities, including a reasonable margin or return.
	Section 74(I) of the Municipal Systems Act: A municipal council must adopt and implement a tariff policy on the levying of fees for municipal services provided by the municipality. Tariffs must reflect the costs reasonably associated with rendering the service, including capital, operating, maintenance, administration and replacement costs, and interest charges.
	Electricity Pricing Policy (EPP): NERSA issued the EPP which provides direction to municipalities on the principles for the formulation of electricity prices. The EPP recognises that a base tariff is established by NERSA and where municipal surcharges on electricity are introduced in terms of section 74 of the Municipal Systems Act, this will be regulated through the norms and standards for electricity surcharges.
	Section 35(4)(r) of ERA empowers the Minister, in consultation with the Minister of Finance, to make norms and standards for the setting of reticulation tariffs. Moreover, NERSA issues electricity tariff guidelines annually providing municipalities with a guideline increase that NERSA has calculated. In addition to the guideline, NERSA reviews the municipal tariff benchmarks.
	The EPP requires that municipalities undertake cost of supply studies at least every 5 years and at least when the licensees structure changes (such as customer base, energy purchase and sales) which could arise if the volume of electricity purchased from IPPs increases.
Municipal Council approval of the PPA	Section 33 of the MFMA applies to contracts having future budgetary implications. If the PPA to be concluded by the municipality will impose financial obligations on the municipality i.e. an obligation to make payment to the IPP beyond the three years covered in the municipality's annual budget for that financial year, then it must follow the process set out in section 33 of the MFMA.
	This includes:
	Making available the final draft of the PPA for public review and comment in accordance with the procedure contained in section 33 of the MFMA; and
	 Upon completion of section 33 process, the municipality compiling a Section 33 MFMA Report setting out all stakeholder feedback pursuant to the section 33 public consultation process and responses, and the final updated PPA (and ancillary agreements if relevant).
	Section 33(1)(c) of the MFMA provides: upon completion of the above public consultation process, the municipality shall submit the MFMA Section 33 Report and PPA to the municipal council for approval. This approval needs to be obtained prior to the municipality signing the PPA with the IPP.

3.6.8. Issues affecting the PPA terms

A municipality will be responsible for drafting the PPA in the Municipal IPP Procurement Phase. Having an appreciation of possible regulatory issues that impact the terms of the PPA should be identified as part of the legal due diligence review, and a recommendation made as to the party best placed to manage the risk under the PPA. This review will be carried over into the drafting of the PPA.

3.6.8.1. Municipality's payment obligations

The PPA imposes on the municipality various payment obligations. These payments or charges could include charges payable to the IPP (fixed capacity charge and variable output charge or take or pay structures under a non-dispatchable plant, deemed energy payments, where energy is curtailed and pass through of use of system charges), payments to the IPP on early termination of the PPA and payments for compensation events and events for which the municipality may have indemnified the IPP.

Given the financial obligations incumbent on the municipality under the PPA, there may be a requirement (specifically by the IPP's lenders) for the municipality to provide security for these payments. Part of the rationale behind the section 33 MFMA procedure is to ensure that a municipality properly budgets for its financial obligations, which is overseen by the National Treasury. Although this process provides a level of assurance, lenders are likely to require more tangible security. Where a municipality is required to provide security for its payment obligations, it will need to do so in accordance with the MFMA which regulates the process and manner in which security is provided by municipalities.

The following provisions of the MFMA should be considered.

- Section 48(1) prescribes the circumstances under which a municipality by resolution of its council can provide security. It needs to be determined whether the circumstances listed in section 48 of the MFMA permit a municipality to provide security in respect if its obligations under a PPA.
- 2. If section 48 applies, then a determination must be made as to a suitable form of security, based on the circumstances of the municipality and its creditworthiness. Section 48(2) of the MFMA specifies the forms of security that a municipality can issue when securing its contractual (payment) obligations.

- 3. Where the circumstances deem it appropriate for the municipality to issue a municipal guarantee, then the requirements under section 50 of the MFMA will apply. To be validly issued, the guarantee must fall within the budgeted limits on guarantees set in the municipality's budget.
- **4.** The municipality must comply with process outlined in section 48 (including obtaining a council resolution) when providing project security or section 50 of the MFMA when a municipal guarantee is issued.



What security can a municipality provide for its payment obligations under a PPA?

Section 48(2) gives municipalities a relatively high degree of flexibility when concluding security arrangements. Municipalities can provide security in a number of the ways set out in section 48(2), and the list is not closed. Section 48 (2) also permits a municipality to "agree to such other arrangements as the municipality may consider necessary and prudent".

Some of the types of security contemplated in section 48 include:

- Agreeing to specific payment mechanisms or procedures to ensure exclusive or dedicated payment to lenders or investors, including revenue intercepts, and payments into dedicated accounts;
- Ceding as security any category of revenue or rights to future revenue;
- Undertaking to effect payment directly from money or sources that may become available to a municipality and to authorise the lender or investor direct access to such sources provided such monies are paid directly into a municipality's bank account in terms of section 8(2) of the MFMA;
- Undertaking to retain revenues or specific municipal tariffs or other charges, fees, or funds at a particular level or at a level sufficient to meet its financial obligations; and
- Undertaking to make provision in its budgets for the payment of its financial obligations, including capital and interest.

3.6.8.2. Relief Events under the PPA

Relief Events are events set out in the PPA which provide the IPP with relief from termination and under certain circumstances penalties. These are events that are outside of the IPP's control which should not affect the capacity charge payable to the municipality or result in deemed energy payments (depending on the technology), regardless of whether or not capacity is available to the municipality for offtake.

Relief Events may arise from rules regulating load shedding, curtailment or unavailability of the network under the Codes which impacts the availability of generated power by an IPP, and therefore a view of the impact of curtailment on the allocation of risk under the PPA should be provided as part of the legal due diligence review

3.6.8.3. Fair risk allocation

PPAs in relation to generation facilities embedded in municipal networks need to address load shedding, curtailment or unavailability of the network; and the risk allocation for the load shedding, curtailment or unavailability of the network (causing a shortfall in generation) under a PPA which needs to reflect the specific underlying causes. A fair and market related risk allocation would be to allocate this risk to the municipality in the form of capacity payments or deemed energy payments (depending on the technology) being due and payable to the IPP for the energy that would otherwise have been delivered to the network but for load shedding, curtailment or unavailability of the network. The exception to this is where the cause of the generation facility being load shed, curtailed, or disconnected from the network is due to an act or omission of the IPP, in which event the IPP should not be entitled to any relief under the PPA.

3.7. PROCUREMENT PLAN

The procurement plan for a municipal IPP serves as the central organising document for the Procurement Phase. The procurement plan guides the municipality on an optimal procurement structure and should be directly linked to the preferred technical solutions options identified in the preliminary stage of the Feasibility Study and also take cognisance of the legal and regulatory framework set out in the Legal and Regulatory Assessment. Importantly the procurement plan allows the municipality to plan the timing of the envisaged procurement and when key activities and other milestones are envisaged to have been achieved, as well as the budget needed by the municipality to fund the procurement activities.

The following elements should be addressed in drafting a municipality's procurement plan:

- 1. The procurement design (single stage or two stage process);
- 2. The procurement process, which should be drawn from the Legal and Regulatory Review;
- **3.** Procurement timeline specifying key milestone dates in the procurement process. Table 18 sets out the key procurement milestones;

Table 18: Key Procurement Milestones

- **4.** Key municipal officials comprising the project manager and the transaction advisors;
- 5. Procurement governance structures including the various committees to be appointed by the municipality during the procurement process and naming the parties to be appointed to such committees. The procurement plan should identify the following committees for during the procurement evaluation and adjudication:
 - Bid Evaluation Committee is to be appointed to evaluate the bids received. The composition of the BEC is usually cross functional and should not include same members as the bid specification committee. Technical evaluation teams arranged according to discipline are also established and feed into the BEC:
 - Bid Adjudication Committee: Depending on the delegations granted by the municipal manager, the BAC could make the final award of the bid or make a recommendation to the municipal manager to make the final award; and
 - The BEC and BAC should comprise of different members so as to ensure that a transparent review of the evaluation and award is undertaken.
- **6.** A risk matrix setting out principal Procurement Phase risks and suitable mitigations;
- 7. A list of the key approvals and consents needed during the Procurement Phase and to reach Financial Close, both by the municipality and the IPP;
- **8.** A quality assurance and audit procedure to ensure that the procurement meets the constitutional requirements of a fair, equitable, competitive, transparent, costeffective process.

A detailed list of the contents of a procurement plan is set out in Module 4 (Feasibility Study Phase) Stage 7 (Procurement Plan) of the *Municipal Service Delivery and PPP Guidelines*.

3.8. FEASIBILITY STUDY REPORT

The various reports and assessments set out above should culminate in a single consolidated Feasibility Study Report. The Feasibility Study Report must identify the preferred IPP technical solution option and confirm the municipality's ability to satisfy the legal, financial, and technical requirements of such procurement.

In addition to attaching all the above assessments and reports, the Feasibility Study Report should be topped and tailed as follows:

- 1. Table of Contents
 - a. Glossary
 - **b.** Acronyms
- **3.** Introduction
 - a. Executive Summary
 - **b.** Outcome of the Municipal Readiness Assessment
 - **c.** Background including Feasibility Study Planning activities
 - **d.** Approach and methodology to the Feasibility Study
- 5. Project Definition and Needs Assessment
- **6.** Technical and Financial Solutions Options Analysis
- 7. Economic Viability Assessment
- 8. Legal and Regulatory Review
- 9. Stakeholder Engagement Plan
- 10. Procurement Plan
- 11. Recommendation for Preferred Outcome
 - a. Collation of above assessments and studies
 - **b.** Request for Feasibility Study approval

4 STAGE 3: FEASIBILITY STUDY APPROVALS

4.1. MUNICIPAL COUNCIL CONSENT TO PROCEED TO PROCUREMENT PHASE

As with section 120 of the MFMA in respect of PPPs, once the Feasibility Study Report has been completed, the municipality should table the report for submission to the municipal council for an in principle decision on whether the Feasibility Study supports the procurement of an IPP.



Decisions of Municipal Councils versus decisions of Municipal Managers

The Municipal Structures Act, the Municipal Systems Act, and the MFMA provide clear guidance on the administrative roles and responsibilities of municipal managers and the oversight role of a municipal council. These statutes recognise the municipal council as the highest authority in the municipality and strengthens the power of the council by vesting it with significant powers of approval and oversight.

Given the importance of the approval and oversight role of councillors, the Municipal Systems Act and the MFMA separate the policy-making responsibilities of municipal councillors from the implementation role of the municipal officials.

A decision to undertake a feasibility study for a Municipal IPP is both an administrative decision (from a budgeting and resourcing perspective) as well as a matter of policy (aligning with the Municipality's IDP relating to the procurement of power from IPPs).

For this reason, the municipal council should approve by way of a resolution any recommendation made by the municipality and signed off by the municipal manager to commence a Feasibility Study for an IPP.

4.2. PRELIMINARY STAKEHOLDER ENGAGEMENT

Under local government legislation, municipal council decisions need to be informed by the views of a number of stakeholders. In addition to the recommendation of the municipality's administration based on the Feasibility Study Report, the views of the community and key government stakeholders need to be taken into consideration in the deliberations of the municipal council.



Although a municipality is not formally required to comply with a public consultation process, section 120(6) of the MFMA relating to PPPs is instructive and provides a structured basis for soliciting the views of stakeholders. As such, prior to submitting the Feasibility Study Report to the municipal council for approval, it is recommended that municipalities engage in the following stakeholder consultation process which mirrors the process in section 120(6) of the MFMA in relation to PPPs and should be more fully articulated in the Stakeholder Engagement Plan:

- STEP 1: Through the communications channels and methods described in section 21 of the Municipal Systems Act, the municipality should make public the particulars of the proposed IPP and relevant experts of the Feasibility Study Report in order to solicit comments from the local community.
- STEP 2: In addition, the municipality must make available the Feasibility Study Report for review and comment to the key government stakeholders. At a minimum this includes National Treasury, Co-operative Governance & Traditional Affairs (CoGTA), the Department of Energy and Electricity as well as SALGA.

- STEP 3: Once feedback on the Feasibility Study Report is received from the community and the key stakeholders, the municipality must consider whether to update the Feasibility Study Report with such comments, or not. A register of comments and responses must accompany the Feasibility Study Report when it is submitted to the municipal council for deliberation.
- **STEP 4:** A municipality may also, prior to the sitting of the municipal council determine that the consent of the Minister of Energy and Electricity is required in terms of Regulation 5(3) of the New Capacity Generation Regulations.
- STEP 5: A municipal council may, after considering the recommendations of the municipality, the views of the community and key stakeholders as well as whether the Feasibility Study Report aligns with the municipality's IDP, pass a resolution permitting the municipality to commence in the Procurement Phase.



Consent of the Minister of Energy and Electricity in terms of Regulation 5(3) of the New Generation Capacity Regulations

The New Generation Capacity Regulations were amended in 2020 to include provisions relating to municipalities procuring new generation capacity. Municipalities have experienced challenges interpreting the requirements under Regulation 5(3) requiring the Minister's prior consent to procurement of new generation capacity from IPPs.

Some of the principal issues that municipalities have grappled with include:

- Whether municipalities can procure new generation capacity from an IPP outside of a section 34 ministerial determination. There is case law where a municipality challenged whether a section 34 determination is a prerequisite for concluding a PPA with an IPP. The courts have commented in obiter that the New Generation Capacity Regulations must be applied to all new generation capacity procured from IPPs by municipalities.
- The New Generation Capacity Regulations provide no guidance to municipalities seeking the Minister's approval as to the criteria that will be applied by the Minister in considering applications under Regulation 5 (3), or the timing for the Minister's consent. This creates a risk for municipalities having budgeted for costly feasibility studies and spent the time undertaking such studies only to have the Minister potentially reject such application, or not respond to their application.
- The ability for NERSA to police whether the Minister's approval has been given for a IPP procurement has bene diminished by the fact IPPs no longer need to apply to NERSA for a generation license following the amendments to Schedule 2 to ERA.

In the light of the above interpretational difficulties, municipalities must as part of the feasibility study obtain a legal opinion on the application of Regulation 5(3) of the New Generation Capacity Regulations and whether Ministerial consent is required for a municipality to procure electricity through an IPP.





MUNICIPAL IPP PROCUREMENT PHASE

MODULE I Municipal IPP Project Preparation Phase

Planning and Municipal Readiness Assessment

Feasibility Study

STAGE 3
Feasibility Approvals

2

MODULE 2
Municipal IPP Project
Procurement Phase

STAGE 1
Procurement Preparation Activities

STAGE 2Procurement Design Concepts

STAGE 3
Preparation of Bid Documentation

STAGE 4
Procurement Process

3

MODULE 3

Municipal IPP

Implementation Phase

STAGE 1
PPA Management Plan

STAGE 2
Periodic Review of PPA and
Amendment of PPA

1 INTRODUCTION

1.1. ELEMENTS OF A SUCCESSFUL IPP PROCUREMENT

In entering the Procurement Phase, municipalities will be alive to the pressing need to make their municipal IPP procurements successful. Lessons can be drawn from South Africa's REIPPPP. Industry experts commenting on the success of the REIPPP have identified certain key elements that need to be present in order for an IPP procurement to result in success:

- 1. There needs to be a clear enabling policy and regulatory environment;
- 2. Mandated, authorised leadership to manage the procurement programme;
- 3. Adequate resources for hiring experienced transaction advisors;
- 4. A procurement process that is credible, predictable, and well organised;
- 5. High quality, bankable procurement documentation and government agreement (inducing the PPA);
- **6.** Extensive public and private consultation to cultivate the trust of all stakeholders in a fair and transparent manner; and
- **7.** Relying on successes such as the REIPPPP to ensure that capital markets provide adequate and competitively priced funding.

All of these factors are addressed in this Manual and will be developed more fully in this Module 2.

Three particular successes of the REIPPPP which bear mention include the rigorous and well-structured procurement process which has resulted in enhanced competition (and by extension the exclusion of any opportunity for rent-seeking or corruption) and cheaper pricing. Moreover, the REIPPPP has been successful in delivering broader social and economic benefits. Of all the large government procurements, the REIPPPP has arguably delivered more immediate ED benefits to communities than any other programme of its kind. There are nevertheless lessons that can be drawn from the REIPPPP, particularly as the bid windows have progressed and the design and execution of the ED commitments honed and improved with each successive round. It is therefore crucial that the ED component of IPP procurement is designed in a way that will not create unintended negative impacts. Finally, having an able and experienced transaction advisory team has been a leading determinant between success and failure.

