

*Key Factors for Private Sector Investment in  
Power Distribution*

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Energy

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Programme

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# **Key Factors For Private Sector Investment In Power Distribution**

**Prepared By Pricewaterhousecoopers Securities  
For The World Bank –  
October 5, 2000  
Final Draft**

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**August 2001**

**Joint UNDP/World Bank Energy Sector Management Assistance  
Programme (ESMAP)**

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# Key Factors For Private Sector Investment In Power Distribution

## Introduction

This paper was produced at the request of the Government in Uganda as part of the ESMAP project, "Uganda: Power Restructuring Implementation Strategy".

What are the key factors that influence the private sector's evaluation of and investment in power distribution firms worldwide, and what does that say about the optimal role of multi-lateral institutions such as the World Bank? This report provides the results of a study that PricewaterhouseCoopers Securities (PwCS) recently carried out on these topics to assist the Bank in developing its policies with regard to power distribution.

As simple as it sounds, it is important to note that distribution is much different than generation. Distribution companies must concern themselves with demand growth, retail markets and the concerns of hundreds of thousands or millions of customers. Also, since they are regulated, and their performance is readily measurable and apparent to customers, distribution firms are generally more concerned about country politics, unions and work force concerns. Generation firms, by contrast, tend to be more focused on technical and performance issues, wholesale markets and contract compliance. Fundamental differences such as these serve to highlight the different factors that companies use for evaluation and investment in power distribution compared to other segments.

In addition, many countries worldwide have identified separation of the ownership of each segment of the industry as a key element in the restructuring of the power industry. The main objectives of such separations are generally to increase efficiency and minimize or eliminate the exercise of undue market power. Generation, transmission, distribution, and in some cases retail supply companies are being split apart from their formerly integrated utilities in countries as diverse as Korea, Argentina, the Dominican Republic, Germany and Australia.

In light of this restructuring, the pace of distribution company sales has picked up in recent years, but it has been unbalanced. Most of the value of distribution companies sold has been in developed countries, and very few sales have taken place in Asia or Africa. According to a proprietary PwCS database:

- There have been 183 significant private transactions for power distribution companies worldwide, with a total purchase price of US\$115 billion from 1992 to the present (not including some minor transactions).

- Of these deals, 118 transactions for a total of approximately \$41 billion (64% of the deals, and 36% of the amount paid) have taken place in developing countries.
- More than 125 companies have participated in the purchase of distribution companies, though a number have purchased minority shares, and others have re-sold their original interests.
- On the average, buyers on average have paid about \$1,000 per customer in developing countries and \$2,200 per customer in developed ones (with prices ranging up to \$5,000 per customer) when they purchase distribution companies.
- In developing countries, 94 of the 118 deals have taken place in Latin America, 18 in Eastern Europe and the former Soviet Union, and 6 in Asia. The dominance of Latin America in these transactions is striking, as is the virtual absence of Asia.
- A number of these sales have been privatizations of government-owned entities (e.g., Brazil, Hungary, and Australia), while others have involved sales of companies already owned by investors (e.g., the UK, the US).

In terms of the companies participating in these deals, we note that there are still a number of major companies interested in power sector investment in developing countries (both in generation and distribution), but recently, their number has been shrinking (e.g., with reports of the planned withdrawal of GPU, Reliant, PowerGen, Constellation, Entergy, and Enron). At the same time, some regional players are expanding their market presence (e.g., China Light & Power, Singapore Power, and Enersis). Many of the “majors” have refocused on the US and Europe for the time being, given the rapid expansion of investment opportunities as those markets are being restructured.

Just as important as the deals, however, may be the process or sequence in which it makes sense to restructure the power sector and privatize its assets. A strong case can be made that it is better for countries to privatize distribution before (or at least at the same time as) generation, especially in developing countries. This should foster the development of financially viable offtakers that will not need to sign long-term PPAs, require government guarantees or multi-lateral insurance in order to support their payment obligations. Yet most developing countries outside of Latin America that have restructured to some extent have privatized their generation first, and even then, primarily new generation (e.g., Pakistan, the Philippines, Indonesia, Taiwan, China)

In sum, our report is designed to identify the factors that the private sector will give the most weight to in its evaluation of investment in power distribution companies. As an owner, investors recognize that they will need to balance the countries’ and customers’ objectives (e.g., enhanced efficiency, low rates, better customer service, environmental

compliance) with those of their own shareholders (achieving or surpassing targeted rates of return, enhancing share value). In general, investors indicated that they were seeking to improve the quality of service and quality of life in the countries in which they were investing. They agreed that the idea is to make such investment a “win-win” for both the investors and the countries involved.

