

LAD CASE STUDY

Strengthening Electricity Distribution in Uganda: The Role of Private Equity

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LAD

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In August 2012, Partner David Grylls and Director Adrian Mucalov of Actis, a global private equity fund active in emerging markets, met in their London office to review key points for an upcoming meeting with the Actis Investment Committee. Grylls and Mucalov were tasked with resolution of several issues regarding the Initial Public Offering (“IPO”) of Uganda’s main electricity distributor, Umeme Limited (“Umeme”), scheduled for listing on the Uganda Securities Exchange (“USE”) in November 2012 and for cross-listing on the Nairobi Securities Exchange (“NSE”) in December 2012. News that Actis, owner of 100% of Umeme’s shares, was planning to divest a partial stake in Umeme was met with heated debate among several key stakeholders, including factions within the Government of Uganda (“GoU”), the Electricity Regulatory Authority of Uganda (“ERA”), and the Ugandan public. Support from certain factions of parliament was lacking. The next few weeks would be crucial as the Actis and Umeme management teams began their roadshow to generate interest in the IPO from among prospective investors in South Africa, Kenya, Uganda, and London.

Uganda’s existing electricity distribution company, a monopoly, was in dire straits in 2005 when Actis took over and created Umeme. Through its fully owned portfolio company Globeleq, Actis assumed indirect ownership of Umeme from 2005 to 2009, and direct ownership from 2009. The business had been plagued by frequent power losses, a dismal safety record that included high rates of accidents among the general public and of serious injuries and fatalities among workers, as well as persistent financial distress. Despite challenges that seemed overwhelming, Actis, relying on its deep experience as an investor in emerging markets, notably in the power sector, was confident it could improve the company and transform it into an efficient and competitive organization for power distribution in Sub-Saharan Africa. Indeed, Umeme seemed well suited to benefit from the approach to resources and investment offered by a private equity firm experienced in emerging markets. Such an arrangement would provide injections of badly needed capital, hands-on management, and operational expertise over a relatively long time horizon.

Over the past seven years, Actis had invested significant staff time and financial resources in proving its investment thesis and value-add strategy for Umeme. Grylls was particularly proud of what the Actis and Umeme team had achieved through “focused capital investment, operational improvements including loss reduction, development of strong stakeholder relations, particularly with the Government of Uganda, and a deep commitment to safety, environmental, social and governance principles (“ESG”).” As a result, Umeme had built a financially sound electricity distribution business with world-class management and a clear vision and trajectory for continued success.¹

Kelvin Fu prepared this case under the supervision of Professor Roger Leeds of Johns Hopkins School of Advanced International Studies. The case was developed for the Leadership Academy for Development, solely as a basis for class discussion. It is not intended to serve as historical record, a source of primary data, or an illustration of effective or ineffective management.

Despite Umeme’s impressive transformation, significant underlying tensions between various stakeholders remained. In particular, certain factions of the GoU had previously advocated early termination of the 20-year concession arrangement, begun in 2005, with Uganda Electricity Distribution Company Limited (“UEDCL”) for power distribution. Discontent also came from consumers who periodically protested what they perceived as high tariffs, irregular access to power, and frequent power cuts. Before proceeding with the IPO roadshow, the Actis Investment Committee asked Grylls and Mucalov to design a plan for addressing concerns of key stakeholders, including institutional and retail investors likely to participate in the IPO, as well as ERA officials, capital market authorities, and officials of securities exchanges in Uganda and Kenya. Grylls and Mucalov also needed a strategy for handling press reports about the IPO. When news of the planned IPO had leaked into the press, for example, the result was speculation about the future of both the company and the sector. Based on their long experience in creating value for businesses operating in low income, developing countries, Grylls and Mucalov were confident that Umeme displayed the underappreciated potential of private equity. In developing countries like Uganda, this contribution of private equity to overall development of the private sector was often misunderstood. The Actis team, therefore, needed to showcase Umeme’s successful transformation and to demonstrate the company’s strong potential for continued growth and expansion of public access to affordable electricity. Consequently, Grylls and Mucalov planned to emphasize essential aspects of the turnaround that contributed to the company’s ongoing growth: improved safety, more dependable access to and quality of electricity, more responsive customer service, sound financial performance, environmental cleanup of the company’s operations, and vastly improved adherence to world-class ESG standards. They also wished to demonstrate to investors that the proposed IPO had the support of the GoU, ERA, and the capital market authorities in Uganda and Kenya. Since this would be the largest IPO ever attempted in Uganda and the first Ugandan cross-listing with the Nairobi Securities Exchange, it was important to address uncertainty about the capability of the two exchanges to execute the IPO efficiently, and, equally important, about adequate liquidity of the secondary markets. Grylls and Mucalov knew that the Actis Investment Committee would expect a detailed explanation of how they planned to persuade investors that it was the right time to purchase Umeme shares. Grylls and Mucalov were also acutely aware of the impact that a failed IPO would have on the future value of Umeme and on the exit options available to Actis.

Ugandan Economy

Uganda is a landlocked East African country with an area of 241,038 square kilometers; the actual land area is 199,810 square kilometers (see **Exhibit 1** for a map of Uganda). In 2012, Uganda’s population was 36,306,796, with a per capita GDP of US\$647.70.ⁱⁱ Uganda is the second most populous landlocked country and remains one of the poorest countries in the world, with 37.7% of the population living on less than US\$1.25 a day.

During 2010 and 2011, Uganda experienced consistent strong growth in GDP, 6.2% and 5.9%, respectively. This growth was driven by an increase in investment and regional demand. The economy expanded primarily on the back of the industrial and service sectors. However, a slight slowdown to 5.3% growth in GDP was expected in 2012, the result of stagnation in public spending, lower demand for exports from the Euro Zone, and higher local interest rates restricting activity in the private sector.ⁱⁱⁱ

Agriculture is the most important sector of the economy, employing over 80% of the work force. Coffee accounts for the bulk of export revenues. Uganda has substantial natural resources, including fertile soils, regular rainfall, recently discovered oil, and small deposits of copper, gold, and other minerals. Economic growth in recent years has been constrained by the inadequacies of the infrastructure, including the electric power sector. Especially in emerging markets, increased demand for electricity is driven by the growing requirements of power for both operation of commercial industry and for the residential sector as penetration, incomes and spending increase.

Overview of the Ugandan Electricity Sector

In 1999, the government initiated liberalization of the electricity sector through issuance of the Power Sector Reform and Privatization Strategy, enacting a new electricity law (The Electricity Act, 1999) and creating the ERA to regulate the industry.^{iv} In the same year, the government also mandated the unbundling of Uganda Electricity Board (“UEB”), a monopoly that had been responsible for managing generation, transmission, distribution, sale, import and exportation of Uganda’s electricity.^v The unbundling of the UEB formally occurred in April 2001 and the electricity sector was restructured into three distinct companies: The Uganda Electricity Generation Company Limited (“UEGCL”) to manage electricity generation for the entire country, the Uganda Electricity Transmission Company Limited (“UETCL”) to manage electricity transmission and the Uganda Electricity Distribution Company Limited (“UEDCL”) to manage electricity distribution. All three companies were licensed and regulated by ERA, which was mandated to establish and monitor a tariff structure (see **Exhibit 2** for an overview of the Uganda electricity industry).

According to the Ugandan government, demand for electricity was expected to more than double in the next decade, assuming continued trends of economic growth. Government estimates projected an increase in domestic power sales from just over 1,700GWh in 2011 to approximately 4,600GWh in 2021, which would help mitigate the acute power shortages. Effective generation of approximately 400MW at times fell short of demand. However, the new Bujagali hydropower plant that began generating in February 2012 was now operating at full capacity of 250MW, significantly increasing the energy supply. Between 2005 and January 2012, the GoU attempted to ease the shortfall by subsidizing thermal power supply. Elimination of those subsidies in mid-January 2012 resulted in a significant increase in the retail tariff. However, the increase created a more sustainable energy sector as the retail tariff is now reflective of the true cost of electricity generation, transmission, and distribution.^{vi}

On the supply side, the primary energy sources in Uganda are hydropower and thermal. The GoU is committed to increasing power generation in Uganda and has been working with the private sector to plan for a diverse and sufficient generation mix – albeit leveraging Uganda’s significant hydroelectric potential. Co-generation and thermal plants had recently been commissioned by local and foreign investors, with the newly commissioned Bujagali hydropower dam as the most notable example of private sector investment. Power generation capacity in Uganda was severely underinvested for many decades. The first hydropower station, Nalubaale, was built in 1954 with an installed capacity of 180MW and the second hydropower station, Kiira, was built in 2000 with an installed capacity of 200MW.^{vii} Prior to the privatization of Umeme, it was difficult to attract power generation companies for investment and construction in Uganda. The crumbling power distribution infrastructure and extremely low

collection rates essentially meant that power generation companies could not earn profits.^{viii} As a result, it was only after a gap of eight years that the next power generation plant was built, in 2008, before the electricity distribution infrastructure and sector cash flows improved significantly (see **Exhibit 3** for Uganda’s power generation capacity).