In the chapters below, we draw on a number of the successes and lessons from the REIPPPP to help guide municipalities in achieving successful municipal IPP procurements.

1.2. OVERVIEW OF THE PROCUREMENT REGULATORY FRAMEWORK

A municipality needs to have in place a procurement framework in the form of a Municipal SCM Policy, which together with the Procurement Plan developed as part of the Feasibility Study, form the backbone of the Procurement Phase. Below is a brief summary of the procurement regulatory framework as it applies to municipal procurement of IPPs.

The starting point of all government contracting is Section 217(1) of the Constitution which requires that when an organ of state in the national, provincial or local sphere of government or any other institution identified in national legislation contracts for goods or services it must do so in accordance with a system which is fair, equitable, transparent, competitive, and cost-effective.

Constitutional principles relating to Government contracting

All government contracts for goods and services need to be concluded in accordance with a system which is fair, equitable, transparent, competitive, and cost-effective.

The principle of fairness and equitability indicates that the procurement process must be procedurally fair, i.e. bidders must be afforded equal access to participate in the competition, both in terms of receiving the same information as well as time to respond to a tender invitation.

An "equitable" procurement system should reflect the underlying aim of the Constitution to ensure that historical imbalances of race, gender, etc., are remedied. The equitability requirements are inter alia given effect to the PPPFA which is enacted in terms of section 217(2) of the Constitution.

Transparency relates to openness and accountability in the process in that organs of state must not procure goods and services behind closed doors. Transparency applies throughout the tender process and places an obligation on organs of state such as municipalities to share decisions made about the tender process openly and to be held accountable for tender decisions.

Competitiveness and cost-effectiveness require organs of state to make use of competition in order to procure goods and services at the lowest possible cost which leads to cost-effectiveness or value for money. While there may be other benchmarks for testing value for money the Constitution prescribes competition as the main driver for cost -effectiveness.

Following on from this obligation, Chapter 11 of the MFMA applies to goods and services and provides for a municipal supply chain management regime which also applies to procurement of IPPs. Chapter 11 provides a framework which guides municipalities on what policies it needs to put in place to carry out its procurement functions. While sections 112 and 115 of the MPMA set out the underlying principles related to supply chain management, most of the guidance with which a municipality's procurement process must comply is set out in the Municipal SCM Regulations. Municipalities have some flexibility when it comes to tailoring their SCM policies however the framework in section 112 and the Municipal SCM Regulations is prescriptive.

The Municipal SCM Regulations limit the standard procurement options to the following as set out in Regulation 7(2):

"A supply chain management policy must, subject to regulation 11(2), provide for the procurement of goods and services by way of:

- **a.** Petty cash purchases, up to a transaction value of R2 000 (VAT included);
- **b.** Written or verbal quotations for procurements of a transaction value over R2 000 up to R10 000 (VAT included);
- c. Formal written price quotations for procurements of a transaction value over R10 000 up to R200 000 (VAT included); and
- **d.** A competitive bidding process for:
 - i. Procurements above a transaction value of R200 000 (VAT included); and
 - ii. The procurement of long-term contracts."

Based on the above financial thresholds, given that the contract value of a PPA with an IPP will exceed R200 000 (including VAT), the default process for any municipal IPP procurement process would be a competitive open process undertaken under the MFMA, the Municipal SCM Regulations and the municipality's SCM Policy.

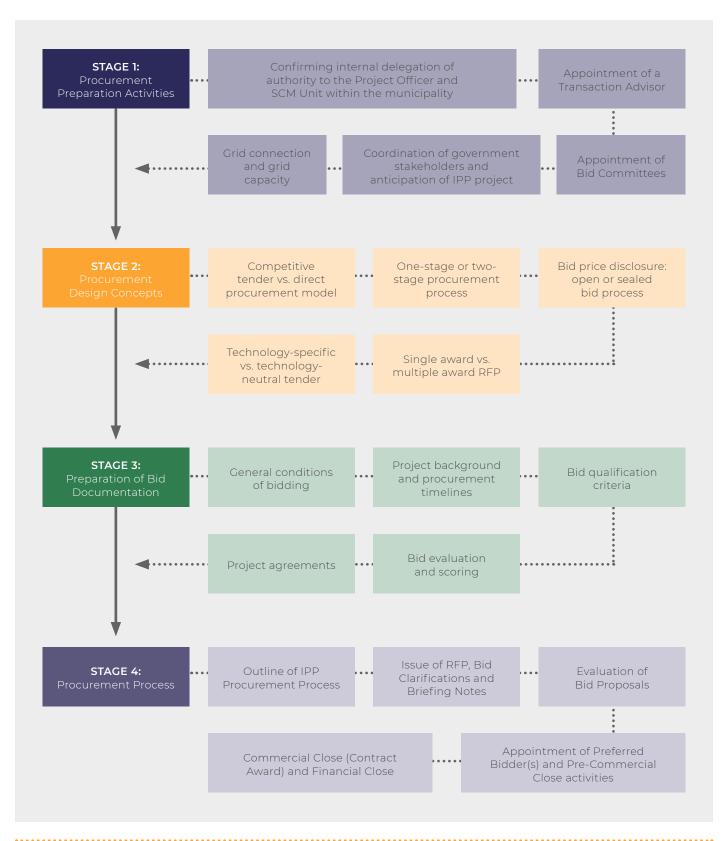
In accordance with the Municipal SCM Regulations, the SCM Policy of a municipality must prescribe procedures for a competitive bidding process for each of the following stages:

- 1. Compilation of bidding documentation;
- 2. Public invitation of bids;
- 3. Site meetings or briefing sessions, if applicable;
- **4.** Handling of bids submitted in response to public invitation;
- 5. Evaluation of bids;
- 6. Award of contracts;
- 7. Administration of contracts; and
- 8. Proper record keeping.

The process that should be followed for such an open procurement process is well known by municipalities. In the following sections, we have detailed specific features of a municipal procurement as it may pertain specifically to the procurement of an IPP with the intention of concluding a PPA at the end of the procurement process.

Return to Table of Contents

1.3. ROADMAP OF MUNICIPAL IPP PROCUREMENT PHASE





STAGE 1: PROCUREMENT PREPARATION ACTIVITIES

The procurement of an IPP is initiated with the release of tender documents to prospective bidders. Before doing so, however, there are a number of key preparatory activities that should be undertaken by the municipality in the procurement preparatory phase to give the procurement process the greatest possibility of success.

There are procurement preparation activities that a municipality can commence internally, whereas other activities require the assistance of a duly appointed transaction advisor.

The key procurement preparation activities to be undertaken by a municipality prior to the onboarding of a transaction advisor are:

- 1. Confirming the delegation of authority to the project manager and SCM Unit within the municipality;
- 2. Where necessary, appointing a transaction advisor;
- **3.** Appointing members to various committees identified in the Procurement Plan and established for the Procurement Phase;
- **4.** Engaging Government stakeholders in anticipation of IPP project; and
- **5.** Reassess grid connection and grid strengthening requirements.

2.1. CONFIRMING DELEGATION OF AUTHORITY TO THE PROJECT OFFICER AND SCM UNIT WITHIN THE MUNICIPALITY

The team leader or project officer appointed by the municipality in the IPP Preparation Phase, and responsible for coordinating the feasibility study stage, should ideally continue in her / his role, provided he / she have met the KPIs linked to the role and delivered on his or her mandate.

The importance of an experienced and competent project officer as well as an internal SCM Unit capacitated with people with the necessary technical and financial expertise to procure new generation capacity and to run the procurement process, cannot be overstated.

If the project manager appointed by a municipality is an external party, the municipality may need to extend her or his appointment, depending on the terms of his consultancy agreement. Regardless of whether or not the project officer is an internal or external placement, the municipality's SCM Unit must ensure that the requisite delegations of authority are in place to allow the team leader or project officer and the SCM Unit supporting her or him to take decisions freely and without interference, provided these are always exercised within the authorisation framework of the delegated powers as well as the applicable procurement regulatory framework.

If for any reason, the municipality needs to appoint a new team leader or project officer, a suitably experienced candidate will need to be appointed. The project officer is someone with extensive experience working both within a government institutional setting as well as with the private sector (consultants, developers, contractors, lenders, etc.), someone that has experience in PPPs, IPPs, and preferably the renewable energy sector, as well as someone who has a working understanding of power purchase agreements and the various contracting arrangements associated with an IPP procurement.

Where a metropolitan or district municipality intends to adopt a programmatic approach by procuring multiple municipal IPPs, consideration may be given to establishing an internal unit (within its SCM Unit or within a municipal entity) dedicated to procuring power or new generation capacity. This decision, however, will have strategic and budgetary impacts for a municipality, and needs to be adequately provisioned for in the IPP Preparations Phase (Municipal Readiness Assessment).

2.2. APPOINTMENT OF A TRANSACTION ADVISOR

A preliminary step, before developing appropriate tender documentation, is for a municipality to ensure that it has a competent transaction advisor with expertise across a number of disciplines to guide it through the IPP procurement phase.

The transaction advisor appointed by a municipality for the IPP Preparation Phase, mandated to undertake the feasibility study report is likely to have been appointed for both the feasibility study stage as well as the procurement stage. The municipality's contract with the transaction advisor, however, may contain a provision permitting the municipality to re-tender the services at the procurement phase. It may be in the municipality's interests to run an expedited competitive tender process for transaction advisory services for the IPP procurement phase especially where the budget for the transaction advisor still needs to be secured by the municipality or is based on assumptions that are no longer applicable and require updating and a repricing of services. The procurement Phase of a municipal IPP is intense and complex, and there is not a lot of precedent for IPPs at local government level. It is therefore crucial that a municipality feels that it is in safe hands.

Finding a reputable transaction advisor with a solid track record in renewable energy procurement will inevitably come at a cost to the municipality. It is highly unlikely that this role could be occupied by service providers to the municipality's pre-selected panels for municipal services. There are not many consultants in the local South African market with these skill sets, and their specialism commands a premium. It is therefore critical that a municipality provisions financially for a transaction advisor appointment. Most municipalities will not have adequate internal financial resources to cover the cost of the transaction advisor, and therefore. with the assistance of industry associations like SALGA, a municipality should at the very earliest stages after the feasibility study is approved by its municipal council source the necessary funding for a transaction advisor. There are various development cost facilities available, usually from development financing institutions such as the DBSA which are repayable on a procurement success basis, and there is also the possibility to apply for grants from the National Treasury.

To mitigate some of the high costs of a transaction advisor, it may be that a municipality requires bidders to pay a registration fee in order to receive the RFP documentation. It is also possible to build into the project agreements a project development fee equal to a percentage of the total project costs that would help a municipality recover costs related to the preparatory and procurement phases.

2.3. APPOINTMENT OF COMMITTEES IDENTIFIED IN THE PROCUREMENT PLAN

An important preliminary activity is for the municipality to give effect to the requirement in its Procurement Plan to appoint members to each of the committees needed for the Procurement Phase including bid specification, bid evaluation, and bid adjudication committees.

The skill sets of the parties selected to sit on the bid specification and evaluation committees should consist of specialists in various areas (financial, technical, ED, and legal) and ideally be a combination of both internal municipal resources as well as external expert advisors (usually part of the transaction advisory team).

The size of the bid evaluation committee should also be set at a level that does not render the committee's work difficult to achieve due to being unusually large and unwieldy, but also of reasonable size to have a representative cross-section of views. Technical evaluation teams arranged according to each discipline evaluating bids should be established and inform the BEC of specialist feedback.

Each committee member should be given a formal mandate by the municipality to sit on a particular committee and the functions and output of each committee should be made clear to those members appointed to a committee.

The bid adjudication committee may be specifically appointed for the project from senior municipal officials and officials from relevant ministries, or a standard bids adjudication committee. If the latter, a municipality should consider inviting additional members from affected ministries.

2.4.ENGAGING GOVERNMENT STAKEHOLDERS IN ANTICIPATION OF IPP PROJECT

It is at this preliminary stage that a municipality should start considering the various government actors and stakeholders involved in an IPP project. While permitting and licensing risk remains the responsibility of the IPP, a municipality has a vested interest to ensure that all necessary consents and approvals required by the IPP are provided by other responsible authorities timeously so as to prevent delays in implementing the PPA.

Where the municipality is providing land for the IPP procurement phase, the municipality may have taken the view, as part of the feasibility study and in an effort to bridge the time period between contract award and effective date under the PPA, that it should take steps to commence site enablement activities including the consent application process, even though such consents remain the responsibility of the IPP. Engagements between the municipality and affiliated government departments should begin at this early stage of the procurement process, anticipating that such processes are complex and, in some instances, iterative, particularly where the consenting authority requires additional information to deliberate on the application.

Arguably the most important government stakeholder that a municipality needs to start engaging at this stage is Eskom, especially given that large parts of the distribution network are owned and operated by Eskom. A municipality will need to amend its electricity supply agreement with Eskom to account for the energy purchase from an IPP. Depending on where the IPP project will be located it may need to connect to the Eskom distribution or transmission network, and the IPP would need to sign a grid connection and use of system agreement with Eskom. Eskom is therefore a key role player in the success of a municipal IPP and early engagements will mitigate the risk of delay after the PPA is signed and the contract awarded.

2.5. RE-ASSESS GRID CONNECTION AND GRID CAPACITY REQUIREMENTS

In the IPP Preparation Phase (under Module 1), and specifically the feasibility study, the Municipality would have undertaken a grid assessment to determine whether an IPP would be able to connect to the municipal grid or it would have determined whether some grid strengthening work needed to be undertaken.

Where the grid is owned by the municipality, and it forms part of the municipality's IDP to expand its grid capacity (either specifically for an IPP or more generally to provide greater grid capacity), then based on costing reviews performed at the Feasibility Study Stage, as updated (where relevant), a municipality will need to start the process of both budgeting for such grid strengthening and also giving consideration to the procurement of an appropriately qualified professional team who can manage the process of, developing a specification, procuring and appointing a suitable contractor, and overseeing the grid strengthening works.

In addition to potential grid strengthening, the municipality needs to prepare for the process where IPPs would approach the municipality during the Procurement Phase to establish the cost of connecting their prospective plants to the municipal distribution grid, where this is applicable. The municipality should decide whether it will issue a cost estimate letter itself, or whether it would provide the IPP with the necessary information and specifications and allow the IPP to undertake their own cost estimate under a self-build option. The self-build electricity connection option will enable the IPP to control the timing of their connection and, to a greater extent, the cost of the connection. It will also avoid the municipality having to prepare multiple cost estimates for a number of potential IPP projects.9

⁹ Eskom's self-build policy and requirements provides guidance as to the structure and requirements under such a self-build option and can be found <u>here</u>.

3 STAGE 2: PROCUREMENT DESIGN CONCEPTS

3.1. A FULL AND DETAILED UNDERSTANDING OF THE PROJECT

As stated in section 2.2 the appointment of transaction advisors for the procurement phase is a critical preparatory activity the Municipality needs to undertake. Part of the procurement preparation activities, once the above initial activities have been completed and a transaction advisor is contracted to the municipality is for the transaction advisor to review the feasibility study outputs and specifically the output specifications and procurement plan, as this forms the basis of what needs to be procured and the basis of the municipal council's approval of the procurement.

Before designing the procurement documents, the project objectives and scope need to be clearly and concisely summarised, in terms of intended outcomes, supported by expected project outputs. This statement should then be the introduction in every subsequent procurement document. The affordability limits should also be clearly documented as this will form a key parameter that will be assessed once bids have been submitted.

The Procurement Plan compiled as part of the Feasibility Study would have set out the timelines, institutional arrangements, processes and strategies to be applied during the Procurement Phase. The Procurement Plan should continue to inform the roll out of the Procurement Phase and will need to be continuously updated throughout the Procurement Phase as the planning tool for all activities. The Procurement Plan and Feasibility Study would have also identified broad risk allocation principles. These principles need to be confirmed, and any other concepts need to be identified and developed. The municipality would need to agree and approve all procurement concepts. These concepts will form the basis of the drafting the procurement documents and the PPA.

The transaction advisor should also consider the design of the procurement process and develop the relevant procurement documentation.

In designing a suitable procurement process for a municipal IPP, consideration should be given to the following concepts:

- 1. Competitive tender versus direct procurement model;
- 2. One-stage or two-stage tender process;
- 3. Bid price disclosure: open or sealed bid process;
- 4. Single versus multiple bids; and
- 5. Technology specific versus technology-neutral tender.



