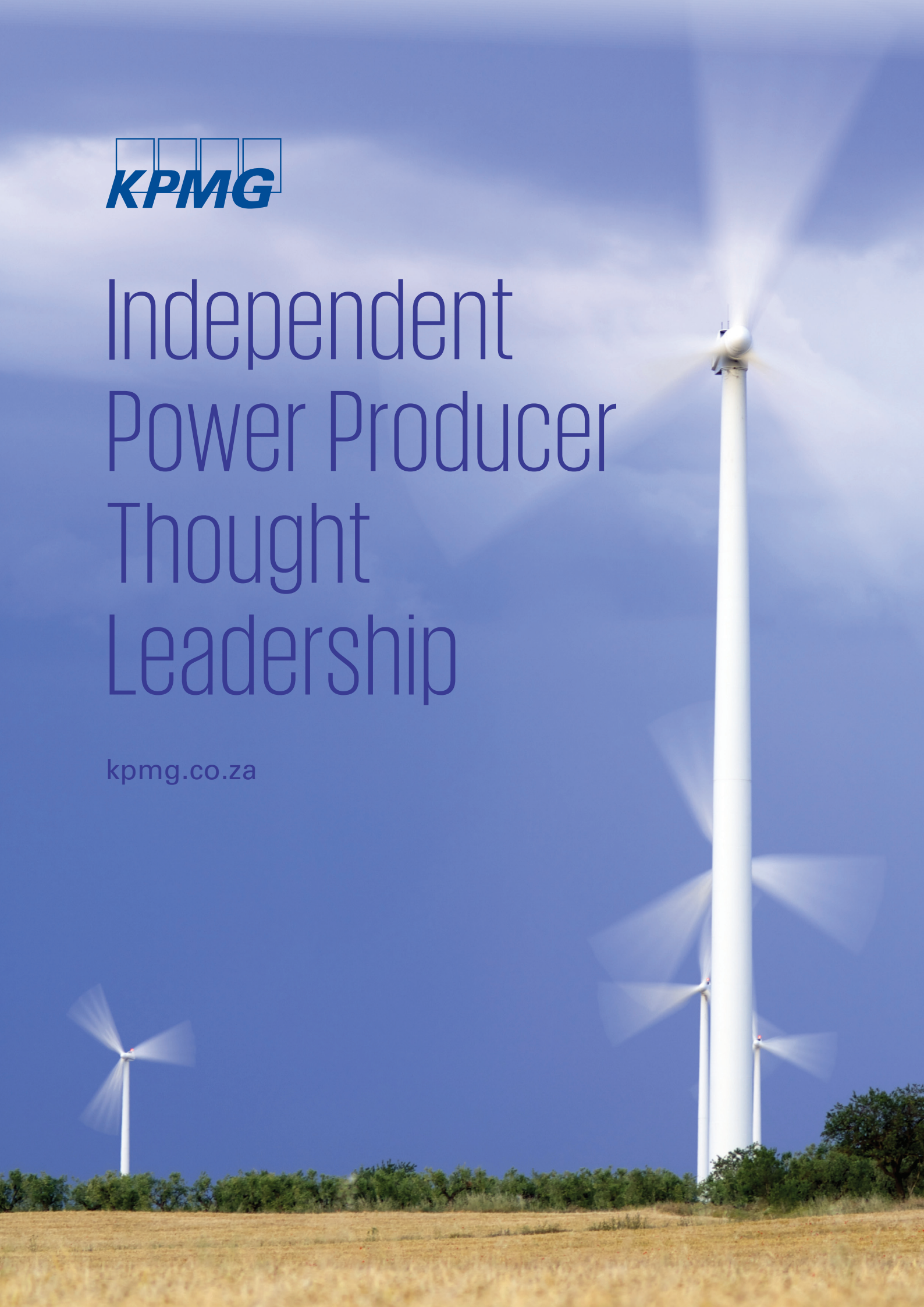




Independent Power Producer Thought Leadership

kpmg.co.za



Independent Power Producers: Responding to Africa's power generation needs

It is well documented that Africa is faced with a significant shortage of power generation capacity with more than 60% of its population not having access to electricity. The continent is home to many of the fastest growing economies yet this growth remains constrained due to a lack of growth in the power generation infrastructure. Our challenge is to appropriately respond to the power generation need of the continent by providing reliable and affordable electricity to all African's while remaining cognisant of the requirements of investors to facilitate investment into the industry.