## **Methodology**

To carry out this work, PwCS carried out a number of steps:

- We identified a number of private sector companies that have purchased multiple distribution companies worldwide as candidates for participation, and obtained the Bank’s feedback on the list. The Bank added some suggestions for additional firms, and made clear that it was important to interview companies worldwide, not just those from the US.
- We identified the right people to interview at each company, using our current contacts and the firm’s extensive international network.
- Based on our experience working with investors and governments worldwide, we recommended the key issues that could affect investments in distribution, and grouped them into eight major factors, with a number of sub-factors in each (see next section).
- We assembled these factors into a survey, which we sent to top decision-makers in the target utilities by e-mail, with a description of the project as a whole. We followed up, in some cases several times, to ensure that they or their senior staff completed the survey.
- Upon receipt of the survey responses, we scheduled and conducted a detailed interview, lasting between 30 and 75 minutes, using their responses as a guideline for the discussion.
- Finally, we assembled our results and developed this draft final report.

To ensure open and frank discussions, PwCS promised the interviewees that we would not quote them in this report. However, the discussion below is directly based on the responses to our survey and the interviews that PwCS conducted. Appendix 2 identifies the companies that we interviewed as part of this assignment, all of which contributed to the results described below.

## **Key Factors Influencing Investment, and the Investor Decision Process**

In our survey and discussions, PwCS asked the private sector to identify the influence of eight major factors on their decisions to invest in power distribution companies, as well as their overall decision process. Under each of the major factors, we identified between four and nine sub-factors. For example, the major factor called “overall country status” incorporates sub-factors such as political stability, the prospects for economic growth, the level of income or income disparity, the perception of corruption, and others.

The eight major factors that we identified that affect the private sector’s investment decisions in power distribution, and some of the main sub-factors, are:

- Overall country status (e.g., investment climate, economic situation)
- Regulatory issues (e.g., maturity of the framework, incentives for performance, flexibility)
- Laws and the legal system (e.g., contract compliance, environmental statutes, arbitration)
- Condition of the target company (e.g., level of losses, skills of staff)
- The tendering process (e.g., ability to obtain control, use of threshold prices)
- Resource availability (e.g., health of the power sector, available of power supply)
- Likely financial performance (e.g., returns and their stability, ability to finance)
- Features of the investing company (e.g., consistency with corporate strategy, synergy with other businesses)

We have organized our comments in the next section according to these eight factors.

In terms of the investors’ decision process, one of the key features we identified was that the private sector generally uses some of these factors and sub-factors as “threshold” items; i.e., minimum features of the investment climate that have to be in place before they will consider investing. Some companies further indicated that they have carried out a strategy review and already identified the countries in which they are most interested – in effect these countries automatically pass their “threshold”, while other countries would only be included on a case-by-case basis. Most firms also said that they would exclude certain countries from consideration due to turmoil or political instability (e.g., Colombia, Peru, and Indonesia).

In determining whether to invest, nearly all investors used a heuristic approach, in which they first determine whether the country and the target company meets their threshold criteria (e.g., ability to repatriate funds, sufficient hard currency, etc.) before carrying out a more detailed due diligence. While some use a checklist to ensure that they have evaluated all the important factors, none of the firms that we spoke to use an explicit formula to weight different factors (e.g., give factor x a 40% weight and three others 20%) to determine whether to make an investment. Most use an informal checklist, rather than a formal one, to determine whether they are interested in an investment. When it comes to financial modeling, however, some will get quite detailed, including the use of “real options” and probabilistic analysis.

Though each company differs to some extent, the general decision process they use is:

- Identify an opportunity for investment in distribution and assign it to the proper office
- Conduct a preliminary screen to see whether there might be a “fit” with their strategy, and whether the country passes the “threshold” test
- If so, assemble a team (which can be drawn from worldwide experience) to evaluate the company in more detail. Often called due diligence, this is when the company takes a more comprehensive look at the political, economic, financial and technical issues that would be involved in owning this firm.
- The team leader comes to a conclusion, and if positive, proposes to senior management or the Board for the resources required to carry out an effective bid.

The next section presents the results of our surveys and interviews with investors.