3.2. COMPETITIVE TENDER VERSUS DIRECT PROCUREMENT MODEL

As noted in the introduction to this Module 2, in terms of procurement regulation and the prescription under the Municipal SCM Regulations, a municipality is required to follow a competitive tender process in procuring a municipal IPP given the contract value of the procurement. Deviations from a competitive tender process are permitted in exceptional and limited circumstances.

There are many benefits to a competitive tender process. Chief amongst these is that a competitive tender process is likely to yield appropriate market-related prices from bidders and will produce a better pricing outcome for the municipality given that pricing competition remains a driver up until contract award. Price is also a compelling reason for why unsolicited bids should be treated with caution by municipalities. Despite its SCM Policy allowing this regime; unsolicited bidders seldom advance because procuring authorities lack the capacity to assess whether an unsolicited offer is competitively priced. In the context of IPPs where the most compelling criterion is the tariff offered; unsolicited bids make little sense.

Deviations from a Municipality's SCM Policy

Regulation 36(2) of the Municipal SCM Regulations provides that the SCM policy of a municipality may allow the accounting officer to deviate from the policy in certain circumstances, and Regulation 36(1)(a) of the Municipal SCM Regulations allows the accounting officer to dispense with a competitive tender process and to procure any required goods or services through another process "where it is impractical or impossible to follow the official procurement processes".

In terms of the Supply Chain Management Guide for Accounting Officers of Municipalities and Municipal Entities issued by National Treasury, it will be considered impractical to invite competitive bids under the following circumstances:

- **a.** Emergency cases: cases where immediate action is necessary in order to avoid a dangerous or risky situation or misery or disaster such as floods and fires;
- **b.** In case of a sole supplier;
- c. For the acquisitioning of special works of art or historical objects where specifications are difficult to compile;
- d. The acquisitioning of animals for zoos; or
- e. In any other exceptional cases.

This is a closed list of grounds for a deviation, and of the grounds listed, there are none that stand out as clearly forming a basis for a municipality deviating from a competitive tender process when procuring electricity from a municipal IPP. The exception to this is when a municipality purchases small volumes of electricity from a SSEG generator. In such instances it would be impractical to undertake a competitive tender process.

3.3. ONE STAGE OR TWO STAGE PROCUREMENT PROCESS

There is no requirement, in the Municipal SCM Regulations, for a municipality to conduct a two-stage procurement process when procuring goods and services. A two-stage tender process where bidders are first invited to pre-qualify in terms of their relevant capability (expertise and experience) as well as their financial strength is recommended for large infrastructure procurements to ensure that only bidders capable on paper of delivering the infrastructure and related service prepare a proposal. While there is merit in this approach, the disadvantage is that it can extend the duration of the procurement phase, which becomes protracted and expensive. When added to the already protracted procurement process owing to compliance with public consultation processes regulated under municipal legislation for high value contract with longer contract terms, a two-stage process is perceived as offering less than more benefits to local government procurement. The benefits of a speedier procurement process for government needs to be balanced against the financial impact on bidders who are required to absorb higher bid costs to prepare fully developed bids without the benefit of knowing that they are prequalified to do so.

The more recent approach across the three spheres of government, including on the REIPPPP bid windows has been to dispense with a prequalification phase due to the additional time it would add to the procurement process, and opting instead to follow a one-stage combined Request for Qualifications and Proposals that allowed only 3 months for bid preparation. The time savings in this approach are regarded as being more cost effective for government given that a prequalification round involves additional documents and evaluation, adding to the cost of the transaction advisors. The need for a more expedited procurement process is also a priority if one considers the rationale for municipal IPP procurement which is largely motivated by the likelihood of power supply shortages and the need for additional new generation capacity to come online rapidly.

Apart from the decision by a municipality on whether or not to structure its procurement as a single or split- out procurement process, the Municipality should also consider whether there is a need or whether the procurement could benefit from either a Request for Information or Expression of Interest process which may be issued prior to formally commencing the procurement process.

The advantage of both a Request for Information and an Expression of Interest is that a municipality can make an informed decision, based on market interest, about whether to proceed with a project. If used, it should be early in the Procurement Phase as part of the Bid Design process, or before the procurement phase, or as part of the Feasibility Study once the preferred technical solution option has been identified. If undertaken as part of developing the procurement documents, it serves the dual purposes of helping to solicit important information as to the appetite for an IPP but also provides the market with an indicator or signal of a pending procurement and its intended timeframes which may assist interested parties with initiating their developmental activities.

3.4.BID PRICE DISCLOSURE: OPEN OR SEALED BID PROCESS

An important procurement design question is to consider whether bids are provided on a sealed bid basis or an open bid basis.

A sealed bid tender is one in which all bidders are required to submit proposals by a predetermined date and time as set out in the RFP and do not know what others have bid, due to strict confidentiality undertakings contained in the RFP. Because they may only bid once, they are unable to

adjust their proposal based on competing bids. An open bid tender, on the other hand requires that all bids submitted in accordance with the timeframes contained in the RFP to be opened in public, and that the bid prices be disclosed in public, the rationale for which is that there can be no adjustment by corrupt officials or respondents during the bid evaluation process. An open bid tender approach is seen to counter any unethical behaviour in the procurement process and promotes transparency and accountability by the procuring municipality.

The Supply Chain Management Guide for Accounting Officers of Municipalities and Municipal Entities issued by National Treasury encourages an open bid tender process. Its guidance to municipalities is as follows:

"The municipality / municipal entity should open all bids at the stipulated time and place. Bids should be opened in public, that is, bidders or their representatives should be allowed to be present. If requested by any bidder, the name of the bidders and if practical the total amount of each bid and of any alternative bids, should be read aloud. The names of the bidders and their individual total prices should be recorded when bids are opened." [para 4.5.4 Supply Chain Management Guide for Accounting Officers of Municipalities and Municipal Entities, 2014]

Municipalities need to weigh up the benefits of price disclosure and transparency in an open bid tender process against the confidentiality undertaking associated with IPP procurement where bidders are usually required to submit a signed undertaking at bid submission that they have not discussed their bids with competitors. The National Treasury's SCM Guide for Municipalities is written in the context of procuring smaller less sophisticated goods and services where an open bid tender procedure is justified. Pricing confidentiality is required in an increasingly competitive market and the REIPPPP (which is designed on a sealed bid tender process) has shown that this method is relatively straight forward to implement and can achieve substantial competition, with price reductions.

3.5. SINGLE AWARD VERSUS MULTIPLE AWARD RFP

A municipality's decision on whether to issue a single bid for a single municipal IPP, or multiple bids across multiple rounds of bids or bid windows will depend on a number of factors including:

- **1.** The maximum size of the procurement programme in respect of capacity; and
- **2.** The maximum and minimum sizes of individual projects.

In a multiple award procurement, the RFP is designed to procure a number of qualifying projects up to a maximum threshold of MW for bidders who pass the threshold criteria and are ranked first according to price and SED, as required in terms of the PPPFA. On the other hand, single award projects are structured so as to solicit offers from bidders for a single project and evaluate all bidders against each other to award to one Preferred Bidder. This approach may be more appropriate for municipal IPPs where a particular municipality-owned site has been selected to make available to an IPP in the vicinity of the distribution network. It may also be appropriate for a biogas or landfill project which is adjacent to or to be constructed over an existing municipal sewage or landfill site. The multiple award RFP has been used by metropolitan municipalities such as Ekurhuleni Municipality.

Part of the decision to run a single award RFP or a multiple award RFP is the size or capacity being offered to IPPs in the procurement. Municipalities would have done a lot of the groundwork in the Project Preparation Phase as part of the Feasibility Study to determine its overall capacity requirement and at this Bid Design stage, the decision is whether or not to meet its total capacity requirement through a single award RFP for one or more technologies, or whether to make small blocks of capacity available for tender but in a single procurement round. As pointed out above, this could encourage more competition rather than to procure the entire capacity requirement in a single procurement.

Other factors that may influence the minimum and maximum sizes of individual projects to be included in the procurement are:

- Depending on where the IPP intends to connect to the municipal distribution network and the grid capacity at that point could result in a limitation on project size;
- If land availability is constrained it may be beneficial to have a lower minimum capacity to encourage participation by more bidders; and
- The minimum project size should also not be too small
 as the effort in developing and cost of funding a project
 is significant, and it may not result in economies of scale.
 Bidders offering smaller sized projects should still be
 allowed to participate, provided they find innovative ways
 to reduce costs to be competitive with larger projects
 benefiting from scale.

Ultimately the principle of setting the minimum and maximum individual project size in a procurement programme should ensure that the resultant output meets with the objectives and outputs specifications set and developed as part of the Feasibility Study, while at the same time resulting in optimised competition to ensure the municipality achieves value for money in its procurement process.

3.6. TECHNOLOGY SPECIFIC VERSUS TECHNOLOGY NEUTRAL TENDER

The Feasibility Study Report would have, in the technical solution options analysis explored a range of the different technologies for new generation capacity. The selection of technology would have been driven by the strategic objectives of the municipality. For example, if reduction in the cost of supply was the key driver, then lower cost technologies, i.e. wind and solar are likely to be the recommended technologies. Where the strategic objective of the municipality was to provide dispatchable base load or mid merit electricity, then a combination of technologies or a technology agnostic approach may be more appropriate allowing the private sector to determine the optimal solution to provide the base load or mid merit electricity.

The decision on whether or not to be technology specific or technology neutral may be informed by a number of factors. If the decision is evidence-based, then the market has shown under the numerous rounds of the REIPPPP that IPP developers are for the most part technology neutral and will choose the technology that provides the greatest cost benefits and the greatest price reductions. All of these considerations would have been thoroughly assessed during the Preparation Phase in the Feasibility Study and should only be reconsidered if any new issues or risks have been identified in the Procurement Phase.

4 STAGE 3: PREPARATION OF THE BID DOCUMENTATION

Once the procurement structure or design is decided, it will be necessary to prepare high quality, bankable Bid Documentation. This includes preparing a combined Request for Qualification and Proposal. The structure of the RFP will in large part be dependent on the decisions above related to the design of the procurement.

There are certain standard features of an RFP for new generation capacity that would need to be included as part of the RFP, which are premised on the two distinct stages in the bid evaluation process.

These are:

- STAGE 1: compliance requirements, outlined in the General Conditions (including Project Terms of Reference) and Bid Qualification Criteria; and
- STAGE 2: Scoring criteria, outlined in the Bid Evaluation Criteria.

In the first stage, bid submissions are assessed to determine whether they are compliant bids in that they meet both General Conditions or requirements and meet or exceed numerous prescribed technical, financial and legal thresholds to qualify for the second stage. The second stage involves the comparative evaluation of all compliant bids based on price and a matrix of economic development criteria.

With the above stages in mind, generally speaking the RFP should be structured into the following sections:

- **1.** General conditions of bidding including response schedules and standard bidding documents
- 2. Project Background (Terms of Reference) and Timelines
- 3. Bid Qualification Criteria
- 4. Bid Evaluation and scoring
- **5.** Project Agreements including a non-negotiable PPA, a direct agreement and a government underwriting or implementation agreement, independent engineer agreement, grid connection agreements.

4.1. GENERAL CONDITIONS OF BIDDING

The table below sets out typical *provisions* in the *General*Conditions section of the RFP (usually described as Part A).

The information below should be used to supplement the MBDs issued by the National Treasury and which National Treasury requires municipalities to apply in their supply chain management. Where the procurement of a municipal IPP requires a municipality to dispense with the MDBs or amend them to cater for the more complex procurement of an IPP, the municipal manger as the accounting officer has the discretion under the MFMA to allow for such departure, although these should be kept to a minimum to ensure the support and buy-in of the National Treasury as a key government stakeholder.



Table 19

General Condition	Requirement
Bid Notice and Invitation to Bid	The invitation section usually provides a very high overview or description of the project and the municipality's strategic goals and provides general requirements for participation by bidders.
	This section should provide details in respect of the deadline for submission of bids, process of raising clarifications and the municipality's right to cancel the tender.
	It should also contain a disclaimer by the municipality to ensure that no bidder has legal recourse to the municipality in the event of a suspension or cancellation of the tender process.
	Where municipalities make use of prescribed Municipal Bid Document (usually MDB 1) for the invitation, then the above information must be completed on the prescribed MBD.
Definitions	A glossary of terms or definitions and acronyms as well as an interpretation provision should be included as part of good practice.
Eligible Bidders, Documentation Fee	Information guiding potential bidders as to the structure of their bidding consortium, bidder representatives, declaration of interest, and non-eligible persons.
and Registration	There may be a requirement for bidders to pay a non-refundable documentation fee to be eligible for participation in the tender and to receive the RFP document.
	In addition to paying the above documentation fee, it may be a compulsory requirement for bidders to complete a registration form on or before the prescribed bid registration date.
	The compulsory registration allows the municipality to prepare for the bid evaluation process as it would have a view of the number of bid submissions that may be expected.
	As part of a compulsory bid registration process, bidders may be required to notify the municipality of:
	Their intended project technology,
	Contracted capacity,
	If not a municipally chosen site, the site name and co-ordinates,
	Co-ordinates of the substation for the intended connection,
	Whether it will connect to the transmission or distribution system, and
	Information on the identity of all project participants and their advisors.
Bidder Briefing Sessions and	The RFP should stipulate whether a briefing session will be held and whether attendance will be compulsory, and therefore indicate if attendance is a compliance requirement.
Briefing Notes	The RFP should also set out a system for how briefing notes will be issued by the municipality. Briefing notes are usually issued on an ad hoc basis, either to supplement or amend information in the RFP or in response to a bidder-requested clarification. They are thereafter deemed to be part of the RFP and require equal compliance upon bid submission. The RFP should stipulate a cut-off date for bidder clarifications and also a date on which the municipality will release the last Briefing Note before the relevant bid submission date, usually 10 days before bid submission.
Bid Guarantee and Preferred Bidder Guarantee	The General Conditions may require as a bid submission requirement that bidders are required to provide the municipality with an unconditional irrevocable Bid Guarantee. The RFP should also stipulate that if a bidder is provisionally informed of its preferred bidder status, that as a condition of such status, it will be given a time period (15 days is deemed sufficient time) in which to lodge a new guarantee, a Preferred Bidder Guarantee with the municipality, usually for a larger guarantee amount. Only thereafter will it officially be appointed as a Preferred Bidder.
	The purpose of bid guarantees is to discourage bidders from submitting unrealistic proposals by inexperienced bidders who subsequently struggle to finance and deliver on their project. The inclusion of high penalty costs helps to ensure that bids are as fail-safe as possible. For this reason, the General Conditions should stipulate the circumstances under which the bid guarantee can be drawn on by the municipality.
	In the REIPPPP, the preferred bidder guarantee stipulated that where a preferred bidder failed (i) to comply with any conditions contained in the preferred bidder letter of appointment or (ii) to conclude any of the required project agreements or (iii) to obtain the necessary consents for its project within the time period specified under the RFP, this would provide grounds for the guarantee to be drawn by the IPP office. Similar conditions should be considered when deciding whether to require a big guarantee and importantly an appropriate quantum that will achieve this objective.

General Condition	Requirement
Bid Evaluation and Submission Response Format	The RFP must provide clarity as to the manner in which bids will be evaluated for both in terms of meeting completeness and compliance requirements and then for purposes of scoring. Bidder must be provided with clear instructions on the format of bids and the returnable documents for purposes of a completeness check.
	The standard administrative bidding requirements under the MFMA, such as standard bidding documents as published by the National Treasury would also need to be detailed in this section of the RFP.
Bid Validity Period	The RFP should stipulate a bid validity period, in other words that bid submissions constitute valid and irrevocably binding offers for a number of calendar days from the bid submission date. The RFP should also reserve for the municipality the right to request an extension of this period and specify a time period in which the bidder will be required to respond, should they agree to such extension. It is important to consider the complexity of the process as well as the readiness requirements in the
	qualification criteria in setting the bid validity period. It is typical to have a bid validity period of 180 to 270 days. Once a bidder is appointed as preferred bidder it will also be required to extend its bid validity period up to the scheduled commercial close period.
Any other pertinent information	The General Conditions should also include any other information relevant to bidding that may not be suitable to include as qualification criteria. This could include the process that will be followed at commercial close to ensure no ambiguity as to this process which may result in unexpected events that the bidder was not aware of.
	An important consideration that needs to be clearly communicated is whether there will be any adjustment to the bidder's price after bid submission for risks that the municipality decided to retain. This could include allowing an adjustment at commercial close for movement in foreign exchange and interest rates from bid submission to commercial close. This is a risk typically borne by the procurer as the IPP cannot hedge this risk until commercial close is reached.
	Other components of the price that may be adjusted at commercial close is the cost of grid connection, if the cost estimate of grid connection was not required to form part of the price at bid submission or if the cost includes an energy cost for example where feedstock like gas is included in the tariff structure or where battery storage systems will charge using the Eskom tariff structures these may be adjusted.