Umeme

Umeme Limited, the main electricity distribution company for Uganda, was established in 2005 as a joint venture between Globeleq, a wholly owned portfolio company managed by Actis, and Eskom, South Africa’s state-owned electricity generation and distribution company, with the two firms holding 56% and 44% of the shares respectively. In November 2006, Eskom sold its 44% stake to Globeleq, which thereby became the sole shareholder of Umeme.

The new company emerged in the aftermath of a restructuring program in the power sector, undertaken by the World Bank and other international development agencies at the behest of the Ugandan government. Formation of the company was part of Uganda’s broader privatization of the power sector, including the unbundling of transmission, distribution and generation, and the awarding of concessions for the operation of existing generation assets.

In March 2005, Umeme took over the operation and management of distribution and supply of electricity throughout Uganda, formerly conducted by UEDCL. This arrangement required that Umeme pay rental for lease of the distribution system, including the right to operate assets and charge customers for distribution and supply of electricity over the distribution network. Under the terms of the Concession Agreement, Umeme obtained licenses from ERA for distribution, supply and embedded generation.^{ix} The Concession also gave Umeme the exclusive right to charge customers for distribution and supply of electricity over the network (see **Exhibit 4** for key milestones of Umeme).

Umeme’s core business activities are 1) electricity distribution, including the operation, maintenance, upgrading and expansion of the distribution network; and 2) electricity supply and after-sales service, including the connection of new customers, meter reading, revenue collection and customer care. Umeme’s profitability is primarily driven by a fixed USD return on investment (“ROI”) of 20% per annum on network capital investments made and approved by ERA. Actual ROI may be higher or lower than the target, depending on Umeme’s ability to meet the set tariff parameters for distribution losses, uncollectible debts, and distribution operation and maintenance costs (“DOMC”).^x For example, if Umeme does not meet the distribution losses, collection rates and DOMC in accordance with the established tariff rate, then the ROI will be negatively impacted (see **Exhibit 5** for the tariff parameters and the actual performance of Umeme). In other words, Umeme is incentivized to meet or exceed its electricity distribution sales volume and tariff targets so as to earn additional profits.

Background on Actis

Actis, one of the largest private equity firms in emerging markets, was created in 2004 as a spinout from the UK government-owned Commonwealth Development Corporation (“CDC”). Once created as a separate entity, the Actis investment strategy was driven by three trends spurring growth in many developing countries: 1) the rising importance of private sector activity;

2) the rapid migration of millions of people from rural to urban areas and a subsequent increase in incomes among urban consumers; 3) the proliferation of new private companies requiring the long-term capital and expertise that equity firms like Actis could provide in rapidly growing sectors such as energy, real estate, consumer goods and banking services. As a result of these trends, firms like Actis were well placed to make potentially high-profit investments that would also positively impact the country's overall development in the private sector.^{xi}

The ethos of Actis was the “positive power of capital,” expressing the firm’s confidence in bringing about positive change in both its portfolio companies and in the countries of investment. As an example, Actis’ investment strategy emphasized awareness and strengthening of ESG practices in its portfolio companies. To measure the effectiveness of its ESG value creation strategy, Actis developed a methodology for quantitative assessment of the ESG impact in each of its portfolio companies. To this end, Actis created an Energy Impact Model to assess the post-investment progress of its energy portfolio companies in six distinct categories: Finance, People, Social/Community, Infrastructure, Environment and Governance. In each category, the model pinpoints key areas that require action to enhance company performance. For the Umeme investment, the Actis Energy Impact Model provided the deal team with the metrics for goals to achieve during the investment period (see **Exhibit 6**).

Commenting on the approach and investment opportunity the Actis team saw in Umeme, Mucalov explained:

The number one question we ask ourselves when we look at investment opportunities in the power sector is the level of creditworthiness in the sector. Many governments in emerging markets provide significant subsidies to their utility companies and this creates a “false economy,” as governments (around the world) inevitably restrict badly needed capital expenditure in the core utilities, tie up scarce government revenues, and ultimately need to offer investors substantial guarantees – further burdening the government balance sheet which could otherwise be used for social priorities including healthcare and education. Our experience indicates that in order to have a sustainable sector in the long run, it is critically important that the sector is creditworthy and able to collect cash from consumers regularly, rather than depending on government subsidies. Our key message when we approach governments is that the privatization of the power sector means that subsidies must be phased out to allow the sector to move towards a cost-reflective tariff structure – with different tariff categories taking into account affordability considerations. One of the key reasons we saw tremendous opportunities in Umeme was because the GoU had developed a very clear, fair and transparent concession that supports the development of the sector.

The Actis Takeover of Umeme: Addressing a Daunting Array of Challenges

Umeme faced daunting challenges when it was created in 2005. It inherited the underperforming assets and poor track record of its state-owned predecessor, the UEDCL, and was plagued by poor customer services, serious safety problems and severe underinvestment in the dilapidated power distribution network.^{xiii} Due to other government priorities and failure to set cost reflective tariffs, the business developed a long backlog of deferred maintenance and underinvestment; equipment such as transformers, conductors, wires and poles were corroded and in poor condition, resulting in an often faulty distribution system. Power theft was prevalent throughout

the network, aggravated by the company's limited resources to employ staff for routine inspections. In addition, minimal accountability at the local staff level meant that employees often turned a blind eye to theft or actively colluded with locals to steal power.

The power shortages, rolling blackouts during peak demand hours, and other disruptions were compounded by major delays in adding new generation capacity at a time of rapidly growing demand. By 2006, due to an exceptional drought, Umeme faced a major power crisis that forced the government to import electric power from neighboring Kenya as well as to deploy temporary rental power at considerable taxpayer expense. The tariff for bulk electricity supply rose by more than 300% in 2006, and retail tariffs soared by about 140%. In order to avoid further tariff increases and the political fallout resulting from power shortages and price increases, the government resorted to consumer subsidies, amounting to US\$50 million a year.^{xiii}

This was the unfortunate reality of Umeme when Actis took effective management control in 2005. Turning the company around required that Actis invest significant capital and mitigate its exposure to regulatory and political risks. To manage this, Actis relied on assistance from two affiliates of the World Bank Group: the International Development Association ("IDA") and the Multilateral Investment Guarantee Agency ("MIGA"). IDA facilitated privatization of Uganda's power distribution sector by mitigating regulatory risk through its Partial Risk Guarantee ("PRG")^{xiv} instrument of US\$5.5 million in support of the Concession Agreement.^{xv} In simple terms, the PRG supported a US\$20 million letter of credit posted by the GoU to support its obligations under the concession, effectively providing a World Bank guarantee as "credit enhancement," given the absence of a sector track record. At the same time, MIGA also issued US\$40.5 million political risk insurance ("PRI").^{xvi} The PRI protected Actis' equity investment for 20 years against the risks of currency convertibility, war and civil disturbance, and, most importantly, breach of contract.^{xvii} With the strong backing of these World Bank affiliates, Actis was able to quickly embark on an ambitious multi-year program for transformation of its newly acquired enterprise.

Endowed with new management and an injection of additional capital, Umeme undertook an initial capital expenditure ("capex") program to invest about US\$44 million in rehabilitating and expanding the capacity of its power distribution network, implementing a new customer billing system, and rolling out a new customer call center. The Umeme/Actis investment program also targeted the replacement of poles and conductors, the upgrade and expansion of medium voltage transmission lines and substations, and the introduction of new pre-paid meters.

Then, in 2009, the company embarked on an additional US\$50 million investment program, with US\$25 million sourced from a loan by the International Finance Corporation ("IFC"), and the balance from internal cash generation. These funds were applied to additional investment to build out and expand capacity of the distribution network, reduce network losses, and upgrade existing equipment.^{xviii} Actis played a critical role in securing the loan from IFC by working with Umeme management to present a compelling investment thesis.

The results generated by these two investment programs were transformational. By 2012, when Grylls and Mucalov were poised to launch the IPO, Umeme had replaced 145,000 rotting poles (at that time representing over 50% of the physical network), exceeding its original target of 120,000, built an all-purpose training facility to improve employee construction capabilities, ensured compliance with new safety standards, and completed a number of other important

capital improvements (see **Exhibit 7** for details on the capital expenditure program of Umeme).

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Another indicator of substantial progress was the sharp increase in the number of customer connections to the network, from 292,237 in 2005 to 457,808 in 2011, yielding an annual average growth rate of 8%. Significantly, in 2011 this achievement far exceeded the customer connections metric stipulated in the original Concessions Agreement signed with the government. The company also exceeded expectations by substantially increasing the number of rural customers connected to the grid, and was cooperating with the Rural Electrification Agency (“REA”) to increase this number many fold in the coming years, adding connections to Umeme’s network.