## **Survey and Interview Results**

Appendix 1 contains the results of the survey that PwCS distributed to investors, with number in the cells that represent the average score assigned for those factors and sub-factors by those that gave a response, and another column that shows the range of responses. In the discussion below, PwCS considers factors with a score of 7.5 or above (out of a possible 10) to be of “high” importance, those with a score between 6.0 and 7.4 to be of “moderate” importance, and those below 6.0 to be of “low” importance. For reference, Appendix 3 contains the actual survey and instructions that the investors received.

In this project, PwCS interviewed some of the leading companies involved in investing in power distribution worldwide, all of which have made multiple investments. Thus, while the survey involved a relatively small number of respondents (12 discussions and surveys

based on interviews at 8 companies), this feedback provided insights that should apply well across the wider range of distribution investors. Their responses are also consistent with other “best practices” work that PwCS has recently carried out.

### *Overall Country Status*

*In the survey, investors considered this category to be of high importance (average rating of 7.5). In the discussions, it became clear that this factor is critical from the standpoint of setting a threshold for investment. In this category, the most important sub-factors were the level of security for employees, and the confidence of being able to convert local currency into hard currency. The least important factor was the level of income disparity.*

As mentioned, investors will generally use minimum criteria, which they apply either formally or informally, to determine whether to enter into a detailed evaluation of a distribution company. The main “threshold” factors that investors use are:

- The country investment climate, including a “pro-business” attitude,
- The legal/regulatory framework, and
- The likely *stability* of that framework for the foreseeable future.

Most investors in distribution want to be able to foresee an improving overall climate, or at least one that will not deteriorate. They may be planning to invest tens or hundreds of millions of dollars to purchase and upgrade the equipment in a company, and a positive climate will give them comfort that the investment will be secure. China and Venezuela were cited as countries where some investors were uncomfortable along these lines.

The investors indicated that fundamental economic growth is one of the underlying bases for the financial health of an investment they would consider in distribution. In that regard, countries should openly communicate the prospects for such growth to potential investors. Since consumption of electricity is related to economic growth, investors are quite concerned about how well the economy is likely to perform. For example, the Asian financial crisis and economic turmoil was cited as one reason that a number of investors have not added new projects in a number of countries in Asia (both in generation and distribution).

### *Regulatory Issues*

*This factor was considered to be of high importance (average rating of 8.0). All of the sub-factors were important, especially the ability to work with regulators (8.6), the time until the next regulatory review (7.7) and the performance standards that the regulator sets (8.0).*

The clear message from the private sector is: countries should develop an overall policy, and negotiate the best deal possible with the private sector, but once agreed upon, the stability of the deal offered to investors should be paramount. Investors have been caught

unaware by regulatory shifts, and they are highly wary of what they consider “bait and switch” tactics and political interference. Several investors cited countries and states such as the UK, Hungary, and Western Australia, where regulators did not keep promises or made dramatic changes affecting their investments. This concern particularly applies to two items: rates and franchises. Investors prefer a 5-7 year franchise, with no review during that time, and a similar period of guaranteed rate stability or planned increases as subsidies are removed. They consider a 1-2 year guarantee far too short, given the investment they are making.

Investors would like to participate in the regulatory and policy-making process. They believe that if they have an opportunity to work with country officials, that these officials will integrate the private sector’s perspective into their decision. They do not expect a capitulation to their point of view, but rather fair treatment. In that regard, investors expect open communication and regulators and officials they can work with.

In Panama, for example, we understand that regulators assumed that investors would be able to make improvements in efficiency well beyond the level recommended by an advisory group, but did not let investors know they were making this assumption until after they submitted their bids.

If the industry framework is not yet fully liberalized, investors would like the acquisition to make sense not only in the short term, but also when the market opens to competition. Thus, investors would like country officials to anticipate the long-term structure of the industry and to put in place principles and incentives that will work as the structure changes. In distribution, this means anticipating the impact on distribution companies as choice of power supplier is offered to more customers, and as a competitive wholesale market develops.

Investors do not want to be blamed for the inefficiencies of the past, particularly subsidies and cross-subsidies. Many countries have kept the prices of power below their cost for years. These subsidies are often removed or left in place only for the very poor when countries liberalize the power sector. Investors are wary of being blamed for the removal of cross-subsidies and the increase in rates that often accompanies this restructuring.

For example, in Panama, we understand that citizens above the age of 55 continued to receive subsidized power as part of the restructuring process, and investors were required to absorb the subsidies that the government was providing for fuel costs. Investors had anticipated that fuel costs would be a pass-through in rates, as in many other countries.

