4 Sector Assessment

This section introduces ways of assessing the risk of corruption across the electricity sector of a country. Since corruption involves specific individuals and organizations, a "sector level" assessment is an attempt to sum or average the level of corruption across organizations in a sector. As such, sector level indicators can be misleading since the differences between the organizations involved are too great to make averages useful. For example, in a sector where, say, the regulator and the local distribution utilities are very corrupt, while the Ministry and the national transmission company are not at all corrupt, a statement that the sector as a whole is moderately corrupt would not be useful.

Therefore the objective of this section is simply to help practitioners understand risks of corruption across the whole sector, identify risk levels in specific key agencies, and detect general patterns. In this section we review some indicators that can be used to assess the level and risk of corruption. These are:

- Sector performance and efficiency indicators
- Asset observation, that is evidence of specific individuals living beyond their means
- Stakeholder complaints and other stakeholder feedback
- Surveys of corruption in infrastructure sectors.

Using this information we then outline a "mapping" approach sector practitioners can use to understand where corruption is occurring in the electricity sector.

4.1 Sector Performance and Efficiency Indicators

Four key sector performance indicators can provide first order signals on the possible level of corruption in the sector:

- Coverage
- System losses
- Collections ratios
- Cost recovery.

Table 4.1 describes these indicators and their possible relationship to poor governance and corruption. These sector performance indicators should be interpreted in the context of structure, as different structures create different incentives.

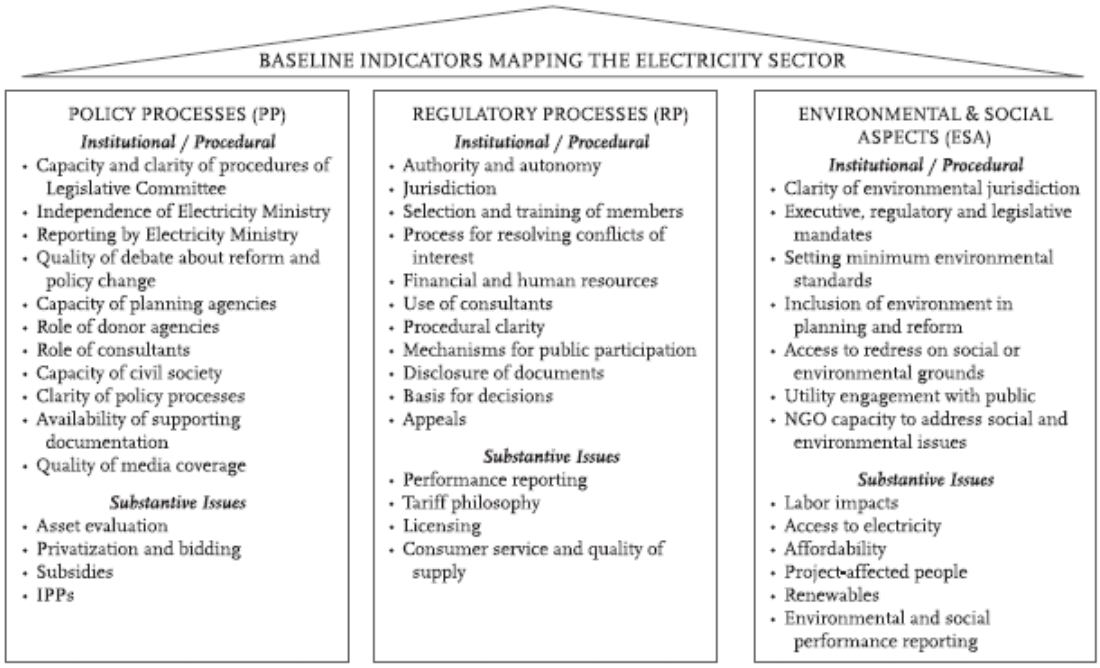
Table 4.1: Corruption and Sector Performance Indicators

Indicator	Description	Possible relationship to poor governance or corruption (or both)
Electricity coverage	Electricity coverage refers to the percentage of the population served by electricity utilities, as a percentage of the total population. (An alternative definition of electricity coverage is total electricity connections as a percentage of the total number of households.)	In general "good" coverage indicates that the sector is putting resources to good use, while "poor" coverage indicates the opposite. Whether a given level of coverage is "good" or "poor" depends on various factors, including the overall wealth of the country, and local geography. So rather than using absolute levels of coverage as an indicator of possible corruption, sector practitioners should focus on how far actual coverage is from where one might expect it to be, given the country's income and geography.
Systems losses	Electricity that has been generated and is "lost" before it reaches the customer. Losses can be "physical" losses (for instance, through transmission losses) or "commercial" losses (for instance, through theft or metering inaccuracies).	High physical losses may indicate corruption risk. Lack of attention to transformer maintenance and loadings, cleaning lines, and so on may indicate: ▪ A tendency to misuse resources generally ▪ Poor quality of construction and repair work ▪ A bias toward large capital projects over maintenance and incremental upgrades of transformers and the like. High commercial losses show a chaotic commercial system, which often allows corruption to thrive.
Collection ratio	Percentage of bills collected.	A low collection ratio indicates lack of discipline in commercial and financial systems in the sector. This lack of discipline will allow corruption to thrive.
Cost recovery	The capture—through fees, subsidies, or other explicit transfers of funds—of the cost of providing electricity services.	Sectors which recover some margin above operating and maintenance (O&M) costs tend to be less corrupt than ones where tariff revenue is less than or equal to O&M costs. This may be because sectors or providers which are recovering their costs are more likely to have effective processes for financial management and accountability in place. Alternatively, if a utility isn't recovering costs, employees are less likely to feel pressure for any kind of commercial discipline—that will allow corruption to thrive. Finally, research suggests that utilities that recover a majority of costs from their customers are more likely to be accountable to their customers.[8]