Increases in customer connections were accompanied by a major expansion of the number of customer service centers, and additional investments designed to equip and train new staff for customer care. With these improvements, for the first time, customers could easily access a new toll free phone number allowing them to apply for a connection, pay their monthly electricity bills, or alert the company to network problems such as power outages, rotten poles, cut wires or illegal connections. The 24-hour toll free customer service lines were operated by 40 employees dedicated to solving customer complaints. Collection rates also improved significantly with the company’s installation of pre-paid meters called “Yaka!” This initiative allowed customers to conveniently manage and control their electricity consumption, while at the same time reducing Umeme’s operational costs, and improving cash flow management.

“In the past, customers did not have any means to notify Umeme of any live wire incidents,” explained Phil Ball, Umeme’s Chief Safety Officer. “Instead, they simply went about their lives even if there was a dangerous live wire in their neighborhood. Customers were accustomed to thinking that it would take several days before Umeme could send a ground team to shut off the power, repair the live wire and restore power. With the new 24 hour service we were able to dramatically improve the emergency response time from a few days to 30 minutes!”

Umeme’s major investment programs, attention to customer care, and other operational improvements, began to reap the positive results anticipated by Actis. The percentage of population in Uganda with access to electricity increased from 8.9% in 2005 to 14.2% in 2012.^{xx} Umeme was also able to reduce the annual average distribution losses from 38% in 2005 to 27% in 2011, and the collection rate increased from 80% to 99% in the same period, exceeding the targets established in the initial Concession Agreement.^{xxi} In addition, Umeme enrolled more than 165,000 net new customers beginning in 2005, and was adding 50,000 new customers annually to the grid (see **Exhibit 8a-d** for more information on Umeme’s operational performance).^{xxii}

Major improvements in operational performance translated directly into stronger financial results. The rapid growth in customer numbers, coupled with an increase in available power supply (due to the increased power generation capabilities of the grid), led to significant growth in sales volumes; measured in gigawatt hours (“GWh”),^{xxiii} sales volume grew at a compound annual growth rate of 11.1% from 2007 to 2011. Earnings before interest, tax, depreciation and amortization (“EBITDA”) increased at an even faster annual rate of 23.5% during this same period, driven by volume growth, capital investment, and loss reduction (see **Exhibit 9a-c** for detailed financials of the company).^{xxiv} Because Umeme is entitled to a 20% return on capital

deployed in network investment, the concession contracts incentivized the company to maximize investment in valuable expansion, rehabilitation, and upgrading of projects.

Prioritizing ESG Initiatives to Provide Strategic Oversight

The company's major capital investment programs required strengthening of ESG standards and practices, a management priority that Actis considered of essential importance in the turnaround strategy. As part of its initial due diligence on Umeme, Actis had conducted an audit of health and safety policies, concluding that safety systems were seriously substandard. The numbers of network-related and worker-related fatalities and serious injuries were alarmingly high. Security and housekeeping of sites was poor, leading to increased risks of electrocution; lack of training programs meant a shortage of trained staff, and safety equipment for property was insufficient.

Based on past experience, Actis held that a critical first step in correction of these problems was establishment of sound corporate governance standards and practices, crucial to attracting additional capital. Strengthened corporate governance practices would enable Umeme not only to establish and monitor compliance with acceptable ESG practices, but also to improve financial transparency and reporting, and to hold management accountable for clear, measurable targets of finance and operation. The process began with revamping the board of directors and implementing a new set of governing rules based on international best practices. Actis leveraged its broad global network of professionals by recruiting a number of new, independent board members, and separating the positions of Board Chairman, who would be an independent, non-executive director, and Managing Director. Actis recruited Charles Chapman, a seasoned electric utility executive as the new Managing Director, and five new independent, non-executive directors with strong experience in operating electrical utility companies, finance and accounting, and/or local business expertise (see **Exhibit 10** for their profiles). Separate board committees were formed to provide oversight and specialized expertise to the board, including committees focused on ESG, Audit, Remuneration, Customer Service and Loss Reduction, and Nominations.^{xxv}

Supported by the Actis ESG global team of specialists, Umeme's newly established ESG Committee ("ESGC") produced a terms of reference ("TOR") that detailed its composition, responsibilities, and procedures for regular reporting to the board. The ESGC responsibilities included: 1) assisting and guiding the Umeme management team in the interpretation of ESG principles; 2) ensuring the company had adequate systems in place for monitoring compliance with the ESG principles; and 3) serving as the liaison for key Umeme stakeholders, such as customers, in any matters related to ESG. The new Committee also developed an ESG Action Plan that laid out "Key Environmental, Health and Safety Performance Indicators" to be tracked and updated regularly, and established a new Safety Department that would report regularly to the ESGC.

The board also granted ESGC authority to regularly track progress in reduction of technical losses, improvement of vehicle fleet efficiency, recycling of waste, elimination of fatal accidents and injuries among the public stemming from illegal connections, and reduction in incidents of worker injury. One encouraging result of these initiatives was the reduction of network-related fatalities from a high of 17 in 2007 to 1 in 2012 (see **Exhibit 11** for the number of safety incidents from 2005 to 2011).^{xxvi} And as further evidence of Umeme's ESG commitment, the company formally adopted the World Bank's and IFC's Performance Standards on Environment and Social Sustainability and Anti-bribery and Anti-corruption Guidelines.

“The creation of the ESG Committee was especially critical to Umeme’s growth and development,” explained Selestino Babungi, Umeme’s Chief Financial Officer. “It was a key enabler for our success in protecting shareholder’s interest and attracting additional capital from international investors, such as IFC. To mitigate the risks of corruption, we also adopted a whistle blowing policy and engaged Transparency International to manage the Integrity Call Centre. It required a shift in mindset and corporate culture, but it made us a stronger company overall.”

ESG compliance was affected by management’s decision to decentralize many business operations, vesting new responsibility and authority in 25 district management teams. For example, Local District Managers were given “ownership” of safety programs, and became accountable to the ESGC for achieving key ESG performance indicators in their districts. Moreover, each local team was given responsibility for managing its own budget and implementing its own capital expenditure program to replace deteriorating infrastructure. In addition, a key initiative implemented by the ESGC was to increase awareness and understanding of safety measures by organizing “Safety Priority Projects” throughout the country, with local Umeme staff responsible for giving health and safety educational talks at school training centers, market places, and on radio and television programs.

Based on long experience investing in companies similar to Umeme, Actis was confident that creation of the ESGC and establishment of detailed ESG performance metrics were critically important steps in strengthening the company’s overall financial and operating performance. The Actis team also knew that these steps were a prerequisite for a successful IPO strategy, as investors everywhere increasingly used ESG compliance as key criteria for investment.

Preparations for an IPO

As a result of substantial improvements in the company’s operational and financial performance, by the summer of 2012, Umeme and Actis had gained significant credibility with the GoU, ERA and the public. A solid foundation was now in place to implement the next stage of Actis’ long-range plans: a multi-stage exit strategy, gradually turning over control of the company to new, primarily local and regional ownership. Actis viewed the IPO as the first step towards its complete divestment over time, either through additional share offerings on the USE and/or NSE, or perhaps a trade sale to a strategic investor. (See **Exhibit 12** for the IPO stages of preparation and **Exhibit 13** for an update on pre-exit preparations).

In preparation for the 2012 offering, the IPO team devoted considerable attention to the cross-listing of Umeme on both the USE and NSE. If successful, the listings would serve as an important validation of Actis’ original investment thesis. They would also represent an important milestone in the establishment of an integrated regional capital market, a long anticipated initiative supported by capital markets authorities in the five East African nations (Uganda, Kenya, Tanzania, Rwanda and Burundi).^{xxvii}

To bolster the IPO transaction team, Actis engaged PriceWaterhouseCoopers (“PWC”) as an advisor to ensure the company’s full compliance with the listing requirements of the two stock exchanges (e.g. corporate governance, accounting and financial reporting practices, public company disclosure requirements). They enlisted Stanbic Bank of Uganda to serve as transaction advisor and lead book runner, and African Alliance as the sponsoring broker. Stanbic and

African Alliance were selected because of their strong local networks and understanding of the regulatory requirements of Uganda and Kenya, and their capacity to help Actis and Umeme navigate the IPO process smoothly.

The transaction team decided to first execute the primary offering on the USE, and soon thereafter cross-list the shares on the NSE. A complication arose when a review of listing requirements in the two jurisdictions revealed more stringent regulatory requirements in Kenya than in Uganda. After discussions between capital markets regulators from both countries, it was agreed that as long as Umeme complied with listing requirements of NSE, it would also have fulfilled the USE requirements. This regulatory compromise benefited Umeme by requiring the company to file only one set of documents, both for the IPO approval and all subsequent disclosure documents (e.g. annual reports).^{xxviii}

As explained by David Alderton, manager of the IPO process:

There were four critical issues we faced in the lead-up to the IPO, starting as early as 2010. First, on the external environment side, it was important to manage and get support from key stakeholders such as the GoU, ERA, capital market authorities and securities exchanges of Uganda and Kenya. Second, the 2012 timing of the IPO coincided with the seven year tariff review process where the ERA set three main operating targets for the period 2012-2018: energy losses, collection rate and DOMC. Hence, we had to work closely with the ERA to make sure the targets were realistically set and achievable, as it would have a direct impact on our bottom-line. Third, we had to ensure we fully complied with the listing requirements for USE and NSE, so we spent a lot of time with external auditors and financial advisors. Lastly, we strengthened our board by recruiting new directors and establishing various subcommittees to embed best practices in corporate governance throughout the company.