4.2. PROJECT BACKGROUND AND PROCUREMENT TIMELINES

The RFP should include a section, either in the General Conditions section (Part A) or as a separate section which describes in more detail the proposed project, its key players and governing laws. This section should provide details of how the project aligns to the municipality's strategic plans envisaged in its IDP, the project scope and salient features of the procurement including specifying the technology, total procurement size and minimum and maximum sizes of individual projects that are eligible to submit a bid response. Any other pertinent information in respect of the design of the project should be described.

This section should also provide information such as whether it is a multiple award or single award RFP bid, the maximum capacity (MW) that will be procured under the specific RFP, the preferred technology or whether the RFP is technology agnostic and the minimum and maximum size of projects.

In the early bid windows for REIPPPP as benchmarks were not available and the competitiveness of RE procurement not yet determined, price caps per technology were included in the RFP, however subsequent procurement rounds of the REIPPPP have proven that price caps are not required and other mechanisms like benchmarking of costs and value for money evaluations provide better indicators to mitigate the risk of uncompetitive pricing.

Finally, this section should set out an outline of the intended procurement process and timelines i.e. a timetable with deadlines for each milestone in the procurement process.

The period given to potential bidders to submit their bids up to the bid submission date is largely driven by the technology type and the readiness requirements as outlined in the bid qualification criteria. For example, a solar PV project development period would be much shorter than



a gas to power project. If the qualification criteria require a bidder to submit an environmental authorisation the timeframe to obtain such an authorisation would need to be considered. Therefore, a period of between three to nine months would be appropriate taking into consideration the underlying factors.

Once bids have been submitted the evaluation process comprising a screening of bidders first for compliance with general requirements and qualification criteria, and then on a comparative basis to award of preferred bidder status to the highest ranked projects will largely depend on the number of bids received, the municipal processes and efficiency of committees as well as a well-structured evaluation process. This can take between three to five months.

The period of appointment of preferred bidders to commercial and Financial Close (FC) will be dependent on whether the RFP is issued with a non-negotiable PPA and other agreements. If the RFP is well structured and a full form PPA is issued with the RFP on a non-negotiable basis this could significantly reduce this period. The other factor that needs to be considered in assessing how long this period could take includes the period for completing the public consultation process prescribed under section 33 of the MFMA. These factors are considered in more detail below. Based on the experience in REIPPPP the signing of the project agreements was generally attained within 9 to 12 months of preferred bidder award. The effective date of the PPA, and Commercial Operation Dates (CODs) is driven by the underlying technology which is typically stated as a requirement in the RFP to be within a number of months after commercial close.

Below is an example of a typical timeline for an IPP procurement.

Table 20

Milestone	Y1 Q1	Y1 Q2	Y1 Q3	Y1 Q4	Y2 Q1-2	Y2 Q3-4	Y3 Q1-2	Y3 Q3-4	Y4 Q1-2	Y4 Q3-4	Y5 Q1-2
RFP Released	X										
Bid Submission Date		X									
Preferred Bidder		X									
Commercial Close			X								
Financial Close						Х					
Commercial Operation Date											X

4.3.BID QUALIFICATION CRITERIA

All bid responses will be assessed against thresholds set for various qualification criteria, to determine whether they are compliant bids. Qualification criteria should cover all relevant facets in the development of an IPP project and should set minimum qualification criteria for a bidder to assess whether it meets the predefined project objectives and output specifications determined in the Feasibility Study to ensure it will successfully execute on its commitment. In broad terms projects that qualify for comparative evaluation are those that are technically, financially and legally qualified, and demonstrate that the bidder has sufficient experience, commitment and resources, to execute the project. Each bid submission must therefore meet or exceed all prescribed thresholds (per criterion) to be considered a compliant bid.

4.3.1. Approach to setting of bid qualification criteria

The municipality in consultation with the transaction advisors should determine the state of readiness required from bidders which will inform the minimum requirements. Bid qualification criteria for the RFP should be adapted depending on the size of the project and the procurement approach. These could include technical criteria, (plant or equipment specifications, technical experience of the bidder), financial criteria (financial standing of the bidder, access to finance etc.) and legal criteria (composition of the bidding entity). These would have to be evaluated as threshold criteria whereafter a scoring and ranking process would follow under the PPPFA.

A municipality should weigh up several considerations in prescribing technical, financial and legal qualification criteria with which a bidder must comply. In the context of multiple award RFPs, commentators have noted that because the risk of delivering electricity into the municipality's distribution network lies with the IPP, there is less of a need to ensure bidders are technically, and financially qualified or capable as they are only paid once electricity is successfully delivered to the grid. As such, for the multiple award RFP the qualification criteria may be reduced significantly.

On the other hand, risk arises when bidders' technical and financial credentials are not properly vetted. For a municipal IPP procurement providing low qualification criteria runs the risk of attracting inexperienced bidders, who are not technically competent and do not understand the actual costs and therefore bid low and are awarded contracts they cannot fulfil. The result is that they crowd out experienced bidders who have properly assessed the costs but do not get the opportunity to bid. Municipalities therefore need to develop a credible procurement process which attracts experienced bidders by setting technical, financial and legal thresholds that experienced bidders can meet.

For a single award RFP, the considerations and approach to developing qualification criteria will be differently motivated. In a single award RFP there will be heightened requirements to ensure that the IPP project does not fail and that the preferred bidder is sufficiently experienced and competent to mitigate any risk of project failure. This generally means the need to ensure the bidder has the technical competence and experience, meets financial qualifications and has the legal form necessary to undertake the project.

It is also recommended where appropriate that the transaction advisors develop returnable forms which could be either in word or excel to facilitate bidders' preparation of their bid responses and which also enables a more efficient bid evaluation process.

4.3.2. Project Structure

It is generally regarded a qualification criterion for bidders to provide a diagram of the project's structure. The RFP must be prescriptive as to what information is required in the diagram.

Typically, bidders would need to show the following aspects of their proposed project structure:

- Identify and explain the project company (even if it was not yet established at the bid submission date);
- Sponsors or equity participants including shareholding of Black Persons and Local Community members;
- Funders and proportion of debt and equity; and
- EPC contractor, OEM supplier (if relevant), and operations and maintenance contractor.

In order to pass this threshold requirement, the bidder must provide sufficient information to satisfy the municipality that the structure has been accurately represented.

4.3.3. Technical Qualification Criteria

Table 21

Technical Qualification Criteria	Requirements
Eligible Capacity	For the municipality and bid evaluation team to assess whether a bid response meets the technical requirements specified in the RFP, the technical qualification criteria should require the bidder to provide information in respect of the contracted capacity of the power plant.
	The contracted capacity should:
	1. Be within the maximum and minimum range for the technology (or technologies) intended to be contracted for; and
	2. Satisfy baseload, peaking or mid-merit requirements as specified.
	A bidder should also detail the delivery points to allow the municipality to assess whether it complies with the requirements of the RFP and where necessary confirm the grid capacity at the delivery point.
	The bidder should also confirm the ability to limit capacity exported to the grid at the contracted capacity.
Capability and Experience	The technical qualification criteria should require the bidder to confirm the capability and experience of the IPP and its key contractors to demonstrate to the municipality that it has the
	necessary experience to undertake the project.
	The qualification criteria may require the bidder to provide an organogram that indicates key members responsible for the execution of the project and their respective roles. The identity and roles of the following entities should be included:
	Project Company
	EPC Contractor
	Civil Engineering Contractor
	OEM Contractor
	O&M Contractor
	The bidder may also provide a list of completed commercial projects of similar nature that provides a description of the specific projects completed, including project value and scope of services provided.
Project Schedule	It should be a technical qualification requirement that the bidder provide a detailed project schedule providing the timeline of key milestones within the overall project schedule that complies with the timeline specified in the RFP.
	The technical qualification criteria may request a bidder to provide at least a level three plan i.e. project level monthly schedule in the form of a Gantt chart, mapping the roles of the key entities with the key milestones.
	Details that should form part of the project plan and schedule include:
	Bid submission date
	Budget quote issue date
	Budget quote expiration date
	Period of budget quote validity after bid submission
	Financial close
	Grid connection date
	Commercial operation date
	Period between financial close to commercial operation date
	In addition to the key milestones above the project plan should cover timeframes linking to:
	Transmission and distribution connection works
	Engineering design, procurement and delivery of equipment, permit acquisition, construction and commissioning
	Environmental consents

Plant Layout	A further requirement should be for bidders to provide a generation plant layout containing a power plant single line diagram and a power plant to grid connection network diagram
	The plant layout should link the items in the project schedule.
Forecast Energy Sales Report	Bidders should be required to submit as part of their technical response an energy sales forecast which contains information evidencing that the energy output from a plant can be translated into projected cashflow.
	The forecast of energy sales must account:
	For an average probability of 50% (P50), of the amount of forecasted energy sales
	Should external debt funding be used to finance the project, provide a forecast for the relevant level of certainty expected as return (e.g. P90 or P95) to funders
	The forecast energy sales report must be conducted:
	1. By an individual / entity with at least five years of relevant technology appropriate production forecast experience
	2. Based on technology relevant data models, databases and best practices
	3. Based on assumptions made to estimates sales at point of connection / delivery while considering contracted capacity
	4. Based on equipment and installations as indicated in the line diagram and technology requirements
Forecast Energy Sales Independent Review	An independent review of the energy forecast sales report helps in confirming and verifying the projected energy sales from the project and therefore may provide additional comfort if so required.
	The independent energy sales reviewer must:
	Be independent of the bidder
	Have at least five years of relevant technology appropriate production forecast experience
	Confirm the experience of the entity providing the forecast energy sales report
	Explicitly verify the data, assumptions, methodology and results of the energy sales report
Technical Specifications	The objective of the requirement for the bidder to provide information about the plant / technology OEM components that will be used in the construction of the plant is to assist the evaluation as to whether the plant meets with the technical specifications.
	The bid response must provide details about the components that will be sourced from OEMs to confirm that it complies with international standards and codes.
	Should the bidder not have identified a suitable OEM at time of bid submission it must provide an indication of components from the most likely OEM that will be used and proof of compliance with international standards and codes
Grid Connection and Grid Code Compliance	The bidder should be required to specify where its project will be connecting to the grid and all information pertaining to potential grid connection works to be undertaken including the cost thereof.
	In order to provide assurance that the bidder takes responsibility for the compliance of the plant with the grid code, it must provide a letter signed by the construction contractor, or the key electrical contractor for the project. The letter shall state that the power plant is able to comply with all applicable codes prior to the scheduled commercial operation date.

Technical Qualification Criteria

Requirements

4.3.4. Financial Qualification Criteria

Table 22

Financial Qualification Criteria	Requirements
Price and Payment Mechanism	The price and compliance with the payment mechanism is a critical component of the bid and the financial qualification criteria should require the bidder to submit a bid and price in compliance with the specified payment mechanism.
	The price functional criteria should be clear in respect of:
	The base date that the price must be stated at;
	Providing a returnable template for the bidder to complete in respect of their price and the relevant payment mechanism;
	Providing information in respect of escalation of the price;
	Providing guidance as to how the price will be utilised in the comparative evaluation of compliant bids;
	What the price should include e.g. cost of grid connection, all construction and related funding costs, operating and cost of decommissioning, taxes, etc.
Financial Model	A financial model forms the cornerstone of a bidder's determination of its price and components making up the payment mechanism. The financial model may also be used to make adjustment to the price in respect of foreign exchange and interest rate movements between bid submission and commercial or Financial Close or any other terms that the municipality may deem appropriate to adjust.
	In the event of a Force Majeure, System Event or Compensation Event stipulated in the PPA, the financial model will also form a critical point of reference for any potential future claims made by the IPP in any of these events.
	The RFP should therefore require bidders to submit a financial model as part of their bid submission.
	A further consideration is as to whether the financial model needs to be accompanied by an audit letter confirming that the financial model is robust and free of material misstatement.
	The financial model qualification criteria should be clear in respect of:
	The format and base date of the financial model, any periodicity requirements, any specific outputs the municipality would be interested in for example sources and uses of funds, cashflow waterfall, equity returns, debt terms, etc.;
	Clearly disclose any macro, micro and general assumptions;
	Clearly disclose the debt-to-equity ratio, all relevant covenants; and
	The financial model must show the funding structure clearly detailing each lender and shareholder, the percentage of equity and shareholder loan details.
	The transaction advisors may wish to provide a returnable template that a bidder should link to its financial model to allow for an efficient evaluation of the robustness of the financial model.
Funding	The RFP must require bidders to demonstrate how their projects will be funded. The municipality needs enough information to be able to analyse the funding structure and to determine whether or not it can be provided and sustained through the project. The project participants, including all forms of funding and the terms and conditions of funding, are crucial.
	The funding qualification criteria should be clear in respect of:
	Requiring the bidder to stipulate a) how the project will be funded providing a clear funding structure detailing the proportion of equity, project finance (limited recourse debt funding to a special purpose vehicle), corporate finance (provided from the balance sheet of a private company) and free carry (in respect of smaller shareholders where applicable) that equals or exceeds the total project construction cost (including funding cost such as interest during construction etc); and b) detailing the identities of all debt and equity funders, the terms and source of the funding.

Financial Qualification Criteria	Requirements
	The debt term sheets must clearly disclose the level of fees, margins, covenants, term, and other relevant terms. The equity term sheet must clearly stipulate all terms including the expected nominal post tax return.
	 What the municipality expects to see to demonstrate that the project will be fully funded at commercial or financial close. In respect of debt this may include preliminary credit committee approved term sheets. In respect of equity this may include term sheets from equity providers as well as demonstrating that equity providers have sufficient funds available to stand behind the term sheet.

To facilitate the financial evaluation process, it is advisable that fit for purpose returnable forms be issued as part of the RFP to allow the bidder to submit key information in a predetermined format. This facilitates bid evaluation as it ensures consistent presentation of information.

Some returnable forms that could be developed include:

- · An excel template for bidder to complete indicating total project cost and total funding (debt and equity);
- A template where the details and terms of debt and equity providers can be populated;
- Standard letters where confirmation of funding and terms can be provided;
- A specific template where the price or tariff components must be populated as well as the methodology to convert the price or tariff components into an Equivalent Annual Tariff or Bid Evaluation Price which will be utilise for the second phase comparative evaluation; and
- Any other information that the municipality would like to specifically extract to facilitate its evaluation for example equity IRR, debt terms, success fees etc.

4.3.5. Legal Qualification Criteria

Legal Qualification Criteria relate primarily to the corporate requirements of the bidder as well as confirmation of the project agreements including the key subcontracts. The main categories for the Legal Qualification Criteria are set out below:

Table 23

Legal Qualification Criteria	Requirements
Project Company Constitutional Documents including Shareholders Agreement and MOI	The bidder is required to provide the project company's constitutional documents reflecting that it is a SPV, whose sole purpose is to undertake the project and that it is "ring-fenced" in terms of the Companies Act.
Agreement and MOI	Generally speaking, it will not be necessary for bidders to have established the SPV by bid submission however; in order to meet this criterion an undertaking is required from the bidder that the company will be established within a time period prior to Commercial Close.
	Where bidders are not yet incorporated, it may nevertheless be a requirement that they submit a fully developed shareholders agreement, between the (yet to be established) project company and its shareholders, with written proof of acceptance of this agreement by all equity participants.

Legal Qualification Criteria	Requirements
Written confirmation of PPA, Direct Agreement, Connection Agreements, Credit Support / Implementation Agreement	It is usually a requirement for bidders to submit declarations (in the form of a returnable document) from the sponsors, the lender, and the subcontractors that they accept the terms of the PPA, Direct Agreement, Connection Agreements, Credit Support / Implementation Agreement, and adhere to the requirement that no mark-ups or amendments are permitted.
	If some of the sponsors have not yet been incorporated at bid submission such as a local community trust, then the appointed lead member of the bidder must confirm that these will be established and registered as indicated in the bid response. Furthermore, confirmation is required that once they are incorporated, they agree to be bound by the bid response to the same extent that they would have been if they had been in existence upon bid submission.
	The above declarations are usually provided in the form of returnable schedules and in order to be compliant, bidders must provide all such declarations, duly signed by an authorised representative.
Key Subcontracts	It is also typically a Legal Qualification Criterion for bidders to submit detailed heads of terms of the subcontracts it would enter into with its key contractors, equipment suppliers, operations and maintenance contracts and any other contractors.
	The ability of a bidder to provide these heads of terms provides comfort to the municipality that a bidder has priced its proposal accurately based also on inputs from key contractors whose costs are critical to calculating the cost of supply.