The current energy access dilemma can largely be attributed to a lack of infrastructure investment, which is a cornerstone for a growing economy. Many believe that the infrastructure investments that are required to address the generation capacity shortfall of the continent are inhibited by capital sourcing constraints, concerns over policy security and an unpredictable political climate.

In South Africa the need to improve the energy mix within the country has come to the forefront with the Government realisation that alternative energy solutions offer an immediate response to the power generation shortfall. The success of the Renewable Independent Power Producer Procurement Programme (REIPPPP) is evident in South Africa and showcases the private sector's willingness to invest in a power sector that displays the following key characteristics:

- regulatory and policy certainty, backed by a political will;
- transparent and well-designed procurement processes;
- transactions that provide reasonable levels of returns (IRR); and
- secured off-take that is backed by government guarantees.

Many believe that the IPP program that has been so successful in South Africa can provide an ideal blue print for addressing the challenges that inhibit investment so desperately needed within the energy sector across Africa.

There is no doubt that the energy landscape within the continent and specifically South Africa is undergoing a period of unprecedented change. Market observers agree that the industry will look fundamentally different within the next few years and the role of the traditional vertically integrated state owned utility, will need to change. Understanding these changes and the challenges that they bring requires a partnership that can provide the right multi-disciplinary team with an integrated approach to the sector, with global credentials and local relevance to assist clients in this exciting journey.

The changes that are on the horizon brings with it the exciting opportunity for us to contribute to the future landscape of this fascinating industry.

Written By:

Ahmed Jaffer

Senior Partner | KPMG South Africa
Head of Power and Utilities Chairman
KPMG South Africa

E: ahmed.jaffer@kpmg.co.za





The importance of getting the accounting right

Getting the accounting right is fundamental to the success of potential and operating independent power producers (IPPs). Lenders rely on the underlying accounting (and tax) information contained in the financial models that potential IPPs submit in the hopes of securing funding for projects. The feedback from lenders is that potential IPPs need to invest more time and effort in the getting the accounting right in the financial models they develop for the IPP Programme. If the accounting principles are over-simplified or incorrect, this has a direct impact on the projected internal rate of return (IRR) calculated by the models. If the lenders can't rely on the projected IRR, they simply will not lend.

The Department of Energy (DOE) and Eskom also rely on the projected IRR in determining whether the project is bankable and whether to ultimately enter into a power purchase agreement (PPA) with the IPP.

For IPPs who are successful in securing a PPA, the accounting continues to be critical. For example, lenders will look to the ongoing results and financial position in assessing loan covenants. Shareholders will pay close attention too as they monitor the progress of their investments. The accounting considerations for the renewable sector have been broadly consistent. However, the forthcoming Coal, Gas and Co-generation IPP Programmes may bring different accounting issues to light. The issues noted below in relation to phase 1, 2 and 3 are likely to be similar. However, there may be additional considerations for phase 4 including whether the PPA should be treated as a service concession arrangement or an in-substance lease, in which case Eskom would recognise the power plant assets on its balance sheet.

The accounting issues faced by IPPs can be divided into 4 main phases of the IPP Programme. Some of the issues faced by IPPs in the Renewable Energy IPP Programme are as follows:

1. Pre-financial close – potential IPPs incur significant upfront costs in this phase. The main consideration is whether these costs should be capitalised or expensed.
2. Financial close - IPPs are often obliged to pay success fees on financial close. They are also required to pay a development fee to the DOE. Again, the main consideration is whether these costs should be capitalised or expensed.
3. Development/construction –
 - Property, plant and equipment (PPE) is significant to most IPPs. Significant areas of judgement relate to costs eligible for capitalisation, depreciation amount and timing, impairment, spare parts, compensation received from contractors, government grants and accounting for assets received from customers.
 - IPPs need to consider the extent to which borrowing costs should be capitalised to PPE as well as the timing thereof.
 - IPPs often exchange their shares for services or for Black Economic Empowerment (BEE) credentials. In some cases, share-based payment accounting is applicable and an expense is recognised.
4. Operation phase –
 - There are practical challenges in determining how IPPs should account for early operating and deemed revenue.
 - IPPs may face estimation uncertainty when applying the principles of revenue recognition, for example where meter readings do not coincide with reporting periods. This may be further impacted by the new revenue standard, IFRS 15 Revenue from Contracts with Customers.