By 2012, Actis and its outside financial advisors were confident of high investor interest in the proposed IPO. Some of the key institutional investors identified by Actis included the National Social Security Fund of Uganda (NSSF)^{xxix} and the IFC. Support from both of these institutions would provide a strong signal to the market that institutional investors had confidence in Umeme's turnaround story and its potential for continued future growth. They also hoped that investor interest would be boosted by the scarcity of alternative equity offerings on the two exchanges (see **Exhibit 14** for a list of companies listed on the USE). Furthermore, the IPO would signal that Umeme was poised for a gradual change of ownership, providing Actis the opportunity to reduce its exposure to Umeme and to begin realizing financial gain from its seven years of extensive hands-on involvement.

Grylls explained the strategy for attracting investors and generating stakeholder support for the offering:

One reason for the IPO was to mitigate risks due to the political and regulatory uncertainties. There were increasing efforts by a small group of Ugandan Members of Parliament to terminate the concession agreements. We significantly reduced perceptions that Umeme would be seen as a foreign-owned company by diversifying equity ownership to include the Ugandan public and Umeme employees, as well as domestic and international investors. We also reached out directly to key stakeholders to generate support for the IPO, including meetings with the President of Uganda, Yoweri Museveni,

who offered his support for the IPO in November 2011. In addition, Umeme sought and received support from ERA through a “letter of no objection” to the IPO.

The transaction team devised a share allocation structure that divided the offering into two investor pools: the “Domestic Pool” and the “International Pool.” The Domestic Pool was subdivided into three sub-pools: Employees and Directors, Retail East African investors and “qualified institutional investors” (QIIs)^{xxx} (see **Exhibit 15** for more details on the allocation policy). In the domestic pool, the team introduced an Employee Share Ownership Plan (“ESOP”) to further incentivize the management team and employees to drive shareholder value. The scheme was expected to attract and retain top talent for Umeme and it also encompassed all of Umeme’s more than 1,300 employees by granting 10,000 shares to each eligible employee as fully-paid shares. This Share Grant Scheme would cost the company approximately US\$5.0 billion (US\$2 million)^{xxxii}, but was viewed as an essential means of gaining support for the offering.^{xxxiii} Ugandan retail investors also were incentivized to participate in the IPO by the offer of additional Umeme shares called “Incentive Shares” at no cost, assuming Umeme’s success in the IPO application (see **Exhibit 16** for the Incentive Shares scheme). Finally, marketing of shares to local retail investors would be facilitated through use of Stanbic’s extensive network of Ugandan bank branches that provided highly accessible and convenient means for investors to subscribe.

Conclusion

The Actis deal team, having worked diligently to keep Umeme on track to meet the listing requirements of the USE and NSE, was almost ready to launch the investor roadshow scheduled to start in a few weeks. Grylls and Mucalov were under immense pressure to ensure smooth rollout of the roadshow and final preparation for the IPO. Before the Investment Committee meeting, they needed to anticipate questions that might arise concerning their strategy for making a persuasive case to IPO investors. How, for example, would they explain the timing of the IPO? What about secondary market liquidity on the two stock exchanges which had hitherto very thin daily trading activity among only a handful of listed companies^{xxxiii}? What key selling points should be highlighted to persuade investors that Umeme’s growth trajectory and profitability were sustainable? Additionally, prospective foreign investors would certainly want to know what steps had been taken to mitigate political risk in Uganda and to ensure that Umeme was operating to expected standards of governance. They glanced through their notes one final time as members of the Actis Investment Committee entered the meeting room.