[8] Managing Public Water Utilities: An assessment of bureaucratic and New Public Management models in the water supply sectors in low- and middle-income countries, Klaas Schwartz 2006, UNESCO-IHE Institute for Water Education

The Electricity Governance Indicators (EGIs) also provide a framework for evaluating governance in the electricity sector (see Figure 4.1 below).

Figure 4.1: The Electricity Governance Indicators



Source: Nakhooda, S. et al (2007) *"Empowering People: A Governance Analysis of Electricity"*, World Resources Institute, page 9.

4.2 Stakeholder Complaints, Dialogue, and Media Reports

Stakeholder complaints, media reports, and dialogue can help to identify corruption and poor governance.

Customer complaints

The utility itself may have a complaints service, which may be a useful source of information. In addition, the sector regulator, a government department responsible for the electricity sector, or a consumer affairs bureau may also run a complaints service. In evaluating the reliability of information from these complaints services, sector practitioners may consider factors such as:

- How independent the complaints office is, for example from the utility's management or other staff members
- Whether the complaints service is widely known to the public, and whether it is well publicized
- Whether the service is respected, and considered to be effective by other stakeholders

- What arrangements are in place to protect "whistle-blowers" against retaliation, and whether complaints be made anonymously.

National anti-corruption agencies also often have complaints registers where stakeholders can expose corruption, or draw attention to practices they believe are corrupt. These are valuable resources for identifying corruption (see Source List 2.1 on page 19 for some examples of national anti-corruption strategies).

Media reports

Some media services scan for corruption related stories in the electricity sector. For instance, Transparency International's "corruption in the news" service scans international news services for corruption related stories, and publishes links to these stories on the Internet.[9]

Media coverage of corruption can serve as a tentative "red flag", by alerting sector practitioners to areas where corruption is allegedly occurring. Some care needs to be taken in interpreting media coverage of corruption. On the one hand the media may have an interest in scandalizing the problem, and so overstate the actual extent or frequency of corruption. Alternatively the media by be influenced or controlled by the state, or by powerful interest groups, and so may have an interest in understating or covering up problems.[10]

Stakeholder dialogue

Electricity sector stakeholders outside the government have differing perspectives on problems within the sector. They may also have less to lose, and more to gain, in exposing corrupt practices. It is therefore useful to talk to leading non-government stakeholders to learn their views on sector problems, and specifically on corruption.

There is considerable literature on the topic of consulting with sector stakeholders.

The first step in opening a stakeholder dialogue is generally to identify which groups of individuals to approach. Groups that may be able to provide valuable information include:

- Consumer organizations
- Neighborhood associations
- Chambers of Commerce and other industry associations
- Professional associations whose members work in the sector (for example consulting engineers, lawyers)
- NGOs working in the electricity sector
- Unions operating in the sector.

Care is sometimes required in identifying those individuals or groups that are useful to talk to—they may not always be obvious, and may not come forward to assert an interest in the sector.

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[9] Transparency International's "corruption in the news service", http://www.transparency.org/news_room/corruption_news

[10] See Soreide (2006) *Business Corruption: Incidence, Mechanisms, and Consequences.*

4.3 Surveys of Corruption in Infrastructure Sectors

Finally, surveys can provide information on the strength of governance arrangements, and extent of corruption, in the electricity sector. Practitioners can:

- Review existing surveys that deal with governance and corruption
- Commission special surveys, to gather information on service delivery or perceptions of corruption (or both) in a particular country or region.

4.3.1 Existing surveys of infrastructure sectors

Existing surveys, that already collect some limited information on corruption in the electricity sector, can be a useful starting point. For example, Business Environment and Enterprise Performance Surveys (BEEPS) include information relating specifically to the electricity sector. Source List 2.1 on page 19 provides further detail on these.