To help customers anticipate changes, including the fact that some rates may rise, and that service is intended to improve, investors would like countries to implement a widespread public education program in advance of any privatization.

We asked every firm about whether they include the opportunity to have access to customers, or to move into non-energy network investments as one of the attractive

aspects of an investment in power distribution. The answer was relatively uniform, particularly in considering investments in developing countries - the financial return from power distribution must stand on its own before they will invest. However, if there are additional businesses that come with the utility (e.g., telecom, water, home insurance), companies will evaluate those businesses as candidates for expansion or sale that could bring in additional revenues.

A developed country example that was widely reported was EdF's purchase of London Electricity, in which the investor was reported to have paid more for the access that the purchase would give them to customers for other ventures. In general, investors recommend that governments and regulators not restrict their ability to move into other areas, since this movement should increase competition and benefit customers.

#### *Laws and the Legal System*

*This factor was considered to be moderately important (average of 7.2). The most important sub-factors in this group were the ability to repatriate funds (rated 7.9, and which arguably could be part of the "investment climate") and the overall industry restructuring process (7.9).*

From the outset, private investors prefer to see an overall program of privatization, as well as one that involves the power industry – this shows greater government commitment to the process of involving the private sector in general. It also indicates that the government is thinking through how to develop consistent policies, not just "one-off" projects. Recent World Bank documents have identified the steps towards liberalization that countries should use. For example, the restructuring programs laid out by countries such as Thailand, Korea, and several Latin American countries are appealing to investors.

Having recourse to the courts or binding arbitration is key. Investors expect disputes to arise, but need to believe that their access to the legal system is adequate to protect their interests, and that country officials will not impede such access. This includes a review of their claims in an expeditious manner.

Many investors indicated that the ability to cut off customers for non-payment (after they are given reasonable notice and sufficient time) is critical. In some countries, the largest delinquent customers are military bases, embassies, and other government agencies. For example, investors were given such rights in a number of countries in Latin America, as well as in Kazakhstan and Georgia, and in some cases, they cut off government agencies when they did not receive timely payment. Investors expect the government to back them up, since doing so sets a tone of support for good citizenship and for making the power sector financially viable on its own.

#### *Condition of the Target Company*

*This factor includes a wide range of sub-factors that describe the distribution company to be acquired. This was considered to be the least important factor (average of 4.9), with*



*some exceptions. The most important sub-factors were the level of engineering or technical losses (7.5), theft or non-technical losses (7.4), and the level of investment required in the system (8.0).*

Investors prefer companies that are not in excellent condition, since this will enable them to show improvements, and if regulator-approved incentives are in place, to make money by keeping a share of the improvements. Thus, most investors believe that countries should not delay privatization and try and improve the operation of distribution companies before selling them; rather, they should leave those improvements to the private sector. This will hasten the pace of reform and benefits for customers, even though it may mean a lower price for the asset. Investors must of course take the costs of upgrades into account in their proformas – they cited metering as one area in particular where significant investment may be needed.

Investors recommend that distribution companies keep track of their performance indicators, since private investors will be interested in tracking them and estimating improvements they could make. Relevant indicators include technical losses; level of theft; collection rates; employees per customer; cost per existing or new customer; sales per customer; safety records; reliability (minutes of outage per customer per year, average duration of outages).

The current employment conditions (e.g., ESOPs, presence of labor unions) make little difference in whether they will consider investing, but flexibility in dealing with employment levels is quite important. Few of the investors have had trouble with unions –in fact, much less than expected. By the time the new investors take over, the unions recognize that one of the reasons for privatization is to improve efficiency, which can involve staff reductions. Further, some investors have found that the employees actually prefer the enhanced pay and benefits they offer to the union's offer of full employment.

However, investors recognize a responsibility to current employees, and expect to make commitments to ease the transition. For example, most investors offer outplacement services and early retirement programs. In addition, one creative company offers a venture fund to provide seed capital for employees who want to set up a new business outside of the utility, plus a big party for those that left on the one year anniversary of their investment.

Whether they were buying from a government-owned or private entity was not material to their decision process, though they generally expressed the belief that they would be able to improve the operations of a government-owned utility to a greater extent.