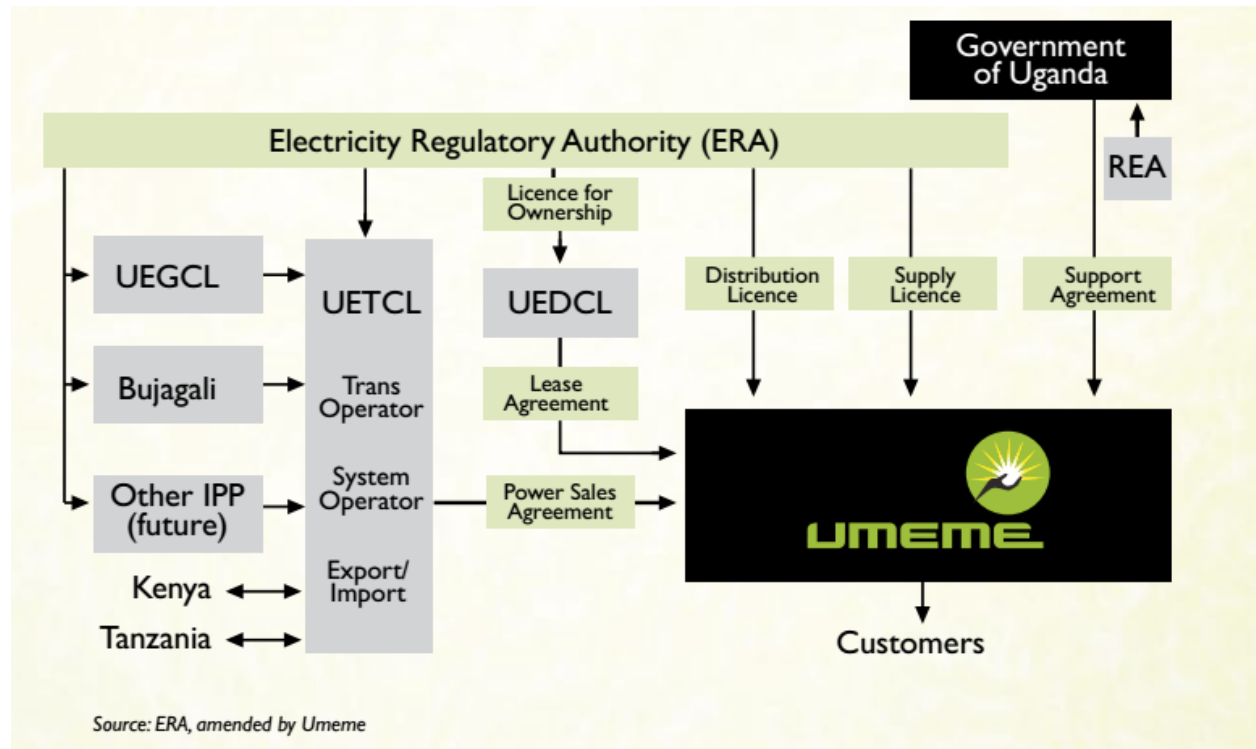
Appendices

Exhibit 1 Uganda Map



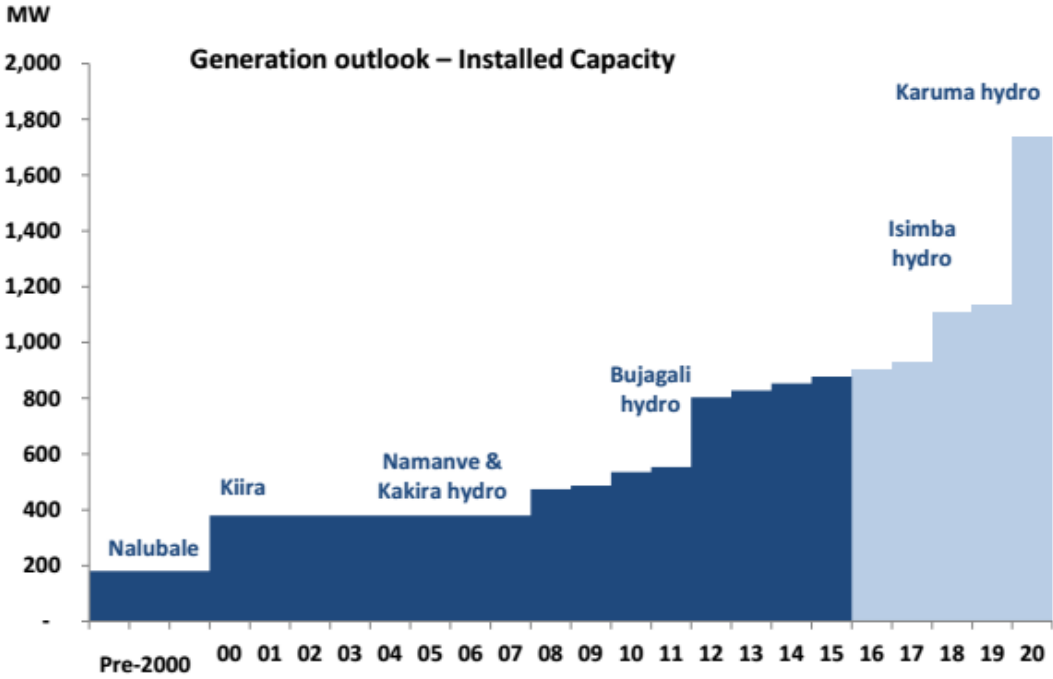
Source: World Atlas

Exhibit 2 Uganda Electricity Industry



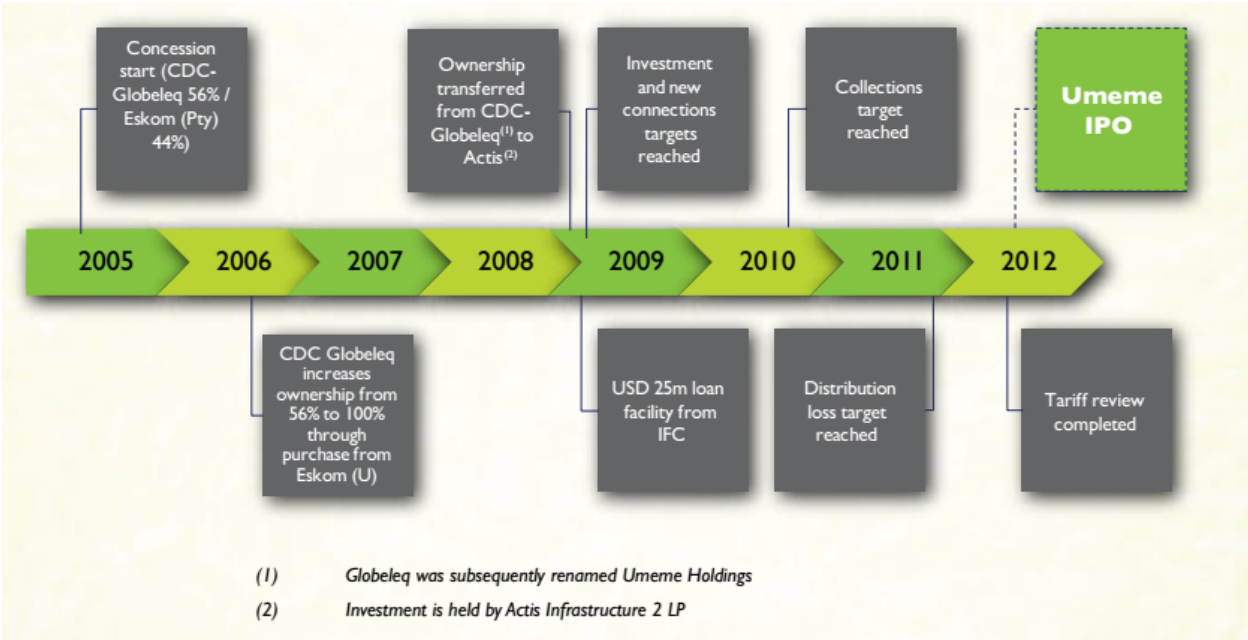
Source: Umeme IPO Prospectus 2012.

Exhibit 3 Uganda Power Generation – Installed Capacity



Source: Umeme IPO Prospectus 2012.

Exhibit 4 Key Milestones of Umeme



Source: Umeme IPO Prospectus 2012.

Exhibit 5 Tariff Targets vs Umeme Actual Targets

Tariff Year		2007	2008	2009	2010	2011	2012
Distribution losses (%)	Tariff	31.3	34.1	31.7	30.2	27.2	25.8
	Actual	35	34	35	30	27	
DOMC (USD'm)	Tariff	27	29	30	31	31	41
	Actual	31	35	36	36	36	
Uncollected debt (%)	Tariff	10.8	6.7	6.4	7.7	4.4	3.1
	Actual	10	10	6	5	1	
Working capital allowance (days lag)	Tariff	120	90	60	30	30	

Source: Umeme IPO Prospectus 2012.

Umeme Impact Assessment

The Actis Energy Impact Model in Umeme shows the positive impact Actis has had strengthening Uganda’s electricity distribution system. Plan to update Umeme impact model in 2013.

- **Governance:** Umeme went from nothing to having a strong management team and governance structure
- **People:** People and H/S have been a key focus area with positive results but were Umeme is still facing important challenges mainly related to public fatalities
- **Social/community:** Umeme has increased the access to reliable energy in Uganda 450%. Its customer base went from less than 200,000 to 500,000 in 6 years. Over 60,000 new customers are being connected annually in a country with particularly poor access to electricity
- **Infrastructure:** Strategic focus to improving Umeme’s infrastructure and intensive capital expenditure of more than us\$160 million have being pivotal to the company’s success and positive impact in the community
- **Environment:** Umeme has low impact on the environment and through time has consistently improved its environmental practices and environmental management systems
- **Finance:** As network reliability has improved and the business has gained a solid operational track record, value uplift has occurred as anticipated

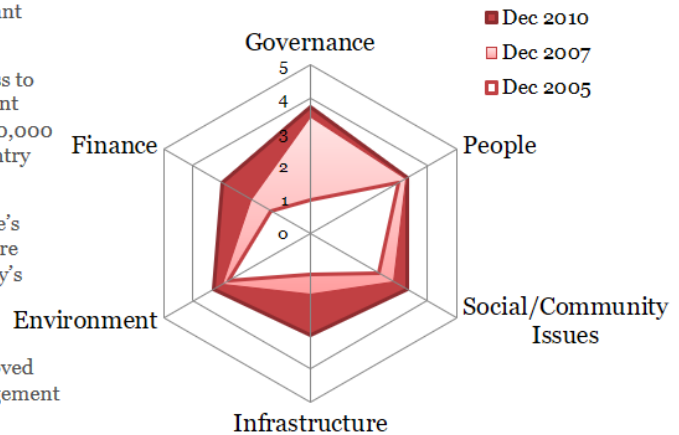
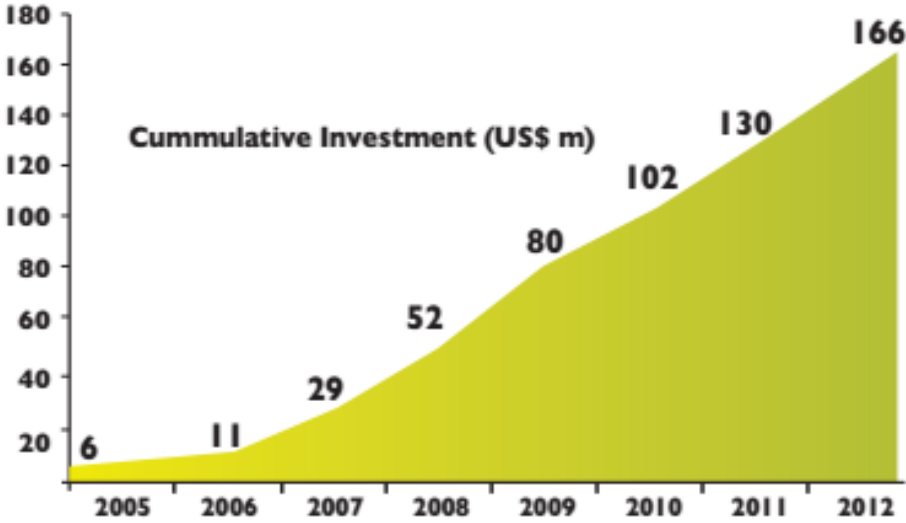


Exhibit 7 Umeme Capital Investment (Cumulative)



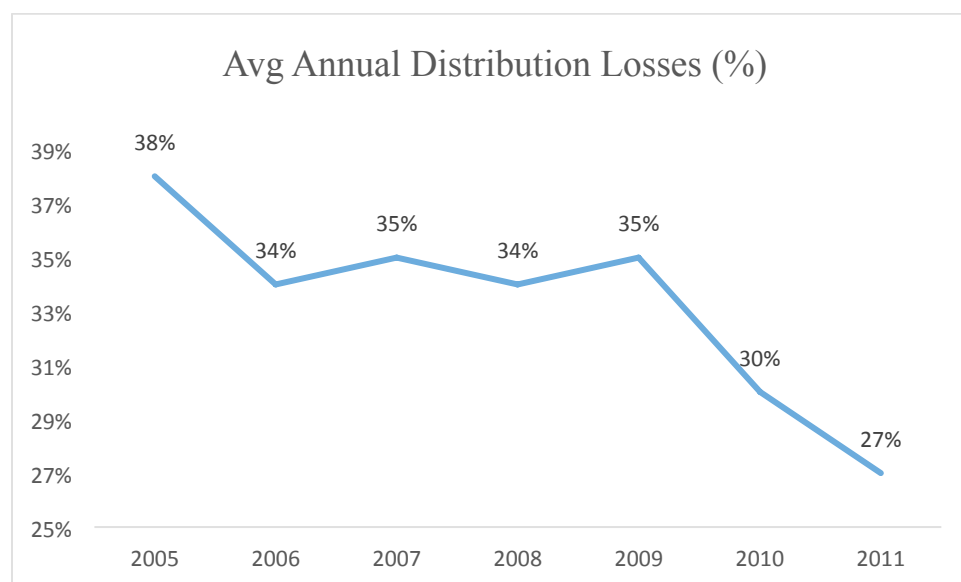
Source: Umeme Annual Report 2012.