Written By:

Tara Smith

Director | KPMG Reporting Accounting
Advisory Solutions

E: tara.smith@kpmg.co.za

The importance of commencing trade

Date: 9 September 2015

Before a company would be allowed to claim expenses as a tax deduction, it must be “carrying on a trade”. If a company is not “carrying on a trade”, its income (if any) remains taxable, but no expenses may be deducted against such income. The mere fact that the company intends to trade is insufficient, however. There must be evidence of active steps taken, which is more than the mere laying of plans.

It seems generally accepted that a project company (ProjectCo) would not be “trading” during the bidding process or the pre-financial close phase. During these stages there are no guarantees that ProjectCo will either be successful in being granted preferred bidder status or reach financial close by the due date. If these milestones are not reached, ProjectCo would not be in a position to operate and generate income.

Many companies take the view that trading commences at financial close. From this date, ProjectCo may incur costs such as salaries, rent, etc., and would be contractually obliged to commence and complete construction, in order to generate electricity and produce income. In other words, as at financial close ProjectCo is no longer merely laying out plans, but taking active steps to start generating income. However, are preparatory activities for a future venture sufficient to constitute trade? ProjectCo is not yet carrying on its core business of generating and selling electricity. No income is earned, and although this is not the only factor to consider, it will most certainly be an important one. In the American case *Richmond Television Corp vs Commissioner*, the judge said “....even though a taxpayer has made a firm decision to enter into business and over a considerable period of time spent money in preparation for entering that business, he still has not ‘engaged in carrying on any

trade or business’.... until such time as the business has begun to function as a going concern and performed those activities for which it was organized.”

The South African Revenue Service may very well take a conservative view and argue that ProjectCo is only able to perform those activities for which it was set up once the relevant third party testing in respect of the plant’s connection to the grid, as well as compliance with the relevant technical and operational requirements, have been successfully completed. Thus, it will be argued that trade only commences when formal sign-off is given that ProjectCo can start generating electricity for Eskom’s account.

Although no expenses would be deductible before ProjectCo is “trading”, the result is not as harsh as it may appear. Expenses incurred prior to trading are not necessarily lost, but possibly deferred until the year when trade commences. Further, if income is earned prior to trade, there are circumstances where such income may be deferred to a later tax year or otherwise shielded from tax. ProjectCo should ensure that its specific circumstances are carefully considered, to avoid an unforeseen tax liability arising in the pre-trade years.

Written By:

Tanya Engels

Partner | KPMG Renewable Energy

E: tanya.engels@kpmg.co.za

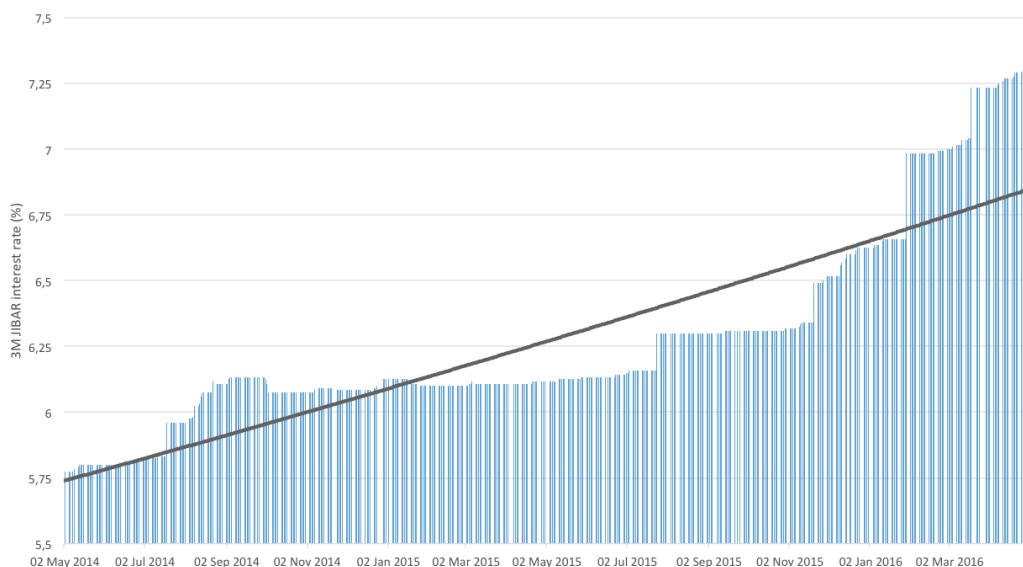


Renewable Energy Projects - Hedging yourself from a knowledge risk

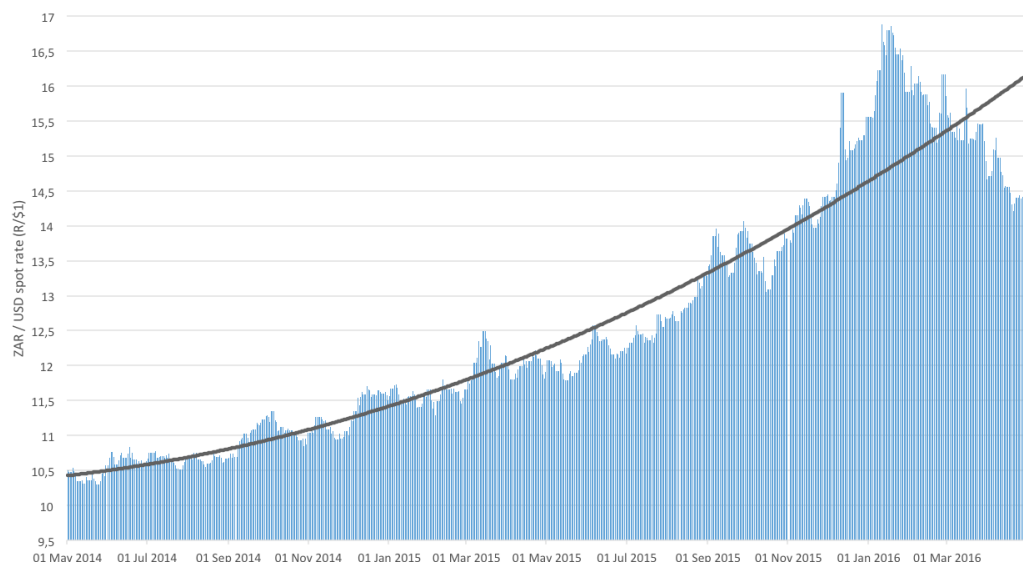
The South African energy industry is being transformed by the Department of Energy's (DoE) Renewable Energy Independent Power Producer Procurement Programme (REIPPPP). Many power purchase agreements (PPAs) have been signed between Eskom and Independent Power Producers (IPPs) and many more are expected. Even with this growth potential, this sector is

facing unprecedented challenges as a result of extreme volatility in financial and commodity markets, which most IPPs are either directly or indirectly exposed to. The volatility is evident in the graphs below indicating local interest rate (3-month JIBAR rates), foreign exchange rate (ZAR/USD spot rates) and commodity price (oil prices) volatility over the past 24 months.