If warranted, sector practitioners may commission special surveys. There are broadly two options for commissioned surveys:

- **Quantitative surveys**, to collect data on key measures of service delivery. The objective of a tailored quantitative survey would be to highlight any areas of the utility's business where poor service delivery indicates that there may be, at best, a problem with governance and accountability arrangements or, at worst, corruption,
- **Perception surveys**, to canvas the views of stakeholders both within and outside the electricity sector. Stakeholders surveyed could include government officials, utility staff, customers, and non-government organizations. As well as directly gathering views on the extent of any corruption, and where corruption might be taking place, perception surveys can gather information on other aspects of the business, which may highlight problem areas (for example, quality of service, staff integrity, the appropriateness and effectiveness of business procedures).

Box 4.1 provides an example of the type of data practitioners can obtain from commissioned surveys of corruption.

Box 4.1: An Example of a Commissioned Survey of Corruption

In 2002, Transparency International conducted a citizen feedback survey across five countries in South Asia (Nepal, Pakistan, India, Bangladesh, and Sri Lanka). Electricity was one of the sectors covered by the survey. The survey found corruption in the connection process, and post-connection (for example bribes to maintain a proper power supply, bribes to reverse over-billing). Data from the survey on modes of corruption, parties engaging in corrupt practices, and the average level of bribes are provided in the table below.

Percentage of respondents reporting irregular connections processes and form of corruption

	Bangladesh	**India**	**Nepal**	**Pakistan**
Percentage reporting irregular connection process				
	36	14	24	65

Types of aberrations				
Had to pay the office staff	98	50	45	44
Through political influence	06	10	06	09
Through relatives	05	05	17	15
Repeated visits to the office	08	48	36	21
Other	03	—	07	03

Percentage reporting corruption in ongoing interactions with the utility

	Bangladesh	**India**	**Nepal**	**Pakistan**
Percentage reporting corruption				
	32	30	12	96
Types of corruption				
Bribes paid to get proper power supply	28	10	24	18
Bribes paid to reduce billing	10	02	—	32
Bribes paid to get illegal connections	02	08	05	05
Bribes paid to correct over billing	20	08	16	20
Bribes paid to prevent disconnection of power lines	10		08	11
Other	42	10	—	09

Average amount of bribes reported

	Bangladesh	**India**	**Nepal**	**Pakistan**
Average amount of bribe	BDT950	INR669	NR531	PR1087

Source: Transparency International, *Corruption in South Asia Insights & Benchmarks from Citizen Feedback Surveys in Five Countries*, December 2002

4.4 Asset Observation

Evidence that individuals working in the sector are enjoying living standards beyond what their wages could support is another indicator of corruption. If wages from an individual's job are insufficient to pay for apparent extravagancies, then where is the money coming from?

"Red flags" could include observations of:

- Parking lots full of expensive cars, especially when official salaries are known to be low

- Other obvious displays of wealth such as gold watches
- Frequent overseas trips by counterparts or sector officials
- Asset declarations from senior officials and politicians that reveal assets well beyond what those individuals' official salaries would support.

Sector practitioners will not be able to definitively determine if such observations are indeed a sign of corruption. However, such observations can serve as useful indicators that corruption may be occurring within the electricity sector. Further dialogue with sector staff and stakeholders can help to determine whether observed assets are indeed a sign that corruption is occurring, or whether there is a legitimate explanation.

Source List 4.1 on page 48 lists useful sources for further information on detecting corruption through asset observation.

4.5 Mapping Corruption Risk across the Electricity Sector

The above sections describe sources of information that can indicate whether and where corruption may be occurring in the electricity sector. If these indicate that a problem may exist, the next question is where in the sector to look to confirm whether there is a corruption problem.

Opportunities for corruption arise where there is a supply of value without a strong owner. Lack of a clear owner means that value becomes available for appropriation. It makes sense to look for corrupt activity in the places where such value is being shifted between agents—for example between the government and the utility, or between the utility and its suppliers or contractors. These places can be thought of as corruption "hotspots"—points in sector processes where money or contracts change hands, or discretionary decisions are made.

In the electricity sector, there are a number of corruption "hotspots". They occur where control over this value is concentrated in particular individuals, or where key decisions affecting value are made. To understand where in the electricity sector corruption may be occurring, it is useful to map out:

- The major flows of value in the electricity sector
- Which organizations control that value, at each point in the flow, and
- The mechanisms through which such value might be misappropriated.

This information can be represented in the form of a diagram. Clearly, each sector and country is different; practitioners can draw a similar picture reflecting the structure and characteristics of the sector in which they are working. To illustrate, we provide two examples below:

- Figure 4.1 maps out possible corruption hotspots for a "typical" vertically integrated national electricity utility
- Figure 4.2 shows the flow of value in a competitive electricity market with:
  - A national generation company
  - A national transmission company
  - A competitive wholesale electricity market

- Private generation companies
- Independent power producers.

Figure 4.3, Figure 4.4, and Figure 4.5 provide alternative versions of the "whole sector" diagram in Figure 4.2. These figures focus respectively on corruption hotspots occurring:

- In the government, and in the generation sector
- In the transmission sector
- At the level of individual distributors.