Exhibit 8a Umeme’s Performance Relative to Concession’s Contractual Obligations

	Original Target	Actual Performance through 31 Dec 2011
Investment	US\$ 65m over the first 5 years of the Concession	US\$134m
New Customer Connections	60,000 over the first 5 years of the Concession	More than 165,000 net customers connected
Distribution Losses	Improve from 33% to 25% over the first 7 years of the Concession	27.3%
Uncollected Debt	Improve from 25% to 7.5% over the first 7 years of the Concession	1.1%

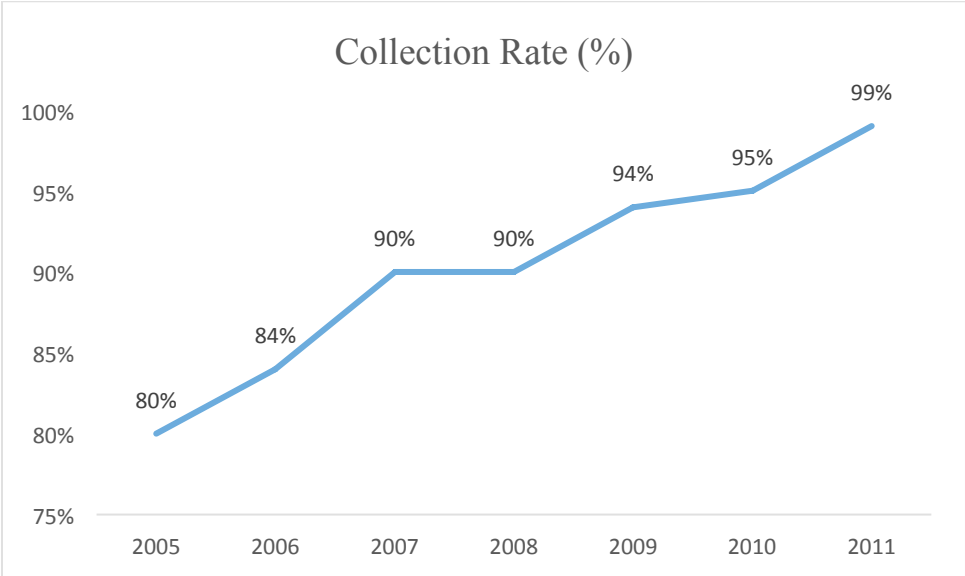
Source: Umeme IPO Prospectus 2012.

Exhibit 8b Annual Average Distribution Losses (Percentage)



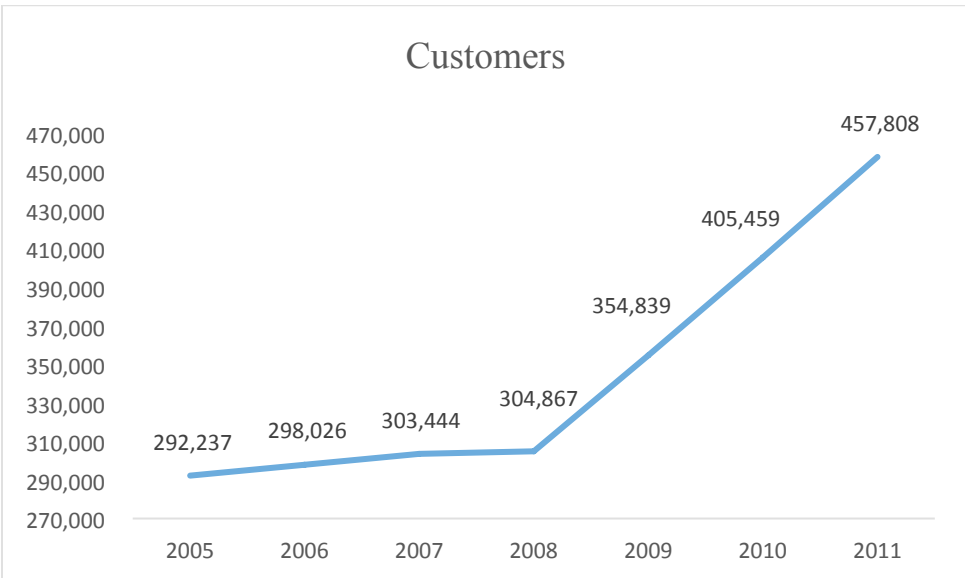
Source: Umeme IPO Prospectus 2012.

Exhibit 8c Umeme Collection Rate (Percentage)



Source: Umeme IPO Prospectus 2012.

Exhibit 8d Total Umeme Customers as of 31 Dec 2011



Source: Umeme IPO Prospectus 2012.

Exhibit 9a Umeme Statement of Comprehensive Income

Analysis of Statement of Comprehensive Income

Ushs'm	12 months ended 31 December					CAGR
	2007	2008	2009	2010	2011	
Revenue	367,135	424,247	476,596	513,676	535,567	9.9%
<i>% growth</i>	72.0%	15.6%	12.3%	7.8%	4.3%	
Cost of sales	259,380	285,896	330,912	356,088	349,133	
Gross Profit	107,755	138,351	145,684	157,588	186,434	14.7%
<i>Margin %</i>	29.4%	32.6%	30.6%	30.7%	34.8%	
Financing income from concession receivab	15,527	15,331	18,640	15,409	14,544	
Interest on bank deposits	3,248	1,466	1,100	1,149	1,485	
Other operating income	5,567	4,313	7,692	5,785	15,307	
Total operating costs	87,535	115,136	106,103	108,715	114,198	
<i>% revenue</i>	23.8%	27.1%	22.3%	21.2%	21.3%	
EBITDA	44,562	44,325	67,013	71,216	103,572	23.5%
<i>Margin %</i>	12.1%	10.4%	14.1%	13.9%	19.3%	
Depreciation & amortization	4,294	6,813	14,144	19,692	21,540	
Finance charge on concession obligation	15,527	15,331	18,640	15,409	14,544	
Other finance costs	2,921	4,019	8,600	10,868	16,957	
Foreign exchange losses / (gains)	-	4,998	-	18,896	5,912	
Profit before tax	21,820	13,164	25,629	6,351	44,619	19.6%
<i>Margin %</i>	5.9%	3.1%	5.4%	1.2%	8.3%	
Income tax	8,491	1,579	15,220	9,197	21,608	
<i>Tax %</i>	38.9%	12.0%	59.4%	144.8%	48.4%	
Net profit / (loss)	13,329	11,585	10,409	(2,846)	23,011	14.6%
<i>Margin %</i>	3.6%	2.7%	2.2%	-0.6%	4.3%	
Number of customers	303,444	304,867	354,839	405,459	457,808	10.8%
<i>% growth</i>	1.8%	0.5%	16.4%	14.3%	12.9%	
Sales volume (GWh)	1,138	1,278	1,401	1,627	1,735	11.1%
<i>% growth</i>	15.0%	12.3%	9.6%	16.1%	6.6%	
Capital expenditures	30,069	46,131	54,087	50,826	78,505	27.1%
<i>% revenue</i>	8.2%	10.9%	11.3%	9.9%	14.7%	

Source: Umeme IPO Prospectus 2012.

Exhibit 9b Umeme Balance Sheet**Analysis of Statement of Financial Position**

Ushs'm	2007	2008	2009	2010	2011
Current Assets	134,809	157,321	159,981	193,583	202,426
Non Current Assets	215,443	267,866	281,844	319,795	356,824
Total Assets	350,252	425,187	441,825	513,378	559,250
Current Liabilities	103,847	125,286	150,896	175,495	196,449
Non Current Liabilities	192,528	223,306	203,925	253,725	255,632
Total Liabilities	296,375	348,592	354,821	429,220	452,081
Equity	53,877	76,595	87,004	84,158	107,169
Total Equity & Liabilities	350,252	425,187	441,825	513,378	559,250

Source: Umeme IPO Prospectus 2012.