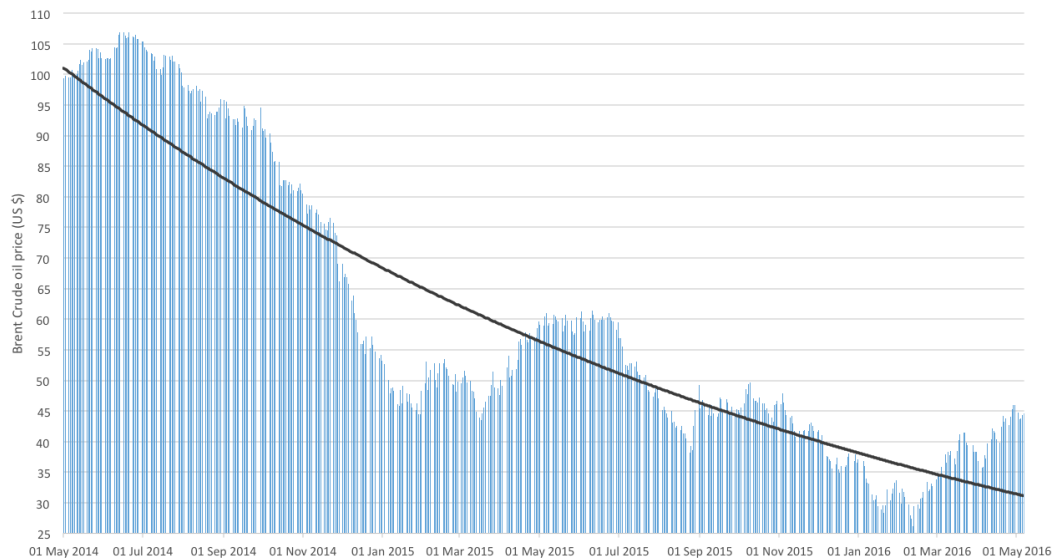
**3M JIBAR interest rate
(May 2014 to April 2016)**



**ZAR / USD spot exchange rate
(May 2014 to April 2016)**



**Brent Crude (WTI) oil price
May 2014 to April 2016**



A common feature of investor loans to IPPs is that they contain terms and conditions requiring the IPP to hedge all (or the majority) of their market risks. This includes interest rate, foreign exchange and commodity (fuel or coal) price risks. Hedging of these risks is traditionally achieved through the use of derivative contracts. The rationale behind these hedging strategies is to protect IPPs in the face of unexpected economic changes and market volatility. For example, foreign exchange rate movements can put substantial pressure on IPPs particularly where a project is committed to and asset and commodity purchase prices are denominated in US dollars, whilst having to sell power in the local currency.

Due to the specialised nature of trading derivatives and implementing hedging strategies, IPPs are exposed to operational risks, as well as valuation and accounting challenges, as the trading of derivatives do not form part of their core business. However, getting the accounting right in the pre and post PPA phases is particularly important for IPPs as lenders rely on the underlying accounting information contained in the financial models that potential IPPs submit, to secure funding for these projects.

The feedback from lenders is that potential IPPs should be investing more time and effort in getting the accounting right, in particular in the financial models they develop for the REIPPPP. If the accounting principles are over-simplified or incorrect, this has a direct impact on the

projected internal rate of return (IRR) calculated by the models. If the lenders can't rely on the projected IRR, it will restrict their appetite for lending.

Volatility in earnings

IPPs need to take into account the potential volatility in earnings that can be expected even when the IPP may have effectively hedged its relevant market risks. This is as a consequence of the mixed measurement model for accounting purposes, under International Financial Reporting Standards (IFRS), that require the measurement of financial assets and financial liabilities on different bases.

Underlying exposures, or hedged items (e.g. future capital expenditure commitments or loan liabilities), are for accounting purposes either not immediately recognised or, at minimum, only recognised on a conventional accrual basis. The derivative, or hedging instruments, entered into to hedge these exposures (e.g. interest rate swaps, FECs or commodity forwards) are, however, required to be regularly fair-valued through the income statement / profit or loss and therefore immediately reflect the full impact of market movements. These timing differences between the hedged item's and hedging instrument's accounting measurement basis will eliminate over the lifetime of the hedge, however, for financial reporting purposes, a mismatch will be reported until maturity is reached.

Consider the example of an IPP that is required to import various capital equipment for construction purposes, priced in foreign currency as part of its REIPPPP. Due to foreign exchange volatility the IPP is often required to hedge its foreign exchange risk using a forward exchange contract (FEC). From an earnings perspective, the IPP will experience volatility in its reported IFRS earnings due to fair value movements on the derivative. However, as the foreign exchange risk of the probable forecast purchase of equipment is “off balance sheet”, an accounting mismatch arises until the equipment is actually delivered and recognised for accounting purposes. This mismatch results in earnings volatility even though from an economic perspective the IPP is perfectly hedged.

Hedge accounting

Hedge accounting is the only solution to address these accounting timing differences. Under hedge accounting, an entity could selectively measure assets, liabilities and firm commitments on a basis different from that usually stipulated in the accounting standards (IFRS), or could defer the recognition of gains or losses on derivatives in equity. This removes the volatility in earnings and ensures the financial information reflects the results of the hedging decision which management has taken.