### *The Tendering Process*

*The tendering process is at the high end of the range of moderately important (average 7.4), but some factors are much more important than others. The most important by far is the ability to have majority control (9.1), followed by a preference for a limited competition or for negotiations to acquire the distribution company (7.9).*

Every investor emphasized the need to have management control. In the past, some major investors made minority investments, but this is rare now. Without control, they are unable to implement the changes necessary to achieve their financial and public service goals. They were clear that control usually means more than 50% ownership, or if less than 50%, they must clearly have the ability to “call the shots”.

In some countries there may be a limitation on foreign ownership of distribution (Example – the Philippines, where the Constitution limits such investments to 40%) – to induce investment, this minority share will have to still convey control to attract investor interest. A “blocking minority” in which an investor can veto the actions of the majority shareholder is not what investors today are looking for.

Investors were lukewarm to the availability of local partners – they would accept them if they added value, as long as they did not have control. They also did not care much whether the country set a minimum price, unless it was obviously too high and out of line for the quality of the asset being acquired (e.g., using norms such as \$ per customer). In most cases, they would carry out their evaluation of the value of the firm, and only check whether it was above the minimum price after the fact.

Also, the reaction of the regulators in the investors’ home country matters little. This used to be a bigger factor in the US, but with the unbundling of regulated and unregulated subsidiaries, each with separate stockholders in some cases (e.g., SEI, NRG), this is becoming a less relevant factor. Even the utilities that lost money when the UK imposed a windfall profits tax were able to absorb the losses from shareholders equity and move on.

Investors made the additional point that when distribution is privatized, it should be done in large enough entities to be financially viable. This indicates that the governments should carry out preliminary financial modeling in advance of privatization, and if there is now only one integrated firm, they should carefully test different scenarios for the number and franchises of distribution firms that they would create.

### *Resource Availability*

*Investors considered this a factor of moderate importance (average 7.0), and all of the sub-factors were about equally important, including the availability of power supply and fuel. In speaking with the investors, they indicated that they generally assume that the government, national utility and merchant plant developers would take care of those items. They would check these factors, generally as an investment threshold, but not make them part of their detailed due diligence.*

Investors clearly want to be able to change the culture of the companies they acquire to the extent necessary to improve performance. They generally have the belief that they want to improve the quality of life for the people in their area (one company said that their goal is “to serve”). To serve, they need to foster or enhance an atmosphere of

service. In general, investors indicate that they have found employees enthusiastic about the changes.

One of the responsibilities often given to a distribution company in restructuring the power sector is to procure their own supply of power, whether from government-owned generation or the private sector. Thus, they said that it is critical to have a system where they are confident that they will be able to procure sufficient power supplies to satisfy their customers' needs. Thus, investors are cautious about countries where there is not a sufficient incentive for the construction of new power plants.

### *Likely Financial Performance*

*This is by far the most important of the factors (average 8.7), with nearly all the sub-factors also being ranked as highly important. The return on equity was critically important (9.5), especially for publicly held investors, which must assess the impact of any investment on their stock price. One of the least important sub-factors, however, was the ability to sell or exit within several years (6.5). This reflects their intention to maintain the investment over the long term.*

In the interviews, investors confirmed that the most important factor is the return they are likely to make on the investment. In this regard, performance incentives are an effective tool to motivate investors' interest. In privatizing distribution, countries should seriously consider ways in which to give investors an upside potential, if customers also benefit. Incentives could include, for example, allowing them to keep all revenues once technical and non-technical losses fall below a certain level, or once outages fall below a threshold level.

One investor indicating that the regulated return of 10-12% would be uninteresting to them, but if incentives could raise their return to 18-20%, they would take a close look. This may sound like an attractive return, but investors pointed out that properly designed incentives should guarantee that they only profit as investors if customers benefit as well. Also, these relatively higher rates of return would have little impact on customer tariffs.

As mentioned above, it is critical that investors be able to keep the incentives that they earn – governments and regulators must make their deal, and stick to it, or investors (and their bankers) will lose confidence in investments in their country.

As mentioned above, near term results from their investments are more important for publicly traded companies than longer-term results, even if they have the same risk-adjusted rate of return. In addition, it is clear that companies do have different minimum expectations for return depending on the country.

The stability of projected returns is also critical. Investors would prefer not to see highly volatile returns.

### *Features of the Investing Company*

*This factor was only of moderate importance (average 6.8), but as with other factors, there was a wide disparity in the sub-factors. Consistency with the company strategy ranked very high (average 8.7), while the size of the target company and the ability to gain experience ranked quite low (3.8 and 4.6).*

One firm did indicate that experience in a distribution company that they purchased would be considered valuable back in the parent company, but most indicated that this was much less important than making each investment successful. Even so, investors will generally only send a handful of expatriates to work in the new country, preferring to leverage their expertise with local talent and minimize possible layoffs.