Exhibit 9c Umeme Statement of Cash Flow

Analysis of Statement of Cash Flows

Ushs'm	12 months ended 31 December				
	2007	2008	2009	2010	2011
Cash generated from operating activities	8,313	11,243	55,462	59,262	70,395
Finance income / (expense) and other	(14,019)	(1,445)	(16,411)	(13,061)	(19,508)
Net cash from / (used in) operating activities	(5,706)	9,798	39,051	46,201	50,887
Intangible asset additions	(27,024)	(46,131)	(54,087)	(50,826)	(78,505)
Recovery of other concession receivable and other	7,948	10,603	15,679	12,471	27,563
Net cash used in investing activities	(19,076)	(35,528)	(38,408)	(38,355)	(50,942)
Proceeds from loans & shareholder contrib.	26,325	33,600	9,575	21,250	23,660
Repayment of loans	(944)	-	-	-	(6,057)
Payment of concession obligation	(7,948)	(10,603)	(15,679)	(12,471)	(27,295)
Net cash from / (used in) financing activities	17,433	22,997	(6,104)	8,779	(9,692)
Net (decrease) / increase in cash & cash equiv	(7,349)	(2,733)	(5,461)	16,625	(9,747)
Cash and cash equivalents at start of year	53,729	46,380	43,647	38,186	54,811
Cash and cash equivalents at end of year	46,380	43,647	38,186	54,811	45,064

Source: Umeme IPO Prospectus 2012.

Exhibit 10 Profiles of Umeme Board of Directors

Patrick Bitature

Mr. Bitature has been the chairman of the Board since September 2007. Mr. Bitature is the founder of Simba Telecom Limited (Uganda), a company which distributes air-time in East Africa. Mr. Bitature subsequently expanded into broadcasting, with the acquisition of Dembe FM, a radio station, followed by Simba Electronics Limited (Uganda), a chain of stores trading in electronic goods. Mr. Bitature also has interests in insurance, banking, hotels and resorts and power generation in Uganda. Mr. Bitature is the chairman of the Uganda Investment Authority and a member of the following boards of directors: National Insurance Corporation Limited (Uganda), Global Trust Bank Limited (Uganda), Radio West FM 100.2 (a subsidiary of the New Vision Group), and Electro-Maxx. Mr. Bitature is a member of the Institute of Chartered Secretaries and Administrators in the United Kingdom.

Younes Maamar

Mr. Maamar has been on the Board since July 2009. Mr. Maamar's experience in power utilities operations, financing and equity investments in relation to energy and infrastructure assets began in 1996 with the World Bank Group and the IFC, before joining the AES Corporation in 2001 as project director. In 2006 Mr. Maamar was appointed as chief executive officer of the Office National de l'Electricité (the Moroccan Integrated Power Utility). Mr. Maamar holds board directorship positions in various energy companies, such as eONE, Morocco-based energy developer focussing on power projects in emerging markets and Silicon CPV, photovoltaic manufacturing.

Charles Chapman

Mr. Chapman joined Umeme in 2009 as Chief Operating Officer and was appointed as Managing Director in the same year. Mr. Chapman has been on the Board since May 2009. Prior to joining Umeme, Mr. Chapman worked for Ireland's leading utility, Electricity Supply Board, as the head of Customer Supply. Mr. Chapman has extensive international experience in previous roles as managing director of Toyota Hellas, regional director of Inchcape plc, Middle East and previously working for Boots Company plc and GlaxoSmithKline plc. Mr. Chapman is a BSc (mgmt) honours graduate of Trinity College, Dublin.

James Mulwana

Mr. Mulwana has been on the board since September 2007. He was the founding chairman of the Uganda Manufacturers Association and is the chairman of its Advisory Council. Mr. Mulwana is the founder and managing director of Nice House of Plastics Limited (Uganda), Uganda Batteries Limited (Uganda), JESA Dairy Farm Limited (Uganda) and JESA Investments Limited (Uganda). In addition thereto, Mr. Mulwana is chairman of the Advisory Council of the Private Sector Foundation Uganda and vice chairman of SOS Children's Village, as well as chairman of the boards of Standard Chartered Bank of Uganda, ZAIN Uganda Limited (Uganda) and Nile Breweries Limited (Uganda).

Stuart David Michael Grylls

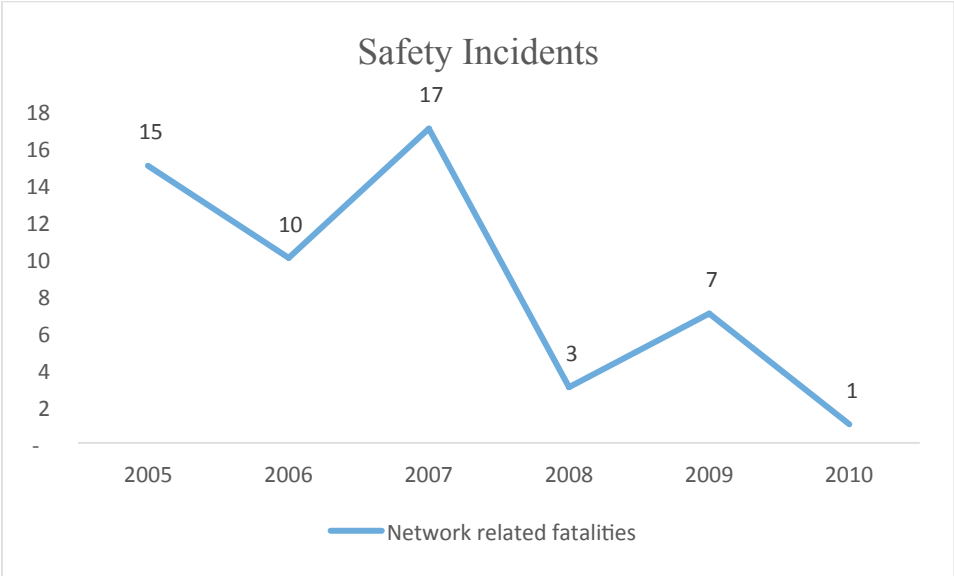
Mr. Grylls joined Actis LLP in 2007 and is currently Actis LLP's investment manager for Umeme. Mr. Grylls has been on the Board since November 2007. Before joining Actis LLP, Mr. Grylls worked at Globeleq Ltd (an Actis Infrastructure 2 LP investee company) for five years, where he was responsible for business development, mainly in Africa. Previously, Mr. Grylls was the managing director of Midlands Power International, and prior thereto, he worked at Covanta, Mission Energy and BP. Mr. Grylls is a chartered engineer and holds a Master of Business Administration from Kingston University and a Bachelor of Science (Honours) from Bath University.

Ian Francis

Mr. Francis joined the Board in December 2009. Mr. Francis was previously a senior audit partner at Ernst & Young LLP in London. He is a non-executive director and audit committee chairman of Optimal Payments Plc., as well as a member of the Institute of Chartered Accountants in England & Wales and the Institute of Chartered Accountants of New Zealand. He holds a Bachelor of Business Studies from Massey University in New Zealand.

Source: Umeme IPO Prospectus 2012.

Exhibit 11 Safety Incidents from 2005 to 2011



Source: Umeme Annual Report 2012.

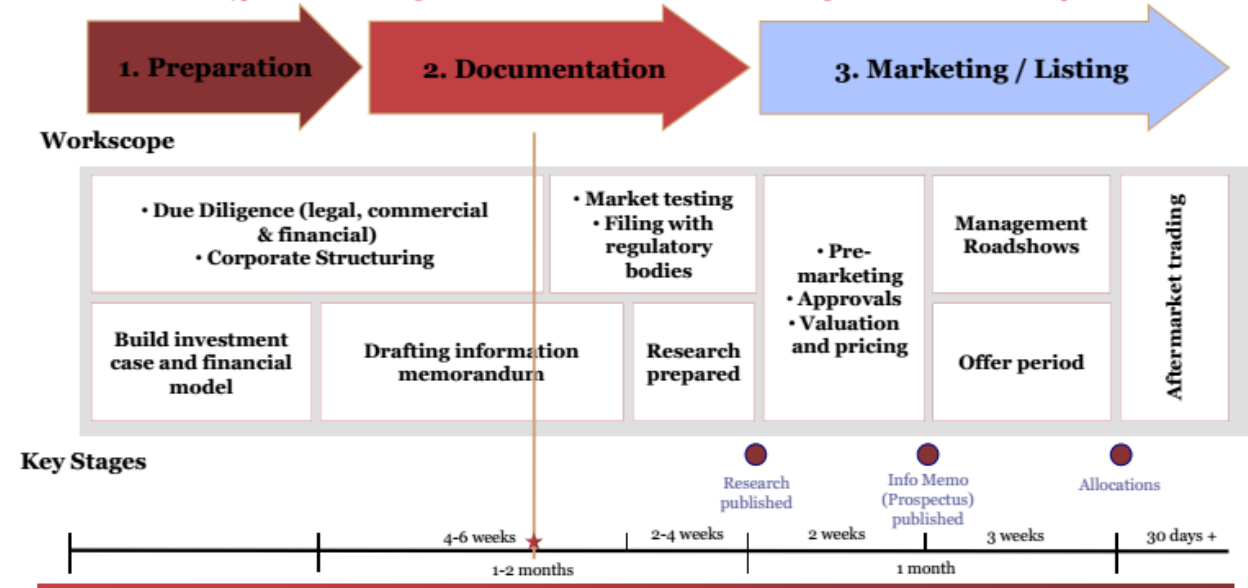
Exhibit 12 IPO Process

Process Details – Summary

After a year of internal readiness work the IPO process is now on track for a 2012 listing (if desired)



- As lead transaction advisors, Stanbic are coordinating the IPO process
- Process is on track for a 2012 launch, with key decision date in January to decide whether to publish/launch Prospectus
 - Stanbic advise us that we can be ready internally and that demand is strong in principle, but that market conditions in 2012 (and macro/political trends in Uganda) will need to be evaluated before deciding whether to launch at that point in time

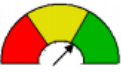







Source: Actis Internal Documentation, 2012.