4.3.6. Land Acquisition and Land Use Qualification Criteria

This criterion requires bidders to submit documents that provide sufficient proof of land acquisition.

In single award RFPs where the procuring municipality has set aside a specific site for the IPP to develop its generation facility, this requirement may not form part of the qualification criteria. If however, the bidder intends establishing its generation facility on municipal land or on a municipal asset not owned by the procuring municipality, then the bidder will still need to provide a copy of the long-term lease agreement concluded with the relevant municipality and evidence that such municipality complied with the MFMA and in particular the relevant Chapters of the MATR.

High Value Municipal Leases

High value leases are leases, the value of which exceeds R10 million. On a 20 year PPA, most municipal leases will be classified as high value leases which requires the following process to be followed by the municipality lessor:

- Long-term lease agreement to be concluded by the municipal manager or her / his delegate after conducting a public participation process regarding the proposed lease
- The Public participation process must commence and be publicised at least 60 days before the meeting of the municipal council at which the proposal to approve the lease is to be considered.
- The municipal manager must solicit the views and recommendations of the National Treasury and relevant provincial treasury
- The municipal council must take into account considerations in Regulation 36 in deciding whether to grant the rights of use.

If the IPP's generation facility is not situated on municipal land, to meet this qualification requirement bidders should be required to demonstrate that they have secured real rights over the project site. They may be permitted to provide either copies of the title deeds for the project site (or where the title deed is unavailable, a Conveyancer's Certificate providing a full explanation for the missing title deed) or a copy of a notarial lease, together with evidence that it has been registered against the title deed for the site (with copies of the deed) for the duration of the PPA or an unconditional land option, lease or sale of land agreement exercisable at the bidder's election.

In addition, bidders should be required to submit proof in the bid response that all necessary applications (including those relating to land use change, subdivision and zoning applications, respectively) have been made to secure the right to lawfully use the project site for their intended purposes.

4.3.7. Environmental Consent Qualification Criteria

To meet this qualification criterion, bidders should be required to pass both a general requirement to provide evidence that all requisite environmental consents listed in the RFP have been obtained by bid submission, as well as compliance with technology-specific environmental requirements. Typically, these include the following environmental consents:

Table 24

Environmental Qualification Criteria	Requirements
Environmental Authorisation	An Environmental Authorisation (EA) is required in terms of the National Environmental Management Act (NEMA) regardless of the bidder's proposed technology. The EA usually has the longest lead time of all the required permissions and can take up to 2 years to obtain.
	To be granted the EA the Project Company must prepare an Environmental Impact Assessment Report (EIAR) or Basic Assessment Report (BAR). An EIAR is required when a project's capacity exceeds 20MW or it covers an area greater than 1 hectare, whereas a BAR is typically for projects with a generation capacity of 10 - 20MW.
	Bidders must submit hard copies of the EIAR or BAR, and include details of any objections to the generation facility's development raised during any public participation process as well as appeals to any EA required by the project. To be complaint, the relevant appeal or review period must have expired by bid submission.
Integrated Water Use License	Each bidder must identify whether their project (including construction activities) will require an Integrated Water Use Licence under the National Water Act. This includes providing copies in the bid response of all studies done to determine the project's water needs and activities. "Water use" includes numerous water-related activities from water extraction, to diverting or polluting a watercourse, disposing of wastewater (for example, when cleaning the mirrors or panels depending on the technology) and storing water to serve the generation facility.
	While the license itself is not required for bid submission, bidders should be required to provide written confirmation of an approved water allocation from the local water services provider (WSP) which is usually the local municipality where the generation facility is to be located.
Technology- specific	Bidders may be required to submit additional environmental consents depending on the technology of their IPP. Below are some of the typical consents required for different technologies:
Environmental Consents	Civil Aviation Commissioner Consent: Wind and concentrated solar and power (CSP) projects must include proof of consent from the Civil Aviation Commissioner to erect potential obstacles to aviation;
	Water use consents: CSP projects situated in water scarce areas require specific confirmation of the water availability for their projects by the Department of Water and Sanitation, as well as proof that an application for an integrated water use licence has been made.
	Waste management license: Biomass, biogas and landfill gas projects require a waste management licence.

4.3.8. Economic Development Considerations

The ED component of an IPP Bid serves as an instrument for Government whereby socio-economic policy objectives can be executed by incentivising the private sector to contribute towards achieving such objectives. ED does not contain any minimum thresholds or qualification criteria; however, the Bidders commitments contribute towards points scoring.

4.3.9. Value for Money

Regulation 9 of the New Generation Capacity Regulations states that the buyer cannot enter into a PPA unless it represents "value for money". The latter means that the project is in the best interests of and delivers an acceptable outcome, to both the municipality and the government (on behalf of electricity users in South Africa).

Numerous factors must be taken into account in this assessment, some of which include the bidder's price

proposal, economic development commitments, the project's calculated IRR and foreign exchange risk borne by the government as well as the risks transferred to the IPP. The Value for Money and affordability assessment must tie in very closely with the Feasibility Study. Where the Feasibility Study Report indicated that the municipality or end users cannot afford an increase in tariffs in excess of current and future expected Eskom tariffs, the municipality should then consider the prices of the bids received and select preferred bidders whose bids do not exceed those thresholds determined during the Feasibility Study. The municipality may wish to benchmark key parameters within the bid submission which may include the equipment cost, cost of funding (e.g. debt margin and equity return), success payments and any other key factors. If the success payments to developers, equity returns or any other factor are considered to be disproportionately large or unjustifiable by the municipality, or excessive relative to the total project cost, then the bidder may fail the Value for Money assessment.

4.4. BID EVALUATION AND SCORING

All compliant bids, that is, bids that meet the abovementioned qualification criteria will proceed to the second stage in which they are subject to a comparative evaluation. The scoring of bid submissions is split between price and ED criteria.

Under a multiple award RFP structure, where a municipality receives more compliant bids that have passed the qualification criteria that are required to provide the maximum capacity allocated to the technology (or technologies) being procured, a comparative evaluation of compliant bids will be done in accordance with transparent evaluation criteria. Any other factors that may impact on the selection of preferred bidders needs to be clearly stipulated – this may include grid capacity at certain connection points.

The PPPFA prescribes the split in scoring of bid submissions between price and specific goals (ED) on a 90/10 preference points system. The 90/10 preference point system applies to bids with a Rand value above R50 million (all applicable taxes included). In terms of this system, points scored for achieving a municipality's specific goals (as contemplated in the PPPFA and incorporated into the municipality's SCM Policy) are then calculated separately and added to the points scored for price in order to obtain a final combined score. In the case of a single award RFP, the PPPFA stipulates that the contract should be awarded to the bidder scoring the highest points when adding price and ED. When the RFP is structured on a multiple award basis, all bids for a particular technology are ranked and preferred bidders are appointed, giving consideration both to those highest ranked and to the maximum MW available per technology.

The 90/10 system may be undesirable for municipal IPP bid scoring for a number of reasons, principally with the weighting given to price over other specific goals. To allocate 10 points to specific goals may be regarded as contrary to the municipality's strategic objectives articulated in its IDP to leverage the spending power of large procurements such as an IPP to meet its socio-economic objectives. It was for this reason that for the REIPPPP, in the earlier bid rounds, the DoE successfully applied for and was granted an exemption from the 90/10 preference points system so that it could allocate 30 points to specific goals. The remaining 70 points were allocated to price or tariff bid.

Exemption from 90/10 preference points system in the PPPFA

There may be compelling reasons for why a municipality may want to deviate from the 90/10 preference points system in determining the split between price and ED in its scoring matrix. Where ED plays a key role, particularly at local government level where the inclusion of the local community is paramount to the municipality in meeting its constitutional pledge and statutory obligations, allocating 10 points to ED may not be regarded as sufficient or aligned with the municipality's IDP. In such circumstances, it will be necessary for the municipality to apply to the Minister of Finance in term of section 3 of the PPPFA for an exemption from the application of section 2(1)(a)(i) of the PPPFA relating to a 90/10 preference point scoring system so as to increase the allocation to specific goals and proportionately reduce the allocation to price. By way of example, the DoE applied for such exemption from the PPPFA for the REIPPPP and allocated 70 points to price and 30 points to ED.

4.4.1. Price Scoring

The price scoring methodology may look different depending on whether the RFP is structured as a single award RFP or a multiple award RFP.

Regardless of whether the RFP is structured on a single or multiple award basis, unless an exemption is obtained in terms of section 3 of the PPPFA from the application of the 90/10 preference points system, the calculation for price points must be done in accordance with the prescribed price formula set out in the PPPFA Regulations. The calculation of points for price is done on a comparative basis and the PPPFA prescribes that the lowest acceptable tender must score 90 points for price. Tenders that quoted higher prices will score lower points for price on a pro-rata basis.

The formula to be utilised in calculating points scored for price is set out in the PPPFA Regulations as follows:

90/10 Preference point system [(for acquisition of goods or services with a Rand value above R50 million) (all applicable taxes included)]

$$Ps = 90 \left(1 - \frac{Pt - Pmin}{Pmin} \right)$$

Where

Ps = Points scored for price of tender under consideration

Pt = Price of tender under consideration

Pmin = Price of lowest acceptable tender.

The municipality would need to specify in its financial qualification criteria how the price for evaluation purposes will be determined. This should allow the municipality to convert for example a number of tariff components including capacity payments, fixed operating and operating payments, energy payments into a single tariff that could be utilised for the comparative price evaluation e.g. Equivalent Annual Tariff (EAT) or Bid Evaluation Price expressed in rand per MWh or rand per kWh. The EAT or Bid Evaluation Price would then be utilised to determine a compliant bidder's price score out of a maximum of number of points awarded to price. As with the comparative pricing methodology under the PPPFA where pricing is a relative metric, a bidder's EAT or Bid Evaluation Price is compared to the lowest EAT or Bid Evaluation Price offered and in a multiple award RFP the lowest price offered for the same technology.

For illustration purposes, if the lowest EAT of Bid Evaluation Price is R1 100/MWh, then in respect of the Price score:

2.5.1

a Bid Response with an Equivalent Annual Tariff of R1 100/MWh will score 90 out of 90;

2.5.2

a Bid Response with an Equivalent Annual Tariff of R1 400/MWh will score 90*(1-((1400-1100)/1100)) = 65.45 out of 90;

2.5.3

a Bid Response with an Equivalent Annual Tariff of R2 200/MWh will score 90 * (1 - ((2 200 - 1 100)/1 100)) = 0 out of 90.

4.4.2. Economic Development Scoring

Where an exemption under the PPPFA preference points scoring system has been obtained, presumably to prioritise specific goals, the municipality can provide a higher allocation of the total score to economic development goals.

Scoring for ED can be designed in a number of ways, as has been seen in the various bid windows for the REIPPPP. During the earlier bid windows, bidders received 10 points for any outcome in excess of the minimum threshold level per sub-element and technology, and an additional 10 points if they exceeded the target level.

ED scoring is allocated across the seven ED elements, including:

- Job Creation
- Local Content
- Ownership
- Management Control
- Enterprise and Supplier Development
- Skills Development
- · Socio-economic Development

Points across each of the elements can be distributed across the total points allocated to ED. The allocation of points across each element should be undertaken to reflect the socio-economic priorities of the municipality. The table below provides an example where Job Creation has been given the highest weighting of points, followed by Socio-economic Development. The table is merely an example, and the municipality should derive their own weightings based on their local conditions.

Table 25: Example of ED Points Allocation and Weighting Across Elements

Element	Example of Allocation of Points	Example of Weighting (%)		
Job Creation	3.00	30%		
Local Content	1.00	10%		
Ownership	1.00	10%		
Management Control	1.00	10%		
Enterprise and Supplier Development	1.00	10%		
Skills Development	1.00	10%		
Socio-economic Development	2.00	20%		
Total	10.00	100%		

In light of the absence of minimum requirements across the ED elements, the design of the points scoring regime for ED becomes critically important in creating the right incentive structures. As such, it is recommended that a framework containing different points-scoring ranges be implemented in order to reward bidders that make higher commitments. This concept is illustrated in the table below using Local Content in the Construction Measurement Period (CMP) as an example. In this example, the total available points for Local Content in the CMP are 1.00. If a bidder commits to procuring 50% or more from local suppliers, the full score is achieved. A lower commitment yields lower points.

Table 26: Example of ED Points Ranges

Element	Range 1	Range 2	Range 3
Percentage of local spend as a share of Total Project	Commitment:20%-30%	Commitment: 31% - 49%	Commitment: 50%+
Value in the Construction Measurement Period (CMP)	Points: 0.20	Points: 0.40	Points: 1.00

An important step in designing the ED component of the RFP is to define the sub-elements that will be used to measure the bidders' ED commitments. Each sub-element needs to be identified together with an indicator for measurement. In addition, a points scoring mechanism should also be defined with a scale that will enable the allocation of points at a sub-element level.

Table 27: Example of Indicators for Sub-Elements for ED

Element	Description					
Job Creation	This element is amongst the most important as it speaks to the policy imperatives of government at local, provincial and national level. This element serves as an important tool for creating jobs within the municipality and can also enable a demographic focus for employment of vulnerable groups in society.					
	Indicators for Job Creation should cover the following indicators during the Construction Measurement Period (CMP) and the Operations Measurement Period (OMP):					
	South African Citizens					
	Black People					
	Black Women					
	Black Youth					
	Skilled Black People					
	People who reside in the local community					
	People with disabilities					
	Unit of measurement: Person-months to be measured as a percentage of total person-months					

Element	Description							
Local Content	This ED element speaks to the industrialisation policy imperative that seeks to build and grow local industries and value chains within the South African economy. It incentivises bidders to seek to procure goods and services from local suppliers within the energy value chain. It is important that the scoring points are designed in a way that balances the creation of incentives with realistic goals that are achievable.							
	Local content scoring should be designed to include the following indicators: • Local content spend during CMP							
	Local content spend during OMP							
	Unit of measurement: Percentage of the total contract value in the CMP/OMP that is sourced locally i.e. from suppliers within South Africa							
Ownership	This ED element refers to ownership shareholding within 1) the project company (i.e. the bidder) 2) the construction contractor 3) the operations contractor. The policy objective of this element is to enhance South African ownership within entities who are awarded and execute on large public procurements.							
	Indicators that could be included within the design of the ownership element (for the Project Company, the construction and operations contractors) are as follows:							
	Shareholding by South African entities							
	Shareholding by Black People							
	Shareholding by Black Women							
	Shareholding by Black Designated Groups							
	Shareholding by Local Communities							
	Unit of measurement: Percentage of shareholding (i.e. equity ownership)							
Management Control	This ED element seeks to incentivise transformation within the demographics in the management level of the Bidder and the construction and operations contractors. There are typically three management levels that are included within this criterion i.e. Board members, Executive Management and Senior Management.							
	The indicators also cover the demographic lens and could be designed as follows:							
	Black People who are Board Members							
	Black Women who are Board Members							
	Black People who are in Executive Management							
	Black Women who are in Executive Management							
	Black People who are in Senior Management							
	Black Women who are in Senior Management							
	Unit of measurement: Percentage of person-months in Board / Executive Management / Senior Management for 1) Black People 2) Black Women							

Element	Description						
Enterprise and Supplier Development	This ED element incentivises the Bidder and the construction and operations contractors to 1) be intentional about their procurement of goods and services from Small- and Medium-Sized Enterprises as well as suppliers who are B-BBEE compliant and 2) to contribute to the ecosystem of economic activity within the area where the project is located by developing other enterprises that are not necessarily within the supply chain of the Bidder / contractor.						
	This element includes three sub-categories including Preferential Procurement, Enterprise Development and Supplier Development. Indicators that could be included are as follows:						
	Preferential Procurement Procurement from B-BBEE compliant entities						
	Procurement from Black-Owned entities						
	Procurement from Black Women-Owned entities						
	• Procurement from Qualifying Small Enterprises (QSEs) ¹⁰ and Exempted Micro-Enterprises (EMEs) ¹¹						
	Unit of measurement: Percentage of procurement spend from each of the above entities as a share of Total Measured Procurement Spend (i.e. total procurement spend from B-BBEE compliant entities)						
	Enterprise Development Financial commitment toward enterprise development in OMP						
	Unit of measurement: Financial commitment (ZAR) as a percentage of revenue in the OMP.						
	Supplier Development Financial Commitment toward supplier development in CMP and OMP						
	Unit of measurement: Financial commitment (ZAR) as a percentage of total project value in CMP and OMP						
Skills Development	This ED element seeks to contribute toward providing a holistic intervention to address the unemployment challenges in South Africa, by addressing the critical shortage of skills. The following indicators could be included:						
	Financial commitment toward skills development						
	Financial commitment toward bursaries to be provided towards Black students at Higher Education Institutions						
	Financial commitment toward skills development for Black Disabled Employees						

It is recommended that bidders' ED commitments be collated into one Excel workbook that covers the commitments for all seven elements. This workbook should be constructed in a user-friendly and simplistic manner that enables bidders to easily identify the points allocations, weightings and the measurements for each indicator.