For simplicity, the five figures below just identify flows of value associated with corruption hotspots. The diagrams do not show all flows of value in the electricity sector.

In doing the sector-level assessment, practitioners will already have gathered information that can be located on the map, to help identify those hotspots where corruption may be occurring. For instance, low collection rates typically indicate a problem with the electricity provider's commercial systems. This problem may simply be a matter of poor governance or incompetence, or it may be an instance of corruption.

Figure 4.1: Financial Flows that May Be Subject to Corruption in a Vertically Integrated Utility

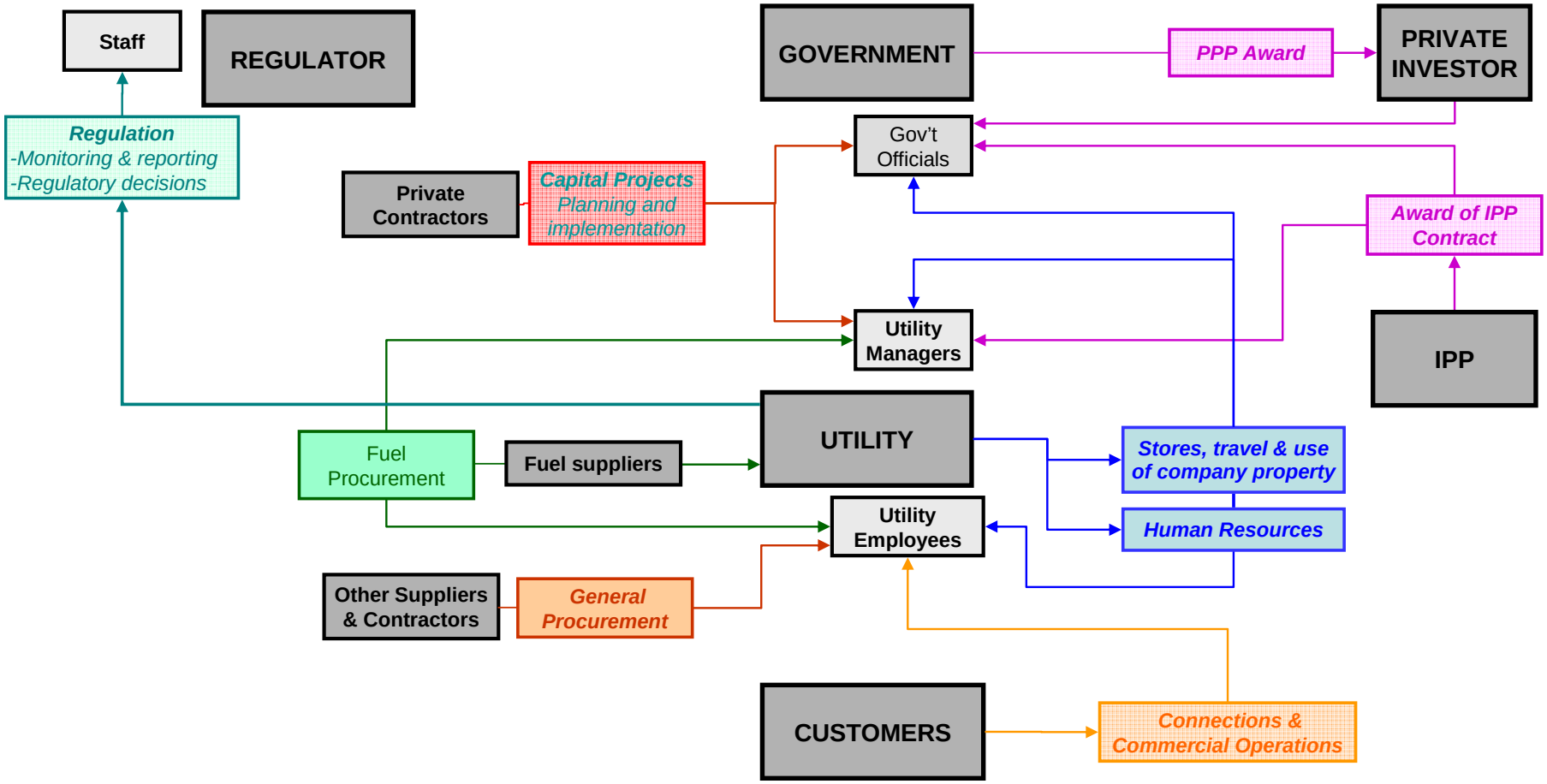

Figure 4.2: Financial Flows that May Be Subject to Corruption in a Competitive Electricity Market