Exhibit 13 Update on Pre-Exit Preparations by PWC

Section 1 – Executive Summary

For all of the functional areas we reviewed some progress has been made. There are ongoing initiatives to address most outstanding items

Area of Review	Overall assessment	Comments
Finance		Good progress. Some process improvements in record keeping and capacity building needed
Revenue cycle		Some progress, although there is still a manual interface between billing and accounting systems
Corporate governance		Good progress. Ongoing initiatives to address open items should be concluded by end 2012
Information technology		Some progress. Plans need to be broadened from current department / specific system focus to enterprise wide focus
Human Resource		Some progress. Competency framework needs to be finalised as precursor to JDs etc
Regulatory		Significant progress made in relation to the agreed targets for the next regulatory period. However department still largely compliance focused. Staff needed

Umeme Limited • Review of IPO preparedness - update
PwC

14 September 2012
3

Source: Umeme Limited: Review of IPO Preparedness Update, PWC, 2012.

Exhibit 14 Companies Listed on the Uganda Securities Exchange

Date Listed	Company
Domestic Companies	
Uganda Clays Ltd	Jan 2000
British American Tobacco Uganda	Oct 2000
Bank of Baroda (U) Ltd	Nov 2002
DFCU Ltd	Oct 2004
New Vision Printing and Publishing Co Ltd	Dec 2004
Stanbic Bank Uganda Ltd	Jan 2007
National Insurance Corporation	Mar 2010
Cross Border Listings	
East African Breweries	Mar 2001
Kenya Airways	Mar 2002
Jubilee Holdings Ltd	Feb 2006
Equity Bank Ltd	Jun 2009
Kenya Commercial Bank	Nov 2008
Nation Media Group	Oct 2010
Centum	Feb 2011

Source: Uganda Capital Markets Authority website. Accessed on July 2017.

Exhibit 15 Allocation Policy of IPO Offer

Category of Applicant	% of Offer
Domestic	
Employees and Directors	9%
Retail East Africans	20%
QIIs in East African Community	25%
Total Domestic	54%
Total International	46%

Source: Umeme IPO Prospectus 2012.

Exhibit 16 Policy for Transfer to Incentive Shares

Number of Offer Shares allotted to Eligible Umeme Customer, Employee or Director	Number of Incentive Shares to be transferred to Eligible Umeme Customer, Employee, or Director by Umeme Holdings
Between 1,000 and 1,900	100
Between 2,000 and 2,900	200
Between 3,000 and 3,900	300
Between 4,000 and 4,900	400
Between 5,000 and 5,900	500
Between 6,000 and 6,900	600
Between 7,000 and 7,900	700
Between 8,000 and 8,900	800
Between 9,000 and 9,900	900
10,000 and above	1 Incentive Share for every 10 allotted rounded down to the nearest 100 Incentive Shares and subject to a cap of 100,000 Incentive Shares

Source: Umeme IPO Prospectus 2012.

GLOSSARY

TERMS	DEFINITION
CAGR	Compound Annual Growth Rate
CAPEX	Capital Expenditures
CDC	Commonwealth Development Corporation
DOMC	Distribution Operation and Maintenance Costs
EBITDA	Earnings before Interest, Tax, Depreciation and Amortization
EHS	Environmental Health and Safety
ERA	Electricity Regulatory Authority of Uganda
ESG	Environmental Social and Governance
ESGC	Environmental Social and Governance Committee
ESOP	Employee Share Ownership Plan
GoU	Government of Uganda
GWh	Gigawatt Hours
IDA	International Development Association
IPO	Initial Public Offering
MIGA	Multilateral Investment Guarantee Agency
NSE	Nairobi Securities Exchange
PRG	Partial Risk Guarantee
PRI	Political Risk Insurance
PWC	PriceWaterhouseCooper
QII	Qualified Institutional Investors
REA	Rural Electrification Agency
ROI	Return on Investment
SE4ALL	Sustainable Energy for All
TOR	Terms of Reference
UEB	Uganda Electricity Board
UEDCL	Uganda Electricity Distribution Company Limited
UEGCL	Uganda Electricity Generation Company Limited
UETCL	Uganda Electricity Transmission Company Limited
UK	United Kingdom
Umeme	Umeme Limited
USD	U.S. Dollar
USE	Uganda Securities Exchange

Endnotes

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- ⁱ “Actis exits Uganda electricity company Umeme”, PE Hub, Dec 27, 2016.
- ⁱⁱ World Bank Data 2012.
- ⁱⁱⁱ “Uganda Country Report”, Economist Intelligence Unit, Jul 25, 2012.
- ^{iv} “Key Issues in Uganda’s Energy Sector”, International Institute for Environment and Development, 2011, p. 10.
- ^v “Uganda’s Electricity Sector Overview”, Electricity Regulatory Authority of Uganda, Accessed via <http://www.era.or.ug/index.php/sector-overview/uganda-s-electricity-sector>
- ^{vi} Extracted from the Umeme Limited IPO Prospectus, Oct 4, 2012, p. 77.
- ^{vii} Umeme Limited IPO Prospectus, Oct 4, 2012, p. 78.
- ^{viii} “Uganda’s Sustainable Energy for All (SE4ALL) Initiative Action Agenda”, The Republic of Uganda Ministry of Energy and Mineral Development, Jun 2015.
- ^{ix} Umeme Limited IPO Prospectus, Oct 4, 2012, p. 69.
- ^x Umeme Limited IPO Prospectus, Oct 4, 2012, p. 71.
- ^{xi} “Exits in Emerging Markets: Actis’ Investment in Umeme”, Stanford Graduate School of Business, Mar 17, 2015.
- ^{xii} “Umeme Promises Better Customer Care”, CEO Magazine, Dec 10, 2013.
- ^{xiii} “Supplemental Implementation Completion and Results Report on a Contingent Credit in the Amount of SDR 5.48 Million to Republic of Uganda”, Dec 5, 2014.
- ^{xiv} Partial Risk Guarantees (PRG) support private sector investment projects, including Public-Private Partnership (PPP) projects, green-field and rehabilitation/expansion projects, concession and privatization transactions. PRG can be structured to protect lenders of limited-recourse project finance debt, or to protect the project company.
- ^{xv} “PPIAF: Mechanisms to Mitigate Regulatory Risk in Private Infrastructure Investment”, Cambridge Economic Policy Associated Ltd, Dec 2005.
- ^{xvi} “IFC Backs Umeme IPO To Support Uganda's Power Sector”, Power Online, Dec 4, 2012.
- ^{xvii} “Project Name: Umeme Limited”, Multilateral Investment Guarantee Agency, World Bank Group.
- ^{xviii} “IFC Invests In Umeme to Help Provide Electricity to More Ugandans, Support Economic Growth”, IFC, Jul 13, 2009.
- ^{xix} Umeme Annual Report 2012, p. 26.
- ^{xx} World Bank Data on Access to Electricity (% of Population).
- ^{xxi} Umeme Limited IPO Prospectus, Oct 4, 2012, p. 108.
- ^{xxii} Umeme Limited IPO Prospectus, Oct 4, 2012, p. 103-104.
- ^{xxiii} One Gigawatt hour represents one billion watt hours.
- ^{xxiv} Umeme Limited IPO Prospectus, Oct 4, 2012, p. 108.
- ^{xxv} “Umeme Limited: Review of IPO Preparedness – Update”, PWC, Sep 14, 2012.
- ^{xxvi} Umeme Annual Report 2015, Mar 22, 2016.
- ^{xxvii} “Umeme: The First International Company to Cross List Shares at the Nairobi Stock Exchange”, Nairobi Securities Exchange Press Release, Dec 14, 2012.
- ^{xxviii} Apart from working out the regulatory requirements for the cross-listing, capital markets authorities from both jurisdictions had to determine how secondary market trading would occur between the two exchanges, which was complicated by the fact that their systems were not electronically connected. An investor must convert their holdings into certificates through the USE and physically bring the certificates to the NSE in order to trade on the NSE.
- ^{xxix} The National Social Security Fund is a National Saving Scheme mandated by the Government of Uganda to provide social security services to employees in Uganda.
- ^{xxx} Umeme Limited IPO Prospectus, Oct 4, 2012, p. 61.
- ^{xxxi} Based on the exchange rate of 1 USD = 2682.0642 US\$ on Dec 31, 2012.
- ^{xxxii} Umeme Limited IPO Prospectus, Oct 4, 2012, p. 114.
- ^{xxxiii} At the beginning of 2012, the Uganda Stock Exchange had only about a dozen listed companies.