Distribution is seen as a long-term investment; as such, they believe they are taking a “bet” on the improvement of conditions in the country and the power sector. Investors do not generally intend to “flip” investments in power distribution, which should encourage governments and regulators to assume that they are forming long-term relationships.

Strategy is not the only component. They also consider philosophy. As mentioned, investors in power distribution seek to improve economic conditions and living standards in the countries where they invest.

### **Role of the World Bank**

Though it was not on the survey, we asked all the investors what role they might see for the World Bank and other multi-lateral institutions (MLIs) in increasing the efficiency of the power sector in general, and in improving the climate for distribution in particular.

For those focused on developed countries, this question was irrelevant, but for the others, the investors suggested several possible roles:

First, they see a role for such institutions in improving the investment climate through technical assistance. By “investment climate”, they meant areas as diverse as the regulatory system and the liquidity of financial markets.

Some did not believe that all the MLIs’ technical advice has been good or consistent. For example, in power generation, one cited a case where the Bank insisted that there be no long-term power purchase agreements (PPAs) contracts with investors in generation, while financial institutions would not finance a project without a PPA. Instead, in the investor’s opinion, it would have been better to allow for PPAs, but provide for a transition of the PPA to a merchant plant once the wholesale market began. Regardless of their concerns, however, investors clearly wanted MLIs to work with country officials to “get the investment framework right”.

Second, investors thought the Bank could play a positive role by promoting a specific process that countries should use for achieving privatization and restructuring in a methodical and efficient fashion. There appears to be too much "reinventing the wheel." Also, while every country is different, there are common principles and approaches to restructuring that should apply universally. The Bank could play a stronger role in promoting these.

Third, most investors indicated that a positive role for the Bank would be to provide financing for power sector projects that require subsidies, such as rural electrification. This would also be consistent with the Bank's overall shift in philosophy towards the alleviation of poverty.

Finally, some investors complained that the Bank was being too tough to deal with, such as requiring the most modern environmental controls on a plant in a rural area where pollution was a minor concern. In other words, they felt that the Bank could be inflexible.

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To provide comments or for more information on this research and the survey of investors, please contact PricewaterhouseCoopers Securities (Richard Gledhill in New York at 212-314-0300 and Elliot Roseman at 703-610-7568).



## Appendix 1 – Results Of World Bank Survey Of Investors In Power Distribution - September 2000

	Range	Average Score
<b>Overall Country Status (Major Factor **)</b>	<b>5 – 9</b>	<b>7.5</b>
Level of current and likely future political stability in the country	4 – 10	7.4
Prospects for country economic growth	5 – 9	7.3
Confidence of being able to convert local currency into dollars	5 – 9	7.4
Level of income or income disparity	2 – 5	4.0
Receptivity to foreign investment and foreign investors.	5 – 9	7.5
Level of security for expatriate employees	5 – 10	7.9
Perception of corruption	4 – 9	6.8
<b>Regulatory Issues (Major Factor **)</b>	<b>4 – 10</b>	<b>8.0</b>
Maturity of the regulatory framework	5 – 9	7.4
Ability to work with regulators / relationship w/current company	5 – 10	8.6
Base rate of return currently allowed and anticipated	4 – 10	7.7
Nearness in time of the next regulatory review	5 – 10	7.7
Type of price regulation - ROR vs. PBR/Benchmark	5 – 10	7.1
Strictness of performance standards and ability to keep gains from improvements	6 – 10	8.0
Ability to move into other “network” industries (e.g., telecomm, water)	6 – 9	7.3
– synergies with other parts of the purchaser		
<b>Laws and the Legal System (Major Factor **)</b>	<b>3 – 10</b>	<b>7.2</b>
Strictness of environmental laws, and whether they impose conditions on the sale	3 – 8	5.5
Overall industry restructuring process and plans	4 – 10	7.9
General legal/contract framework – arbitration, force majeure, sanctity of contracts	2 – 10	7.5
Ability to repatriate funds	3 – 10	7.9
<b>Company Condition (Major Factor **)</b>	<b>2 – 9</b>	<b>4.9</b>
Whether seller is government or private	1 – 8	5.4
Degree of employment flexibility (e.g., collective bargaining contract)	2 – 10	6.1
Perceived skill level of local staff	3 – 7	5.8
Provision of (mandatory or voluntary) ownership stake to employees through ESOPs	3 – 7	4.6
Presence of ESOP prior to privatization (as with telecoms in Ireland)	3 – 7	4.7
Level of electrification in the service territory	3 – 8	6.1
Level of technical losses and ability to lower them	3 – 10	7.5