Table 28: Example of ED Scoring Sheet

Element	Sub-element	Points for Sub- element	Range 1	Points for Range 1	Range 2	Points for Range 2	Range 3	Points for Range 3
Ownership	Black Ownership in the Seller	0.2	10% - 20%	0.05	21% - 49%	0.1	50% +	0.2
Total points:	Black Women Ownership in the Seller	0.1	5% - 10%	0.01	11% - 29%	0.05	30% +	0.1
	Black Ownership in the Construction Contractor	0.2	10% - 20%	0.05	21% - 49%	0.1	50% +	0.2
	Black Women Ownership in the Construction Contractor	0.1	5% - 10%	0.01	11% - 29%	0.05	30% +	0.1
	Black Ownership in the Operations Contractor	0.2	10% - 20%	0.05	21% - 49%	0.1	50% +	0.2
	Black Women Ownership in the Operations Contractor	0.1	5% - 10%	0.01	11% - 29%	0.05	30% +	0.1

Should a bidder claim ED points for Ownership commitments for the project company and / or the construction and operations contractors, it is recommended that the bidder be required to submit supporting documentation to evidence the Ownership points that are being claimed.

¹⁰ This refers to entities with an annual turnover that is between R10 million and R50 million

¹¹ This refers to entities with an annual turnover of less than R10 million

Return to Table of Contents

Such evidence should include the following:

- · A Project structure diagram indicating the Flow Through Shareholding of each entity
- A Flow Through Table indicating the shareholding of each entity
- A B-BBEE Certificate indicating the South African entity participation, Black, Black Women, Black Designated Group Ownership percentages
- · An ISRS Ownership Audit Report

4.4.3. Overall scoring

A bidder's score in respect of ED commitments, together with its price score are added together for a final combined score.

In a single award RFP, the PPPFA Regulations prescribe that the contract be awarded to the bidder scoring the highest points. This is subject to section 2(1)(f) of the PPPFA and whether there are circumstances where objective criteria will be applied not to award of contracts to tenders not scoring highest points for example grid capacity.

In a multiple award RFP, all bids are ranked and preferred bidders are appointed, giving consideration both to those highest ranked and to the maximum MW available.

4.5. PROJECT AGREEMENTS

Included in the RFP should be a set of Project Agreements. These typically include the following agreements:

- 1. A Power Purchase Agreement (PPA) concluded between the seller IPP and the buyer municipality
- 2. Where the generation facility connects to the transmission grid a *Transmission Connection and Use of System Agreement* between the IPP and the NTCSA as the transmitter in terms of which the IPP (as seller) will undertake the facility connection works to connect the facility to the transmission system and the NTCSA will undertake the transmission connection works:
- 3. Where the generation facility connects to the distribution network, a *Distribution Connection and Use of System Agreement* between the IPP and the distributor, either the municipality or NTCSA in terms of which the IPP (as seller) will undertake the facility connection works to connect the facility to the distribution system and the distributor will undertake the distribution connection works;
- **4.** A *Direct Agreement* between the IPP, the municipality as buyer, the credit guarantor and the lenders to the IPP and provides the lenders with step-in rights in the event of a seller default under the PPP
- **5.** An *Implementation Agreement* or similar *Credit Support Agreement*, whether issued by the Government or a vehicle set up for this purpose, concluded between the IPP and the credit guarantor which serves to guarantee the municipality's payment obligations under the PPA.

It has become standard practice in most government infrastructure and energy procurements that bidders accept standardised, non-negotiable Project Agreements. A standardised non-negotiable PPA means that bidders are not permitted to mark up the draft PPA, Direct Agreement, Connection Agreements or Credit Support / Implementation Agreement.

Under the REIPPPP the PPA was standardised and non-negotiable, so the DoEE through the IPP Office considered international best practice and consulted extensively with potential lenders (i.e. local financial institutions) prior to the drafting of the PPA to ensure that the contract would address their needs. It is advisable to include the same restriction in an RFP for a municipal IPP, particularly as this approach can substantially reduce the procurement timeline and Commercial Close is reached much quicker than under a negotiable contract where negotiations are protracted due to the iterative nature of the process. The flipside of this approach is that the Project Agreements need to contain market-accepted provisions that are bankable for lenders as a non-bankable Project Agreement will delay or stall Financial Close entirely.

4.5.1. Key terms of the Power Purchase Agreement

The PPA is the agreement that sets out the terms of the commercial arrangement between the municipality and an IPP and is the culmination of the municipality's IPP procurement. Besides balancing the requirements of the seller and the buyer, because IPPs are project financed, it needs to be bankable. For a description of bankability, see above at 3.3.2 in relation to the Financial Analysis in the Feasibility Study.

There are statutory requirements which set a base minimum as to the terms to be contained in the PPA. These are found in the MFMA as well as the New Generation Capacity Regulations.

Section 116(1) of the MFMA stipulates that a contract or agreement procured through the supply chain management system of a municipality must (a) be in writing; and (b) stipulate the terms and conditions of the contract or agreement, which must include provisions providing for—

- i. The termination of the contract or agreement in the case of non or underperformance;
- **ii.** Dispute resolution mechanisms to settle disputes between the parties;
- iii. A periodic review of the contract or agreement once every three years in the case of a contract or agreement for longer than three years; and
- iv. Any other matters that may be prescribed.

Regulation 9(1) of the New Generation Capacity
Regulations also prescribes certain minimum
requirements to be met specifically in respect of the PPA.
Regulation 9(1) states that power purchase agreement
between the buyer (including a municipality) and an IPP
must meet the following requirements:

- Value for money;
- **b.** Appropriate technical, operational and financial risk transfer to the generator;
- **c.** Effective mechanisms for implementation, management, enforcement and monitoring of the power purchase agreement; and
- **d.** Satisfactory due diligence in respect of the buyer's representative and the proposed generator in relation to matters of their respective competence and capacity to enter into the power purchase agreement

The determination as to whether a bidder's proposal as contained in the PPA provides value for money, takes place during the bid evaluation process - as more fully set out in 4.3.9 and is not a requirement that can be built into a non-negotiable agreement. The draft PPA however can ensure that there is "appropriate technical, operational and financial risk transfer to the generator" by apportioning risks between the IPP and the municipality in a manner that is balanced and that does not render any party in default of its obligations under the PPA by virtue of being allocated a risk it is unable to manage. Risk is quantified by the bidders, and so if a PPA transfers risk to the IPP that an IPP is unable to size and cost, the IPP will build in a buffer or contingency into its pricing to mitigate the effect of such risk materialising. This may take the form of procuring additional insurances or creating financial reserves to draw on should the risk materialise. In aggregate these measures could lead to an erosion of value for money to the municipality. A municipality can to some extent rely on the competitive nature of the open tender process to drive down contingencies and overreaching buffers built into the tariff. On the other hand, bids that are underpriced and do not allocate sufficient financial or other resources to the risks transferred to them under the PPA also run the risk of becoming failed projects once implemented. Having an experienced lender and IPP should hedge against this possibility.

Below are some of the typical provisions contained in a PPA:

4.5.1.1. Duration

The PPA will define the duration or contract term for the seller to sell generated capacity to the buyer. The duration of a PPA is split between a construction period when the facility is being designed and built, followed by an operations period when generated capacity is sold to the buyer.

Due to the nature of the financing of an IPP, which is structured on a limited recourse or project finance basis, where the cost of the generation facility is funded through mainly debt as well as equity, it is generally necessary to have a long-term agreement to recover these costs through the electricity tariff. Most PPAs are likely to be structured for a period of not less than 10 years.

4.5.1.2. Grid connection

As a condition of concluding the PPA, the seller is usually required to warrant that it has on or before effective date

entered into a Distribution Agreement or Transmission Agreement with the distributor, whether the municipality buyer itself or the NTCSA. Importantly the PPA places an obligation on the seller to provide advance written notice (usually 60 days) of the date on which it anticipates it will require its generation facility to be connected to the distribution or transmission system.

In a municipal IPP where the municipality is both the buyer under the PPA and the distributor under a Distribution Agreement, this obligation and any cross defaults will need to be carefully considered and drafted.

4.5.1.3. Commencement of construction

The PPA will require the seller to have authorized an EPC contractor to commence works under a binding written construction subcontract for the design and build of the generation facility. The construction subcontract will define the works which comprises the activities required for the construction of the generation facility, and the EPC subcontractor will be required to procure plant and equipment needed to do so. The PPA typically sets a time limit for the seller to commence construction of the facility, usually within 180 days of the effective date. If the seller fails to do so, the buyer is entitled to terminate the PPA.

The PPA needs to flow down these commitments to the construction subcontract to ensure that the seller meets its obligations to the buyer under the PPA. Where there is a dispute between the seller and buyer regarding whether the seller has in fact commenced construction, any such dispute is referred to the Independent Engineer for determination. The Independent Engineer's determination will be final and binding on the parties.

4.5.1.4. Facility completion and commissioning

The PPA places an obligation on the seller to use all reasonable endeavours to achieve COD by the scheduled COD. This requires the seller to commission the facility and procure the issue of the Facility Completion Form by the Independent Engineer so that the COD falls on or before the scheduled COD. The PPA usually builds in a process for when the seller becomes aware that COD will not be achieved by the scheduled COD, and mitigation actions to ameliorate such delay. Moreover, the seller is required to provide the

buyer with regular reporting and all relevant information on the associated commissioning and testing process.

The PPA regulates the activities in achieving Commercial Operation Date and usually requires the seller to provide the buyer with no less than 60 days advance written notice of its intention to issue the Notice of Commencement of Facility. Similarly, the PPA limits the ability of the seller to issue the Notice of Commencement of Facility to no more than 1 day before the scheduled COD. The PPA will provide that once the Independent Engineer has ascertained the facility completion and the seller has received the relevant Facility Completion Form, it must issue the Notice of Commencement of Facility to the buyer. The Independent Engineer is usually required to do so within 2 business days of the delivery of the Facility Completion Form.

4.5.1.5. Commercial Operation DateCOD and Installed capacity

The PPA caters for various scenarios for where there is a discrepancy between the achieved capacity and the contracted capacity for purposes of meeting Commercial Operation Date.

- 1. Where the facility has achieved facility completion and the achieved capacity is more than the contracted capacity, then for the purposes of the PPA, the facility's power output will be limited to the contracted capacity, and the seller must deliver to the buyer a Notice of Commencement of Facility. COD will commence at midnight following the day upon which the buyer receives this Notice.
- 2. Where the facility has achieved completion and the achieved capacity is less than the contracted capacity but more than the minimum acceptance capacity (where the minimum acceptance capacity is 50% of the contracted capacity) then the seller may either elect not to effect any repairs or replacements and simply issue a Notice of Commencement of Facility, or if necessary, effect repairs or replacements to the facility necessary to achieve its contracted capacity, upon which the Facility Completion shall be re-assessed by the Independent Engineer.
 - **a.** If after effecting repairs the achieved capacity is now more than the contracted capacity, then the facility's power output will be limited to the contracted capacity and the seller may issue a Notice of Commencement of Facility; or

- **b.** If, as re-assessed by the Independent Engineer, the facility remains less than the contracted capacity but more than the minimum acceptance capacity, then the seller may deliver to the buyer a Notice of Commencement of Facility, provided that, in the case of replacements, they must be completed, and the Facility Completion Form must be completed and submitted to the buyer by the last COD.
- 3. If the facility has achieved completion and the achieved capacity is less than the minimum acceptance capacity, then the seller must at its own expense, effect the repairs / replacements necessary for it to achieve an achieved capacity that is more than the minimum acceptance capacity, provided that such repairs have been completed and the Facility Completion Form has been re-assessed and duly completed to demonstrate an achieved capacity that is more than the minimum acceptance capacity by last COD.

The PPA will include a regime for penalising delays such that for every day that the COD is delayed beyond the scheduled COD (unless caused by a System Event or a Compensation Event), the Operating Period will be reduced by an additional day and the Expiry Date will be brought forward by one day.

The PPA will stipulate that if the seller does not achieve COD by a long stop date (Last COD is usually 18 months after scheduled COD), the buyer is entitled to terminate the PPA, unless the seller declared COD on the Last COD even where the achieved capacity is less than the minimum acceptance capacity, the buyer is not entitled to call a seller default.

Where the achieved capacity at COD is less than contracted capacity, then from this COD the contracted capacity will be reduced to the achieved capacity and the power output will be limited to the latter for the purposes of the PPA. The seller may not subsequently increase the achieved capacity beyond that installed at COD. The PPA typically includes a provision stating that the seller may not make any additions to or expand the generation facility to increase the installed capacity beyond that which is installed at COD.

4.5.1.6. Operating Period and generation forecast

During the operating period, the PPA typically places an obligation on the seller to provide the buyer and the system operator (which in the case of a municipal IPP may be the same party) with a weekly estimate of the forecast level of energy expected to be generated by the facility for each day in the week. Failure to do so entitles the buyer to do or procure that another person provides it with this forecast, and the buyer is entitled to recover the costs of this forecast from the seller.

4.5.1.7. Payment and consequences of failure to make payment

The PPA will regulate the regime for payments and invoicing. There is usually an obligation on the seller to submit an invoice to the buyer within a set number of business days after the end of the billing period, specifying the various payments due to it including the early operating energy payment and / or commercial energy payment, the deemed energy payment (if any); the Use of System charges due to be reimbursed to the seller and any other amounts owed by the seller to the buyer (or vice versa). The invoice shall be prepared based on the billing data obtained from the facility metering installation.

The PPA places an obligation on the buyer to pay the seller within 30 business days of receipt of the seller's invoice. If the buyer fails to make payment of any amount(s) due and payable within 5 business days of the due date, the PPA entitles the seller to serve a late payment notice on the buyer. If the buyer has still not made payment within 20 business days of such notice, the seller may call a Compensation Event and enforce the Credit Support Agreement. All late payments attract interest at a default interest rate, which will accrue form the due date to (but excluding) the date of payment.

The payment provisions in a municipal PPA will need to be tightly enforced, particularly if the municipality's cash flows are dependent on revenue collections from electricity sales. The Credit Support Agreement will be critical in underpinning late payment risk under a municipal PPA.

4.5.1.8. Monitoring and reporting

The PPA contains stringent provisions relating to monitoring of contracted capacity. For example, the seller will be required, within 2 hours, to notify the buyer if the facility or more than 10% of the contracted capacity is incapable of generating electricity for reasons as set out in the PPA such as due to any outages or for reasons of force majeure, a system event, government default or a compensation event. The PPA will build in a process requiring the seller to deliver to the buyer a written report detailing the reasons for such incapacity within 5 business days.

The PPA also prescribes strict reporting requirements. Typically, the seller must maintain complete and accurate data and records required to facilitate the proper administration of the PPA. It must include an accurate and up-to-date log of operations, updated daily which includes, among other things, for each 10-minute period in each day, the energy output and reactive energy output, changes in operating status during the day, the number of outages in the day, the duration and reason for each and so on.

4.5.2. Credit Support Agreement

Government support for a municipal IPP may prove more challenging and therefore where the municipality is unable to issue a guarantee for its payment obligations, other credit enhancement vehicles such as partial credit guarantees offered by DFIs should be sourced by the municipality, either to provide a full underwrite of the municipality's financial obligations under the PPA or to supplement the Government support package.