It is only possible to apply hedge accounting when certain IFRS technical documentation and effectiveness testing requirements are met.

While seemingly onerous and slightly technical, most of the requirements would ordinarily be considered by organisations entering into hedging programs, however, these are often not formally documented. They include:

1. There must be formal designation and written documentation at the inception of the hedge, explaining amongst other things, the entity's risk management objective and strategy for undertaking the hedge and the details of the hedged item and hedging instrument.
2. Demonstration that the effectiveness of the hedging relationship can be measured reliably.
3. Reasoning that the hedge is expected to be highly effective in achieving fair value or cash flow offsets in accordance with the original documented risk management strategy.
4. Developing a hedge effectiveness testing methodology whereby the hedge is assessed and determined to be highly effective on an ongoing basis throughout the hedge relationship. (A hedge is highly effective if changes in the fair value of the hedging instrument, and changes in the fair value or expected cash flows of the hedged item attributable to the hedged risk, offset within the range of 80-125 percent.)
5. For a cash flow hedge of a forecast transaction, the transaction is highly probable and creates an exposure to variability in cash flows that could ultimately affect profit or loss.



If hedge accounting is not applied or achieved, the accounting results for an organisation may not reflect the result of the economic hedges transacted in their financial statements, thereby triggering significant volatility in their earnings. Whilst the current hedge accounting principles provides an effective solution for IPPs embarking on hedging strategies, they will have to be cognisant of the strict requirements in order to correctly apply it. This requires specialist accounting and valuation skills.

Hedge accounting principles are undergoing further changes under IFRS 9 which has an effective date for implementation set at 1 January 2018. This new standard broadens the application of possible hedge accounting strategies and promotes a more principles based approach which is aligned to an entity's risk management practices.

Conclusion

IPPs are being required to manage their market risks through derivative hedging strategies. These strategies open them up to various operational, accounting and valuation challenges which they are not adequately resourced or equipped to manage. With the current volatility in financial markets these entities also face significant volatility in earnings if they are unable to apply hedge accounting.

To face this challenge, IPPs need to obtain a practical understanding of these demands to ensure that they manage their risks effectively and provide financial reporting that appropriately reflects this.

How can we help?

KPMG offers an extensive range of financial engineering and risk consulting services applicable to hedge accounting training, implementation and assessment. We are able to provide an "end-to-end" approach: governance and strategy, valuation models and methodologies, independent price verification, operating models and processes, including software/automation solutions and structuring solutions for risk management and hedging.

KPMG's Financial Engineering Group (FEG) has assisted numerous clients with cash flow and fair value hedge accounting to better understand the concepts, principles and requirements of the applicable accounting standards and to reduce income statement volatility and achieve synchronous accounting results. We have also supported clients to assess the appropriateness of their hedge effectiveness testing and assisted on the design and automation of hedge effectiveness testing models, including the development of hypothetical derivative models, regression models and scenario analysis for hedge effectiveness testing.

Written By:

Kevin Hoff

Partner | KPMG Financial Services

E: kevin.hoff@kpmg.co.za





CONTACT US:

Ahmed Jaffer

Partner | KPMG South Africa Head of
Power and Utilities Chairman KPMG
South Africa

M: +27832978920

E: ahmed.jaffer@kpmg.co.za

Tara Smith

Partner | KPMG Reporting Accounting
Advisory Solutions

M: +27827190519

E: tara.smith@kpmg.co.za

Tanya Engels

Partner | KPMG Renewable Energy

M: +27827190418

E: tanya.engels@kpmg.co.za

Kevin Hoff

Partner | KPMG Financial Services

M: +27827148914

E: kevin.hoff@kpmg.co.za

© 2016 KPMG Services Proprietary Limited, a South African company and a member firm of the KPMG network of independent member firms affiliated with KPMG International Cooperative ("KPMG International"), a Swiss entity. All rights reserved. Printed in South Africa. KPMG and the KPMG logo are registered trademarks of KPMG International Cooperative ("KPMG International"), a Swiss entity. MC14285.