Level of non-technical losses – e.g., theft – and ability to lower them	2 – 10	7.4
Stability of the system – and investment required to upgrade to an acceptable level	5 – 10	8.1
<b>The Tendering Process (Major Factor **)</b>	5 – 10	7.4
Opportunity to negotiate with seller or compete against few competitors	6 – 9	7.9
Perceived reaction of regulators in the investor's home country	1 – 8	4.4
Ability to obtain majority control	8 – 10	9.1
Use or level of minimum (threshold) price	3 – 8	5.4
Availability of good local partners	1 – 8	4.8
<b>Resource Availability and Competition (Major Factor **)</b>	5 – 9	7.0
Overall health of power generation sector (e.g., availability of fuel)	5 – 9	7.4
Level of competition for power supply – concerns about availability	5 – 10	7.3
Condition of the wholesale transmission system	5 – 9	7.3
Projected level of distributed generation (which could affect growth)	2 – 9	6.3
<b>Likely Financial Performance (based on projections) (Major Factor **)</b>	5 – 10	8.7
Prospects for growth in power demand in the service territory	7 – 10	8.1
Return on equity, cost per customer, present value or other measures	6 – 10	9.4
Stability of returns over time	3 – 10	7.8
Degree of uncertainty of future returns	4 – 10	8.1
Current level of indebtedness of target company, and to whom	5 – 10	8.0
Ability to raise debt to finance the project (if using project finance) .	6 – 10	8.0
..		
Financing strategy - levels of debt/equity - levels of local debt/equity	6 – 9	8.0
Perceived ability to sell/exit for a profit within several years	3 – 10	5.9
Tax structure and other investment incentives	2 – 10	7.7
<b>Features of the Investing Company (Major Factor **)</b>	1 – 9	6.8
Consistency with overall company strategy	7 – 10	8.6
Perception of opportunity for good returns from distribution in general	5 – 9	7.9
Ability to gain experience that can be used in the home country	1 – 8	4.7
Size of target company compared to size of investing company	1 – 8	4.4
Ability to effectively manage foreign investment	1 – 9	7.0
Synergies w/other regional investments (e.g., gas reserves, generation)	5 – 10	7.6



## **Appendix 2 – Companies Involved**

In this project, PwCS received surveys and/or interviewed senior executives at the following firms, which have been or are currently active in the acquisition and operation of power distribution companies worldwide:

- The AES Corporation (interviews with three executives in different regions)
- Constellation Power
- Electricite de France (three separate interviews)
- Endesa (Spain)
- Enersis (Chile)
- GPU Energy
- Southern Energy International (SEI)
- Union Fenosa (Spain)

In total, we conducted 12 interviews at these 8 companies (PwCS promised to interview 5-7 investors). By speaking with a number of firms worldwide that have been active in power distribution investments, we obtained a good cross-section of different opinions and approaches.





<ul style="list-style-type: none"> <li>• Type of price regulation - ROR vs. PBR/Benchmark . . . . .</li> <li>• Strictness of performance standards and ability to keep gains from improvements . . . . .</li> <li>• Ability to move into other “network” industries (e.g., telecomm, water) – synergies with other parts of the purchaser . . . . .</li> </ul>	
<ul style="list-style-type: none"> <li>• <b>Laws and the Legal System</b> <span style="float: right;"><b>Major Factor</b></span></li> <li>• Strictness of environmental laws, and whether they impose conditions on the sale . . . . .</li> <li>• Overall industry restructuring process and plans . . . . .</li> <li>• General legal/contract framework – e.g., arbitration, force majeure, sanctity of contracts . . . . .</li> <li>• Ability to repatriate funds . . . . .</li> </ul>	**
<b>Key Investment Factors (cont.)</b>	<b>Ranking 1-10</b>
<ul style="list-style-type: none"> <li>• <b>Company Condition</b> <span style="float: right;"><b>Major Factor</b></span></li> <li>• Whether seller is government or private . . . . .</li> <li>• Degree of employment flexibility (e.g., collective bargaining contract)</li> <li>• Perceived skill level of local staff . . . . .</li> <li>• Provision of (mandatory or voluntary) ownership stake to employees through ESOPs . . . . .</li> <li>• Presence of ESOP prior to privatization (as with telecoms in . . . . .</li> </ul>	**