A credit support agreement is concluded between the IPP and the nominated guarantor, whether Government or a third-party credit guarantee fund or both, particularly as a municipal IPP would require private sector lending to support the IPP and lenders are likely to have an expectation that similar credit support would be given as has been given in the REIPPPP and related IPP procurement programmes. Under the REIPPPP, the PPA between the IPP and Eskom was supported by an Implementation Agreement between the IPP and DOE which, together with a Government Framework Support Agreement, guaranteed Eskom's payment obligations under the PPA.

Regulatory Framework for Provision of Security for Debt and Municipal Guarantees

In order for a municipality to conclude a PPA, it will be a lender requirement that the municipality as buyer provide a guarantee to the seller for its payment obligations under the PPA as well as any indemnities and early termination payments.

Security instruments including guarantees are legislated in the MFMA under Chapter 6 regulating Debt incurred by municipalities. In particular, municipal guarantees and payment security are dealt with in terms of sections 48 and 50 of the MFMA as well as the Municipal Debt Disclosure Regulations

Section 48(1) prescribes the circumstances under which a municipality by resolution of its council can provide security for its obligations including contractual obligations. If one of these circumstances is satisfied, a municipality can provide security for its payment obligations under a PPA, and section 48(2) of the MFMA specifies the forms of security that a municipality can issue. This includes, among other things (a) agreeing to specific payment mechanisms or procedures to ensure exclusive or dedicated payment to lenders or investors, including revenue intercepts, payments into dedicated accounts or other payment mechanisms or procedures; and (b) ceding as security any category of revenue or rights to future revenue.

Section 50 of the MFMA allows a municipality to issue a guarantee for any commitment including a payment commitment under a PPA provided the guarantee is within the limits specified in the municipality's specified budget.

Section 51 of the MFMA provides that "neither the national nor a provincial government may guarantee the debt of a municipality or municipal entity except to the extent that Chapter 8 of the Public Finance Management Act provides for such guarantees". "Debt" is a defined term in the MFMA, but the payment obligations under a PPA do not comprise "debt" as defined. Interpreted differently, section 51 of the MFMA permits national or provincial government to guarantee the future financial commitments of a municipality, provided the requirements of Chapter 8 of the PFMA have been complied with. The possibility therefore exists for the Minister of Energy and Electricity to guarantee the obligations of a municipality under a PPA and to conclude a Credit Support Agreement with an IPP. Section 34(2)(e) of the ERA empowers the Minister to issue a government guarantee to support the PPA. This right must be read with the provisions of Chapter 8 of the PFMA.

5 STAGE 4: PROCUREMENT PROCESS

5.1. OVERVIEW OF KEY STAGES AND ACTIVITIES OF THE MUNICIPAL IPP PROCUREMENT PROCESS

As previously noted in this Manual, all procurement of IPPs by a municipality need to be performed in accordance with a competitive tender process. The procurement process follows a sequenced order of stages and activities, each following on from the previous one. The table below summarises the key stages and the activities typically considered to form part of each stage.

Table 29

Stages	Key Activities
Issue of RFP and Bidders to	Establish a digital bid portal or platform for access to all bid documentation – RFP, etc- and for publications of all bidder communications throughout the procurement process
Commence Bid Preparation	Notice of procurement to give bidders advance warning, notice to be published in at least the local media and the municipality / municipal entity's website, and in other appropriate media
	Bidders to be given at least 3 months bid response period
	 Levy Bid Document fee, where the municipal manager deems appropriate. If fee charged payments to be made into municipality's bank account per s8(2) of the MFMA.
	Hold bidder briefing session (discretionary only)
	Bidders to complete a bid registration form on or before the prescribed Bid Registration Date. Registered bidders to be provided with access to bid portal and passwords
	Address Bidder clarifications through briefing notes issued to registered bidders on bid portal
Bid Evaluation	Bids to be received before clear cut off time, no late bids to be considered. Bids to be received through bid portal only, no hard copies
	No opening of bids in public, all submission to be made electronically.
	Technical evaluation teams (one per discipline) to evaluate bid responses and compile reports. Non-compliant bids to not be evaluated further, and bids that do not meet qualification criteria to be set aside. Only bid responses that meet qualification criteria to advance to scoring evaluation
	Municipality to issue clarifications to bidders, as required
	Bid evaluation committee to consolidate the reports of the Technical Evaluation teams into a single bid evaluation report with recommendation of preferred bidder(s).
	Bid Adjudication Committee to adjudicate bid evaluation recommendations and select preferred bidder(s).
	BAC to obtain municipal council resolution to appoint preferred bidder(s) and finalise PPA and other project agreements
Preferred Bidder(s)	Notify preferred bidder(s) of their appointment, issue formal letter and include any conditions that the BAC recommended and as approved by the municipal council.
	Preferred Bidder(s) to conclude a Preferred Bidder Undertaking setting out various conditions and obligations to be met by the preferred bidder within the period prior to commercial close
	Notify unsuccessful bidders i.e. bidders with non-compliant bids or whose bids did not meet the threshold qualification requirements
Preferred Bidder(s) Pre-	Municipality to engage with preferred bidder(s) to provide assistance to preferred bidder for securing all necessary consents and permits for its project.
Commercial Close Activities	 Preferred bidder(s) to negotiate and conclude all supporting project agreements such as EPC Subcontract, OEM Supply Agreements, Operations and Maintenance Agreement, Independent Engineer Agreement, Lease Agreement with project site landlord

ř	3
2	
+	y
2	
Š)
4	_
Ţ)
0	D
()
100	Ü
4	2
2	
÷	۲
0	ט
٥	Ľ

Stages	Key Activities
Municipality Pre-Commercial Close Activities	 Municipality to undertake a Cost of Supply Study based on final agreed tariff for submission and approval by NERSA. Compliance with the process under section 14 of the MFMA and MATR if land is to be made available to the IPP by the municipality
	 Municipality to obtain Minister of Energy and Electricity approval in terms of Reg 5(3) of the New Generation Capacity Regulations. Municipality to conduct a section 33 public participation process
Contract Award / Commercial Close	 Obtain municipal council resolution approving the conclusion of the PPA and other Project Agreements Signature of PPA between IPP and municipality and other Project Agreements
Pre-Financial Close Activities	 IPP to finalise any outstanding permits and licenses for the Project, including (i) registration of generating activities with NERSA and (ii) obtain grid connection budget quote from NTCSA IPP to finalise all land arrangements, including servitude agreements, lease agreements or sale agreements
Financial Close	IPP to conclude Financing Agreements and attend to Conditions Precedent fulfilment so that financing is available to commence construction of the generation facility.

5.2. ISSUE OF RFP, BID CLARIFICATIONS AND BRIEFING NOTES

In line with recommended procurement practices for Government institutions including municipalities to migrate to a digitised procurement platform, bids should all be received from bidders digitally, and all procurement activities from the issue of the RFP, the release of briefing notes and bids evaluation should take place on a secured platform which registered bidders' representatives, municipal officials and transaction advisors are verified and identified each time they access the portal. A digital procurement platform or e-procurement method significantly reduces the opportunities for irregular conduct both by bidders and evaluators and lends credibility to the procurement process which funders require.

Initial training on how to use the platform by the Technical Evaluation Teams as well as the BEC and the BAC should be undertaken prior to bid submissions being received.

A team of advisors and the internal municipal team should be on standby to attend to bidder clarification questions during the bid response period. All bid clarifications must be uploaded or sent in the format prescribed in the RFP and in the timeframes communicated to bidders by the municipality. Bidders should be given the option to submit a general clarification question or a private clarification

question. The former may be required to prevent any commercially sensitive information of a bidder being disclosed in a public forum. It is then up to the municipality to exercise discretion as to whether its response to a particular clarification question should be made public to all bidders or whether it needs to provide a private response. Decisions on bidder communication and whether to make public or private need to be guided always by the constitutional principles of transparency and fairness.

When the municipality responds to a bidder clarification question it should do so using briefing notes. A briefing note will respond to a particular query and the advisory team should assist the municipality in preparing a suitable response. The response should be agreed by the project manager before being made public to bidders in the form of briefing notes published on the procurement portal in a time period of no later than 10 days after receipt of the clarification question. Registered bidders should also be automatically notified by email when the municipality releases briefing notes, particularly if the briefing note seeks to amend the RFP, the response schedules or the PPA.

5.3. EVALUATION OF BID PROPOSALS

It is recommended before bids are received that Technical Evaluation Teams (TETs) prepare Bid Evaluation Templates which closely follows the Qualification Criteria specified in the RFP. The templates can then be reviewed by the municipality and signed off before bid evaluation commences. It is recommended that any amendment to the bid evaluation templates be submitted to the municipality for noting, documenting the reason for the change in template. This ensures that the evaluation is undertaken on a consistent basis that is aligned to the Qualification Criteria.

Once bids are received, the various Technical Evaluation Teams (TETs), split into different disciplines will be required to evaluate all bids received using the evaluation templates.

The different TETs should work independently and although they should have access to all parts of a bidder's submission (in addition to the part they are working on), clarifications on particular bids should be raised in an open forum with all TETs present to ensure that there is a uniform approach. Where there is a query on a bid submission which the TETs are unable to resolve internally, the bid evaluation committee may authorise that a bidder be formally approached in writing to clarify an aspect of its bid submission. Although bid response clarifications are bilateral and not made known to all bidders, there can be no change in the scope or tariff of a bid submission arising from a bid clarification by the BEC.

Observing strict protocols within and amongst the TETs is critical to the success of the procurement and the perception by bidders, the public and key stakeholders that the process meets the constitutional requirements of being conducted in a procedurally fair and transparent manner, minimises the risk of legal challenge

The evaluation by the TETs culminates in the development of bid evaluation reports for each discipline and to which completed evaluation sheets are to be attached. The bid evaluation report of each discipline should specify where a bidder met the qualification criteria and rank submissions based on their scoring for the qualification criteria. The individual bid evaluation reports per discipline are consolidated into a single bid evaluation report which ranks the bidders based on their overall scoring from highest to lowest.

The consolidated bid evaluation report is presented to the BEC for review. The BEC is required to interrogate the bid evaluation report to ensure that the evaluation is in line with the criteria set out in the RFP and that any anomalies in the scoring are investigated and fully motivated. Once the BEC is satisfied with the recommendations in their bid evaluation committee report and that all conclusions are fully substantiated, the bid evaluation committee report together with its recommended preferred bidder(s) is submitted to the BAC for adjudication.

The role of the BAC is to adjudicate the recommendations of the BEC and to thereafter select the preferred bidders, or in the case of a single award RFP, the preferred bidder and the reserve bidder. It is not envisaged that the municipal council would need to issue a resolution to appoint the preferred bidder. Rather a municipal council will need to approve through a council resolution the final terms of the PPA(s) that have complied with a section 33 process, as set out below.

5.4.APPOINTMENT OF PREFERRED BIDDER(S) AND PRE-COMMERCIAL CLOSE ACTIVITIES

5.4.1. Preferred bidder notification

Pursuant to the BAC's approval of the BEC's preferred IPP bidder(s) recommendation, the project manager (acting under a delegation from the municipal manager) must notify the preferred bidder(s) and in the case of a single award IPP, the reserve bidders in writing of their appointment and inviting them to undertake the activities required for reaching commercial close. The preferred bidder(s) and if a single award RFP, the reserve bidders must formally accept their appointment in writing and if relevant, issue a new preferred bidder guarantee to cover the period up until commercial close.

As part of their acceptance of the preferred bidder award, bidders may be required to sign an undertaking to the municipality in terms of which they agree to achieve key project activities and milestones by set dates contained in the RFP. The consequence of not doing so is that preferred

bidders may be disqualified from further participation in the tender process and also run the risk of having their preferred bidder guarantees drawn on by the procuring municipality, although the decision to do this should not be taken lightly especially where bidders were unable to obtain material consents owing to delays by consenting authorities.

At the same time as the preferred bidders are announced, all unsuccessful bidders must be notified by the project officer in writing that their bid submissions were unsuccessful.

Municipalities must remain mindful of the following:

- 1. Where they notify a bidder that their bid submission was unsuccessful, this may constitute "administrative action" under Promotion of Administrative Justice Act (PAJA).
- 2. Unsuccessful bidders are entitled to request written reasons for why their bid submissions failed and are likely to do so given the time and cost investment to bidders in preparing a bid response.
- **3.** A municipality is required under PAJA to respond within a set time period after receipt of a request for written reasons.
- **4.** Bidders who are dissatisfied with the reasons provided by the municipality for their bids being unsuccessful may challenge the municipality's decision on one of the grounds of judicial review set out in section 7 of PAJA.
- **5.** An unsuccessful bidder may also bring an access to information request to access procurement evaluation reports and other documents under the PAIA.
- **6.** Similarly, municipalities are required to respond to such request within a set time period prescribed in the PAIA Regulations.

The key activities to be undertaken once preferers bidders are appointed can be split between those that the municipality must lead on and those to be directed by the preferred bidder(s).

5.4.2. Pre-Commercial Close Preferred Bidder activities

In the period after preferred bidder award, the preferred bidder(s) are responsible for the following key activities:

- 1. Securing all necessary consents and permits for its project;
- 2. Where the connector grid is not that of the municipality's, a budget quotation from the grid provider (NTCSA or another municipality) in respect of connection works; and
- **3.** Negotiating and concluding all supporting project agreements such as the Shareholders Agreement, EPC Subcontract, OEM Supply Agreements, Operations and Maintenance Agreement, Independent Engineer Agreement, and Lease Agreement with the project site landlord.

These activities are particularly time and cost intensive for preferred bidders and municipalities, where possible, should seek to provide bidders with institutional and political support, particularly in respect of obtaining all necessary consents and approvals. While the risk of obtaining approvals remains that of the preferred bidder, it is for the benefit of a municipality that bidders are given timeous access to other responsible authorities in Government to ensure that their IPP procurements



are successful. In this regard, a municipality's engagement with key government stakeholders (as set out below) sets the foundation to ensuring that authorities know about a municipality's IPP procurement and are receptive to applications made by preferred bidders for project consents and approvals.

5.4.2.1. Indicative List of Consents

Below is an indicative list of consents that may be required by an IPP depending on where its generation facility is located.

Table 30

Category of Consents	Types of Consents	Consenting Authorities
NERSA Registration of Generation Activities	By virtue of exemption in Schedule 2 of ERA, registration with NERSA in accordance with section 9 of the ERA.	• NERSA
Grid Connection	Grid Connection Budget Quote (indicative cost and timeline)	• Eskom/NTCSA
Construction- related Consents	 Construction work permit in terms of the Occupational Health and Safety Act, 1993 Building plan approval and site development plan approval i.e. sanitation plan and fire plan in terms of section 4 of the National Building Regulations and Standards Act, 1977 Water use licence in terms of Section 21 of the National Water Act, 1998 Licence for the construction of any road, building or structure in a State forest under section 23(1)(h) of the National Forests Act 	Department of Forestry, Fisheries and the Environment (DFFE) Department of Water and Sanitation (DWS) Provincial and local authorities
Land Use Consents	 If required, land use authorisations and permits, including the rezoning of the land in terms of the Spatial Planning and Land Use Management, 2013 When entering into lease agreements on agricultural land for a period longer than 10 years or effecting a subdivision on agricultural land, the consent of the Minister of Agriculture is required under the Subdivision of Agricultural Land Act, 1970 If a proposed construction development is within the mining right area, approval is required in terms of section 53 of the Mineral Petroleum Resources Development Act, 1998 Confirmation regarding land claims in terms of the Restitution of Land Rights Act, 1994 	Relevant municipality Deeds registry Department of Agriculture, Forestry and Fisheries (DAFF)
Environmental Consents	 Environmental Authorisation under NEMA Waste management licence for the disposal of waste from the project site in terms of the National Environmental Management: Waste Act, 2008 Atmospheric emissions license in terms of National Environmental Management: Air Quality Act, 2004 Major hazard installation in terms of the National Environmental Management: Waste Act, 2008 Permit for restricted activities under National Environmental Management: Biodiversity Act, 2004 If applicable, Heritage Resources Permits in terms of the National Heritage Resource Act, 2000 (Heritage Impact Assessment can be performed as part of EIA) 	Department of Forestry, Fisheries and the Environment (DFFE)
Other	 For wind farms, approval from the Director of Civil Aviation in terms of the Civil Aviation Act, 2009 A confirmation letter in terms of section 29(1)(b) of the Electronic Communications Act from the relevant electronic communications network service licensees Confirmation of no objection received from the South African Radio Astronomy Observatory in terms of Section 25 of the Astronomy Geographic Advantage Act, 2007 	Civil Aviation Authority South African Radio Astronomy Observatory

5.4.2.2. Key Project Agreements

Obtaining the above consents and concluding the above agreements are usually included in the above Project Agreements as conditions precedent. For a detailed description of the key project agreements other than the PPA that the IPP will be required to negotiate and conclude for purposes of reaching commercial close see 3.5.2.2 above.

5.4.3. Pre-Commercial Close Municipality activities

The municipality is responsible for engaging in and managing the following processes in the period prior to commercial close:

- 1. Updating its Cost of Supply (COS) Study setting out any change to the tariff structure based on final agreed tariff under PPA for submission and approval by NERSA.
- 2. If the municipality has agreed to make land available, the IPP for the establishment of its generation facility, the municipality must obtain the necessary regulatory approvals under the MFMA and MATR in order for the parties to sign the long-term lease agreement.
- **3.** Obtaining Minister of Energy and Electricity approval in terms of Reg 5(3) of the New Generation Capacity Regulations, where required.
- **4.** Conducting a section 33 public participation process at least two months prior to tabling the PPA and related project agreements with the municipal council.
- **5.** Finalise the PPA and any other legal agreements for commercial close and engage with the IPP to ensure that all schedules to the agreements are completed with the relevant project information.
- **6.** Completion of grid connection agreements either as part of the PPA or as a separate agreement that outlines timelines for connection of the plant to the grid, key operation requirement parameters when the plant is connected to the grid, while in normal operation, and during event of faults.

5.4.3.1. Updated Cost of Supply Study

A COS study is one of the most important considerations in establishing and designing electricity tariffs implemented to provide municipal services to customers / end-users and to recover costs incurred by the municipality. The COS study will be valid for a period of 5 years or until significant licensee structure changes are made.

The Electricity Pricing Policy (EPP) states that electricity distributors shall undertake COS studies at least every five years, but at least when significant licensee structure changes

occur, such as in customer base, relationships between cost components and sales volumes. This must be done according to the approved NERSA standard to reflect changing costs and customer behaviour.

Therefore, the municipality will most likely need to update and submit their COS study when the IPP becomes operational and when it will impact the municipality's cost of supply either positively or negatively. The municipality needs to ensure in undertaking the COS that it considers the full cost of the IPP which includes the direct cost of paying for the electricity, as well as any indirect cost like contract management, the cost of maintaining and operating the necessary systems to integrate the IPP into the municipal distribution system as well as any financial guarantees that the municipality has put in place to support the bankability of the project.

5.4.3.2. Section 33 Process

There may be a need after preferred bidder award to include in the non-negotiable PPA bidder specific information contained in its bid submission. This will usually be contained in the schedules to the PPA rather than any material amendments to the PPA. Once the execution draft of the PPA is prepared, the municipality must commence a statutorily prescribed process set out in section 33 of the MFMA.

It is expected that the PPA under a municipal IPP procurement will be for period in excess of three years. Three years is the forecast spending catered for in a municipality's budget for capital expenditure even though the budget is prepared and approved on an annual basis. In the ordinary course a municipality's budget is approved by the municipal council, however, where a municipality enters into a contract which will impose financial obligations on the municipality outside of its annual budgeting process and beyond the three-year forecast contained in its annual budget, then in terms of section 33 of MFMA, a greater level of scrutiny and consultation is needed.

The process in section 33 of the MFMA exists to ensure that those affected by any decision by the municipality to burden its budget with a long term financial commitment, namely the end-users in its geographical area as well as government institutions tasked with an oversight function of local government, are fully and adequately informed of the impending contract and its implications for the duration that it will impose such financial obligations. A PPA is a contract binding the municipality to a future budgetary commitment as referred to in section 33 of the MFMA and must therefore have been subjected to this process to be lawful, valid and enforceable.

Section 33 culminates in possible changes to the PPA based on public participation and stakeholder feedback followed by municipal council approval. Essentially the consultation process that a municipality must follow involves disclosure and feedback from the public in its area of jurisdiction as well as key government actors with an oversight function of local government. Below is a summary table of how a municipality needs to engage the public and government stakeholders under section 33:

Table 31: Section 33 public participation with the local community and Government stakeholders

Section 33	Local Community Participation	Key Government Stakeholder Engagement
Identify of Parties to be Consulted	Generally, the public, and specifically, the local community of the procuring municipality.	Section 33 requires a municipality specifically to solicit the view and recommendations of: National Treasury and the relevant provincial treasury; CoGTA, being the national department responsible for local government; and
		The responsible national department, being DoEE.
Manner of Consultation	Section 21A of the Municipal Systems prescribed the manner of notification to the public which includes both printed media and online media form.	No prescribed manner, only that the municipality has solicited the views and recommendations of the abovementioned government parties
Time Period of s33 Consultation Process	The consultation process for engaging the public is prescribed and must occur at least 60 days before the municipal council meeting to deliberate on the contract.	In respect of interested government parties, section 33 is less prescriptive and does not impose any time period, however, given the number of interested government stakeholders from whom views need to be solicited, this should occur prior to the public participation process.
Documents to be made Public	This includes: the draft PPA and an information statement summarising the municipality's obligations under the PPA.	Same as for public participation.
Outcome of Participation	The local community must have been invited to submit comments and representations regarding the proposed contract.	None prescribed other than 'views and recommendations'.

5.4.3.3. Contents of the Section 33 report

Following on from the completion of the above consultation process, the municipality (the project manager together with the transaction advisors) must prepare a report for deliberation by the municipal council. Section 33(1)(b) sets out the contents of such report, as follows:

Drawing on the terms of the PPA, a clear statement as to:

- 1. The municipality's payment obligations for each contract year. This will be linked to the tariff approved by NERSA and the financial TA will need to provide the municipality with projections on the modelled increases to the tariff over the life of the PPA;
- 2. The impact of the municipality's payment obligations under the PPA on future municipal tariffs and revenue. This analysis is particularly important given that a large number of municipalities are reliant on electricity revenues as resellers of energy purchased from Eskom and other sources;
- **3.** Any comments or representations on the PPA received from the local community and other interested parties and an indicative response to such comments; and
- **4.** Any written views and recommendations received by National Treasury, CoGTA, DoEE and other consulted key government stakeholders on the PPA.

5.5. COMMERCIAL CLOSE (CONTRACT AWARD) AND FINANCIAL CLOSE

The Section 33 report and all supporting documentation must be submitted to the municipal council by the municipal manager for deliberation, and if no municipal council is scheduled, the municipal manager with the assistance of the project manager must ensure that a special municipal council sitting is arranged to deliberate on the PPA and the Section 33 report. The municipal manager should also submit to the municipal council a draft resolution for adoption, the contents of which must align with the decisions to be taken by the municipality as contained in section 33(1)(c) of the MFMA.

These include:

- That the PPA will derive a significant financial or economic benefit (or both) to the municipality;
- That the municipal council approves the entire PPA in its executed form; and
- That the municipal manager is authorised to sign the PPA.

If the outcome of the municipal council meeting is that the municipal council adopts the PPA on the terms set out above, the municipal manager (or his or her delegate) may sign the PPA. Signature of the PPA signals contract award and commercial close. The signature of the PPA is usually followed by signature of the other project agreements as outlined above.

In the period after appointment of preferred bidder leading up to commercial close the IPP is responsible for the following key activities:

5.5.1. Obtaining all outstanding consents

The Environmental Authorisation can, depending on the IPP project, take a long time to secure due to the extensive public participation requirements. Other land-related consents and approvals, including land servitudes can also take time to obtain. To the extent that the municipality still awaits NERSA approval of the tariff, this needs to be finalised in the period between commercial and financial close. Similarly, the Credit Support Agreement, to the extent required and not concluded at Commercial Close, must be finalised in this period in order for the project to reach Financial Close.

5.5.2. Negotiating and concluding the Financing Agreements

In order to finance the project, the IPP as borrower will conclude a Common Terms Agreement (CTA) with an agent or lead arranger lender which is supported by a series of security documents to secure the debt provided under the CTA. An important part of the lender's security package is the Direct Agreement between the IPP, the municipality and the Lender as well as the municipal guarantee or Credit Support Agreement.

5.5.3. Process to allow for allowable adjustments to the price as provided for in the RFP

As described earlier, the RFP may cater for the price at bid submission to be updated for any movements in interest rate and foreign exchange rate risks from bid submission up to commercial close. Typically, on the commercial close date the preferred bidder will be required to submit an updated financial model incorporating the foreign exchange and interest rate curves applicable on the commercial close date, obtained from a reputable source like Bloomberg, presenting its updated price, but ensuring the equity IRR of the preferred bidder remains unchanged. The preferred bidder may be required to submit an audit opinion that the allowable adjustments have been made in accordance with the process as outlined in the RFP. The transaction advisors would also need to review the adjustment to ensure that all due processes were followed.

5.5.4. Grid strengthening

Should the municipality have undertaken any grid strengthening in the form of upgrading sub-stations, adding new sub-stations, or replacement of transformers in order to cater for connection of new power plants to the distribution network, the technical specifications of these upgrades should be provided to the preferred bidder. The municipality must ensure that upgrades and additions to the grid are catered for in the power plant modelling and grid connection simulation studies that need to be conducted by the preferred bidder in order to show compliance to the Code as part of grid compliance requirements. Any changes to grid characteristics after financial close should be shared with the IPP without delay so that simulation studies can be updated accordingly and catered for prior to connection of the plant to grid before Commercial Operation Date.



STAGE 2
Feasibility Study

STAGE 3
Feasibility Approvals

STAGE 2

STAGE 3
Preparation of Bid Documentation

STAGE 4
Procurement Process

STAGE 2
Periodic Review of PPA and
Amendment of PPA



There are various activities that the IPP and the municipality need to jointly undertake to ensure the smooth and efficient implementation of the PPA, particularly in the period up to Commercial Operation Date. Some of the processes are statutorily prescribed under the MFMA, and others will be managed in terms of the PPA. This Module 3 of the Manual provides a framework for the municipality and the IPP to manage the implementation of the project once the PPA is effective.

2 STAGE 1: PPA MANAGEMENT PLAN

2.1. PROJECT MANAGEMENT PLAN

A PPA Contract Management Plan should be prepared by the municipality and the preferred bidder shortly before commercial close.

The PPA contract management plan will deal with a range of monitoring and reporting issues, however at a minimum this plan needs to comply with section 116(2) of the MFMA which prescribes a number of requirements in respect of contract management which a municipality is statutorily obligated to meet.

Section 116(2) requires the municipal manager as the accounting officer of a municipality to:

- **a.** Take all reasonable steps to ensure that a contract or agreement procured through the supply chain management policy of the municipality is properly enforced;
- **b.** Monitor on a monthly basis the performance of the contractor under the contract or agreement;
- c. Establish capacity in the administration of the municipality
 - i. To assist the accounting officer in carrying out the duties set out in paragraphs (a) and (b); and
 - ii. To oversee the day-to-day management of the contract or agreement; and
- **c.** Regularly report to the council of the municipality or the board of directors of the entity, as may be appropriate, on the management of the contract or agreement and the performance of the contractor.

National Treasury's Contract Management Guide (August 2010) identifies the following key functions or areas to be addressed in any contract management framework:

- 1. Oversight of contract management
- 2. Resourcing contract management activities
- 3. Document and information management
- 4. Relationship management
- 5. Performance management
- **6.** Risk management
- 7. Policies and procedures



To meet the obligations under section 116(2), the table below sets out various contract management mechanisms and processes that a municipality and an IPP should cater for in their PPA contract management plan:

Table 32

PPA Contract Management Obligation	Mechanism and / or procedure to meet requirement	
Governance Structure	Identify members of steering committee comprising of personnel from the municipality and the IPP.	
IPP Project Structure	Include a diagram of all parties in the IPP's project structure including all contractual arrangements and the counterparties to the project agreements as well as any relevant ancillary agreements.	
Delegations of Authority	Identify duly authorised representatives of each party responsible for key project management activities and outline the limits or parameters of their functions and authority.	
Key Personnel	Identify key personnel of the municipality and the IPP, their functions and position. For reasons of continuity, the municipality should have secured the appointment of the project manager that led the Preparation and Procurement Phases of the project into the implementation phase.	
Decision-Making Procedure	Include in a diagram or decision tree mapping out how decision-making devolves to key personnel.	
IPP Project Plan / Programme	Summarise the key milestones of the IPP's construction programme and attach the IPP's final works plan as agreed with its EPC contractor.	
IPP Reporting Obligations	Identify in the contract management plan all reporting obligations under the PPA and related reports that the IPP needs to provide to the municipality including the frequency of such reporting.	
Municipality Monitoring Protocol	Include a protocol for how the municipality engages with the IPP to exercise its rights to monitor the IPP's performance under the PPA.	
OEM Warranties	Summarise the key terms of the OEM warranties for any equipment related to the generation facility.	
Risk Mitigation	Set out a project risk matrix identifying key project risks, risk probability and mitigation strategies to predict, manage and quickly contain project risks.	
Insurances	Set out key terms of IPP's Project Insurances, including exclusions, extensions, etc.	

2.2. PROJECT MANAGEMENT COMMITTEES

The PPA may include a project management schedule setting out the manner in which project committees are established and composed and detailing the mandate and powers of the members of such committees to manage issues arising in the implementation of the PPA. This schedule needs to be integrated into the Project Management Plan so that the two documents are harmonised.

Return to Table of Contents

3 STAGE 2: PERIODIC REVIEW OF PPA & AMENDMENT OF PPA

3.1. PERIODIC REVIEW OF PPA

Section 116(1)(b)(iii) of the MFMA stipulates that a contract or agreement procured through the supply chain management system of a municipality or municipal entity must stipulate the terms and conditions of the contract or agreement, which must include provisions providing for "periodic review of the contract or agreement once every three years in the case of a contract or agreement for longer than three years". The periodic review is a statutory signal to municipalities that they have an obligation to ensure that contractual commitments, particularly on long-term contracts, are being properly implemented through regular monitoring and enforced.

Does compliance with section 116(1)(b)(iii) of the MFMA require municipalities to review the tariff agreed under the PPA on a three yearly basis, and if unfavourable, does section 116(1)(b)(iii) provide municipalities with an inferred right to terminate the PPA?

Municipalities will need to form an opinion on the impact of section 116(1)(b)(iii), however the practice on other long-term contracts such as PPP Agreements which are also generally financed by debt, is in terms of section 116(1)(b)(iii) of the MFMA not to undermine the agreed commercial position under the contract. To do so would preclude municipalities from entering into long-term contracts as no funder would provide finance for a contract on that basis, particularly on a limited recourse basis where the municipal contract lies at the heart of the funder's debt recovery.

Regulation 42 of the Municipal SCM Regulations which regulates performance management provides some interpretative guidance as to the intention of section 116. It requires the SCM Policy of a municipality to provide for "an effective internal monitoring system in order to determine, on the basis of a retrospective analysis, whether the authorised supply chain management processes are being followed and whether the desired objectives are being achieved".

Applied to section 116(1)(b)(iii) of the MFMA, the rationale for a three yearly review is for a municipality to ensure that the contract still meets its strategic objectives in its IDP (which motivated the need and subsequent procurement of the contract) as well as to ensure that the required performance management regime is being implemented by the municipality.

3.2. AMENDMENTS TO THE PPA

If during the term of the PPA it is necessary to amend any of its provisions, the municipality must observe the requirements in section 116(3) of the MFMA, which provides as follows:

(3) A contract or agreement procured through the supply chain management policy of the municipality may be amended by the parties, but only after—

- a. The reasons for the proposed amendment have been tabled in the council of the municipality...; and
- **b.** The local community
 - i. Has been given reasonable notice of the intention to amend the contract or agreement; and
 - ii. Has been invited to submit representations to the municipality.

Section 116(3) does not set a materiality test for when the procedure contained in section 116(3) of the MFMA needs to be complied with, however given that it requires a council resolution which can only be issued once a public participation process has been followed, it seems that changes to the PPA which have any impact of the tariff or other material provisions will require the municipality first to comply with the process set out in section 116(3) of the MFMA.

The requirement of section 116(3) of the MFMA must be read with MFMA Circular No 62 which sets financial parameters on when municipal contracts can be varied or amended. As such MFMA Circular 62 states that contracts may be expanded or varied i.e. amended by not more than twenty percent (20%) for construction related goods, services and / or infrastructure projects and fifteen percent (15%) for all other goods and / or services of the original value of the contract.