<p>Ireland). . . . .</p> <p>...</p> <ul style="list-style-type: none"> <li>• Level of electrification in the service territory . . . . .</li> <li>• Level of technical losses and ability to lower them . . . . .</li> <li>• Level of non-technical losses – e.g., theft – and ability to lower them . . . . .</li> <li>• Stability of the system – and the investment required to upgrade to an acceptable level . . . . .</li> </ul>	
<ul style="list-style-type: none"> <li>• <b>The Tendering Process</b> <span style="float: right;"><b>Major Factor</b></span></li> <li>• Opportunity to negotiate with seller or compete against few competitors</li> <li>• Perceived reaction of regulators in the investor’s home country . . . . .</li> <li>• Ability to obtain majority control . . . . .</li> <li>• Use or level of minimum (threshold) price . . . . .</li> <li>• Availability of good local partners . . . . .</li> </ul>	<p style="text-align: center;">**</p>
<ul style="list-style-type: none"> <li>• <b>Resource Availability and Competition</b> <span style="float: right;"><b>Major Factor</b></span></li> <li>• Overall health of power generation sector (e.g., availability of fuel) . . . . .</li> <li>• Level of competition for power supply – concerns about availability . . . . .</li> <li>• Condition of the wholesale transmission system . . . . .</li> <li>• Projected level of distributed generation (which could affect growth) . . . . .</li> </ul>	<p style="text-align: center;">**</p>
<ul style="list-style-type: none"> <li>• <b>Likely Financial Performance (based on projections)</b> <span style="float: right;"><b>Major Factor</b></span></li> <li>• Prospects for growth in power demand in the service territory . . . . .</li> <li>• Return on equity, cost per customer, present value or other measures . . . . .</li> <li>• Stability of returns over time . . . . .</li> <li>• Degree of uncertainty of future returns . . . . .</li> </ul>	<p style="text-align: center;">**</p>

<ul style="list-style-type: none"> <li>• Current level of indebtedness of target company, and to whom . . . .....</li> <li>• Ability to raise debt to finance the project (if using project finance) . . .</li> <li>• Financing strategy - levels of debt/equity - levels of local debt/equity . .</li> <li>• Perceived ability to sell/exit for a profit within several years . . . . . .....</li> <li>• Tax structure and other investment incentives.....</li> </ul>	
<ul style="list-style-type: none"> <li>• <b>Features of the Investing Company</b> <span style="float: right;"><b>Major Factor</b></span></li> <li>• Consistency with overall company strategy . . . . . .....</li> <li>• Perception of opportunity for good returns from distribution in general</li> <li>• Ability to gain experience that can be used in the home country . . .....</li> <li>• Size of target company compared to size of investing company . . .....</li> <li>• Ability to effectively manage foreign investment . . . . . .....</li> <li>• Synergies w/other regional investments (e.g., gas reserves, generation)</li> </ul>	<p style="text-align: center;">**</p>

When complete, please fax to Elliot Roseman at PricewaterhouseCoopers Securities at 703-610-7460.

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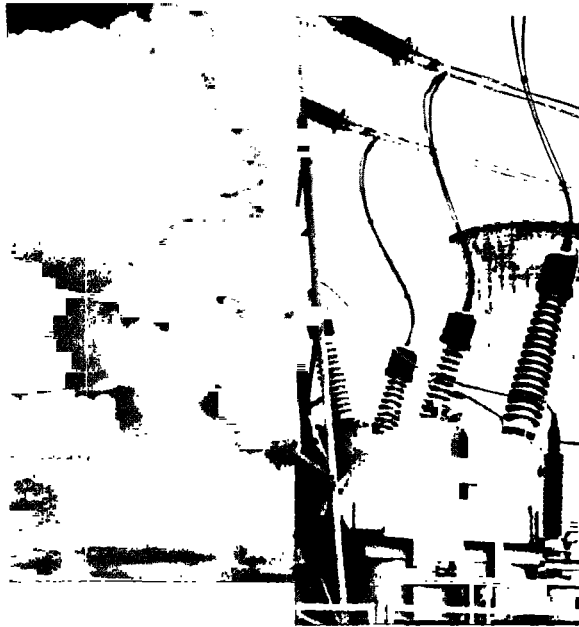
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