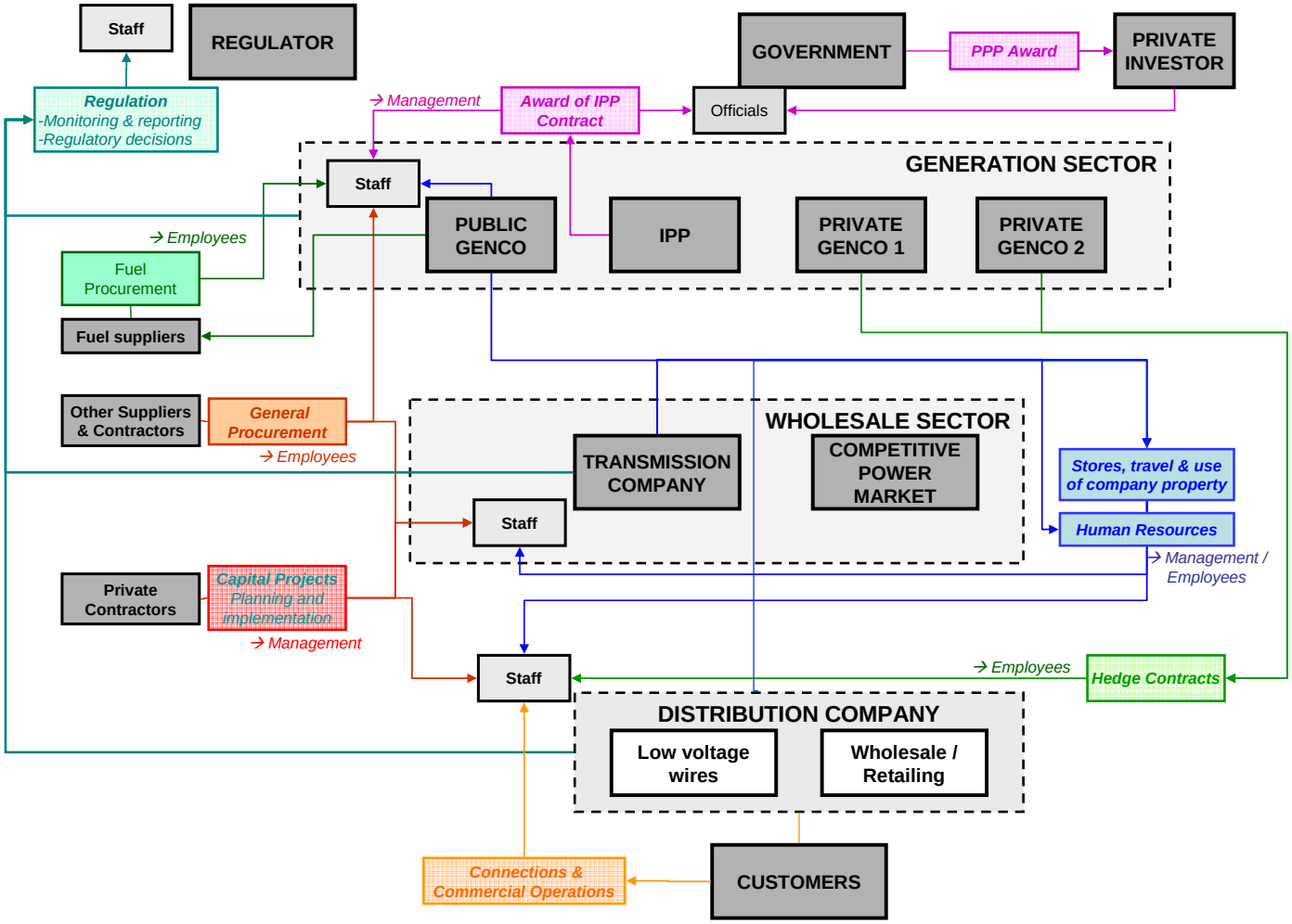

Figure 4.3: Government and Generation Sector Hotspots

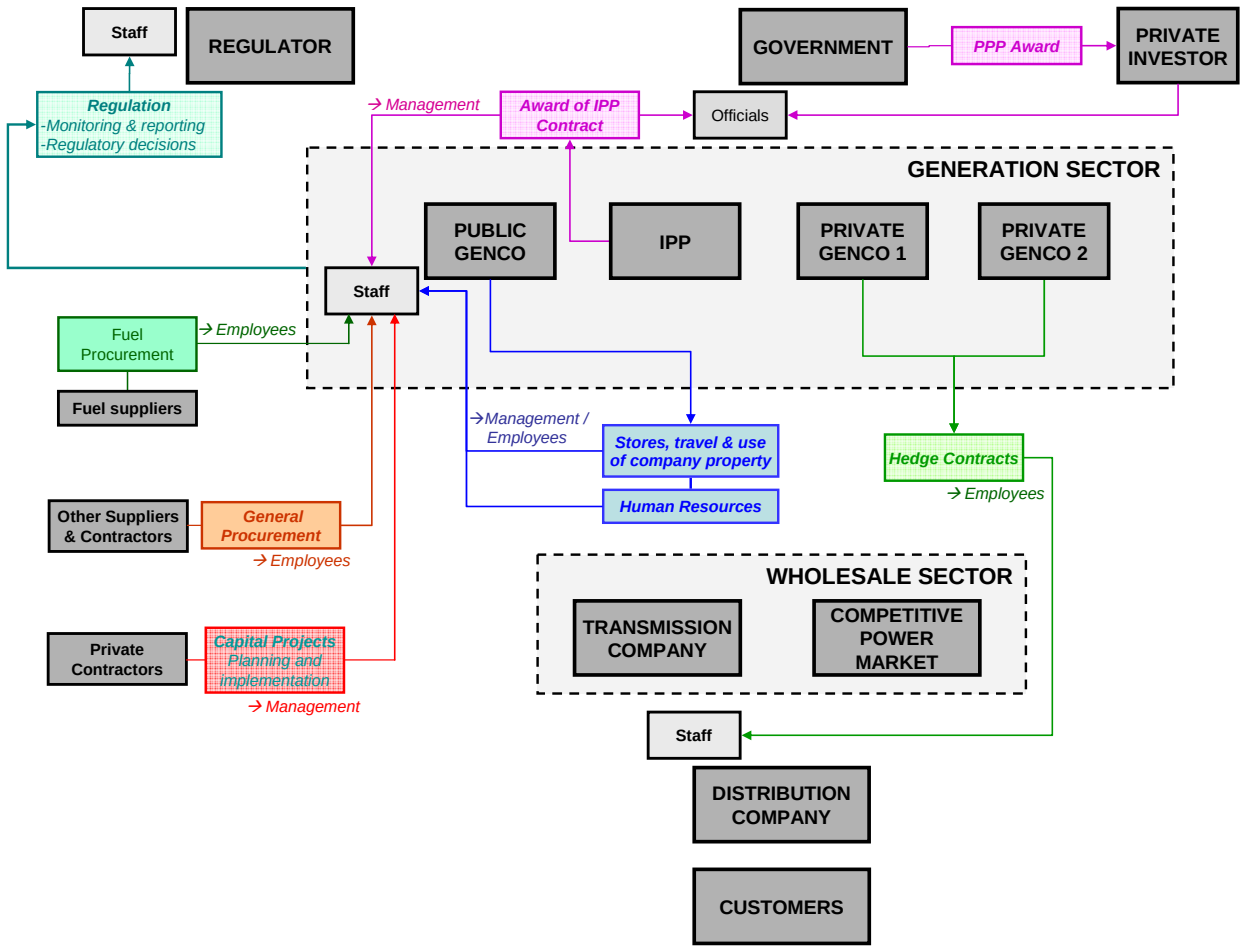

Figure 4.4: Transmission Sector Hotspots

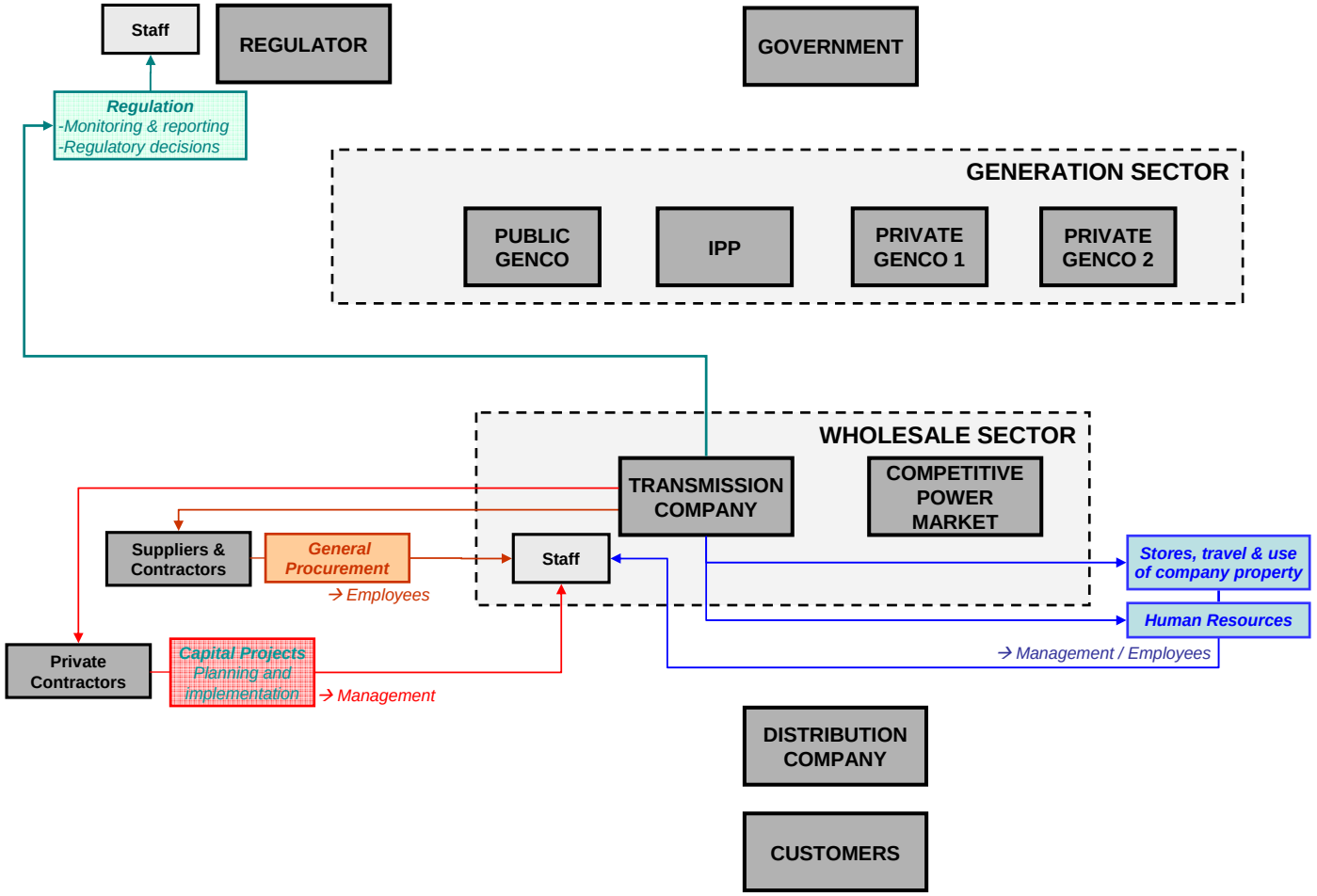

Figure 4.5: Distribution Sector Hotspots

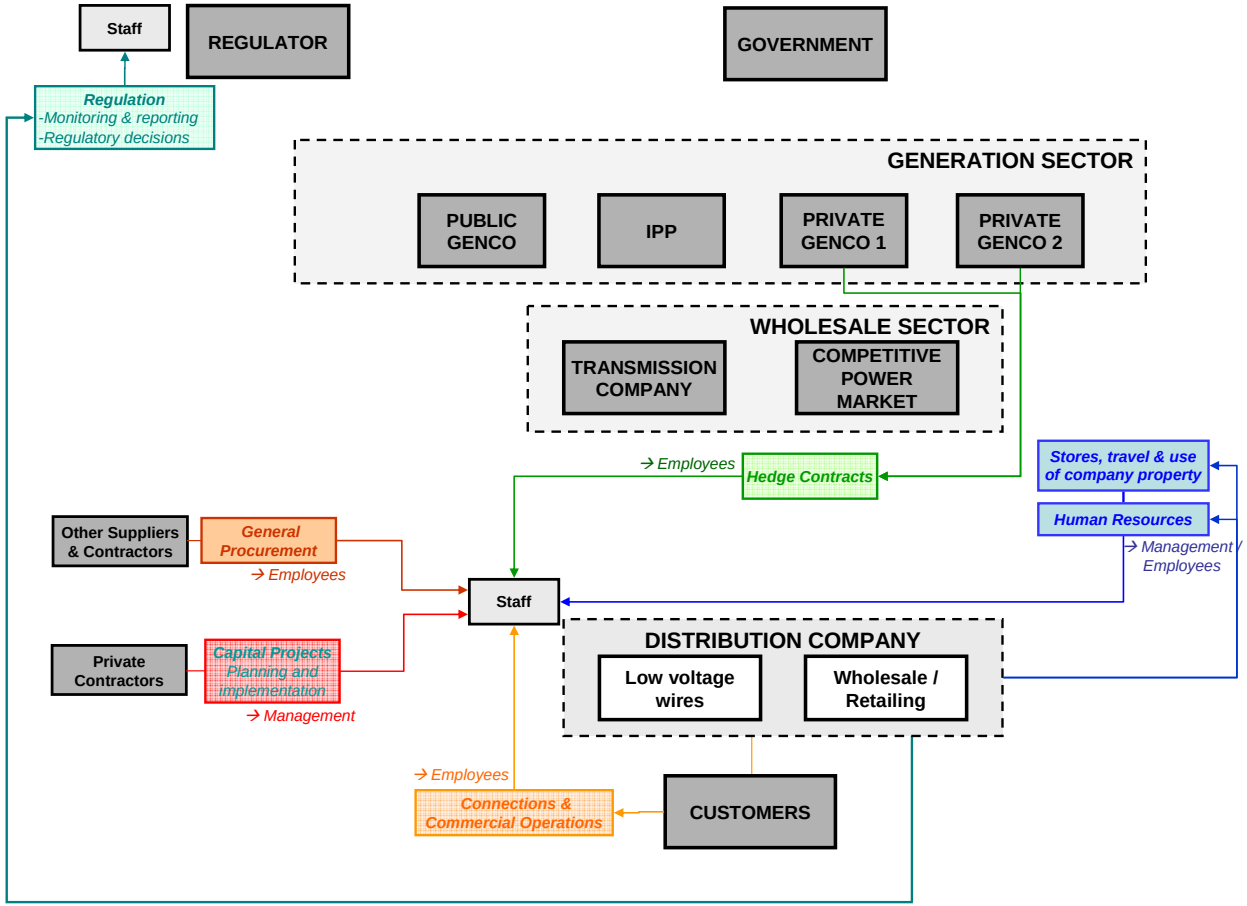

Table 4.2 identifies and defines the most common corruption and poor governance "hotspots" in the electricity sector. The table also indicates the modality of corruption in relation to each hotspot—that is, the mechanisms that may be used to misappropriate value. Sections 5 and 6 discuss approaches for more detailed assessment of corruption in each hotspot: at the provider level and at the project level respectively (Table 4.2 indicates which specific sections to refer to for each hotspot). The discussion in these sections assumes a typical vertically integrated electricity utility (as illustrated in Figure 4.1). This "typical" utility is, publicly owned and managed, operates under a corporate model (as opposed to operating as a government department), and operates as a vertically integrated operation (covering generation, transmission, and distribution of electricity). The utility may also purchase additional power from independent (private) power producers (Section 7 discusses corruption risk in relation to Independent Power Producers, or "IPPs").

Clearly, this "typical" model will not reflect the actual situation in many countries and sectors. The "map" of financial flows for a particular sector, and the extent to which each of the hotspots is a problem, will vary depending on a range of factors. In particular, a number of countries have introduced electricity sector reforms under which:

- The sector is disaggregated, with generation, transmission, and distribution/retailing functions being undertaken by separate companies
- Generators sell electricity through a competitive wholesale electricity market. Typically the market determines a "spot" price and provides for real time balancing of the electricity load
- Generators and their customers (distribution companies or large electricity users) may also enter into hedge contracts to provide certainty over electricity prices.

Section 8 discusses corruption risks in wholesale electricity markets. Finally, Section 9 discusses the implications of different sector structures for assessing corruption risk, particularly private sector involvement in the sector, and issues arising from sector regulation.

Table 4.2: Corruption and Poor Governance "Hotspots"

Hotspot	Definition	Modality	Section Reference
Planning and implementing capital projects	Forecasting, planning, tendering, contract and project management of major capital works commissioned by or for the electricity utility (e.g. additional generation capacity, new transmission or distribution lines)	Corruption in capital projects generally operates by inflating the price or reducing the quality (or both) of the work, so that the public sector pays more to a private contractor than the work is worth. Officials who can influence award of construction and equipment contracts get a kickback of a percentage of the contract value. May be associated with cartelization or bidding rings, in which the suppliers who nominally compete for the contract in fact collude to share contracts between them, at inflated prices. This allows the contractors to add the cost of the kickback to the contract price (and possibly increase its own profits as well).	Section 6
Fuel procurement	Electricity utility purchasing fuel (such as gas, oil, or coal) for generation plant	Fuel is a major procurement item for any utility involved in electricity generation, and so deserves particular attention, as the potential gains from corruption are substantial. Fuel suppliers may pay a kickback (usually a percentage of the contract value) to officials who use their influence to award the supply contract to that supplier. To fund the kickback the supplier inflates prices, provides fuel that does not meet required specifications, or supplies less fuel than was paid for. This may be associated with cartelization or bidding rings. Officials who work in the sector may own companies that supply fuel, and use their influence and relationship to direct the contract award to their companies.	Section 5.1

Hotspot	Definition	Modality	Section Reference
Other suppliers and contractors	Electricity utility purchasing supplies and contracting for services, such as maintenance of generation plant or distribution lines	As for procurement of fuel, above, officials who can influence award of supply contracts get a kickback of a percentage of the contract value—prices are inflated to fund the kickback, or quality specifications are not met, or lower volumes are supplied than were paid for. May be associated with cartelization or bidding rings. May also involve officials who work in the sector owning suppliers and contractors, and using their influence and relationship to direct contract award to their companies.	Section 5.2
Connections and commercial operations	Connections refers to the process by which would-be customers apply for, and receive, a connection to the electricity system. Commercial operations refers to metering, meter-reading, the issuing of bills, and collection of payment	Utility staff may demand bribes to install connections, or may be paid to turn a blind eye to illegal connections. Customers may pay meter readers to under-record their consumption, or may bribe someone in the commercial section to wipe their debts in the utility's system. Staff sent to disconnect a customer may accept payment for leaving the customer connected, while reporting back to the utility that the disconnection has been done.	Section 5.3
Human resources	The way the utility deals with its staff, including hiring, firing, setting pay and conditions, assessments and incentives, work assignments, promotions and movement between positions	Typical techniques include officials collecting payment for fictitious employees, or requiring that workers pay a superior for recruitment, promotion or just to retain a job. In some cases workers may pay to be transferred to posts that offer greater opportunities for personal enrichment through corruption.	Section 5.4
Company property	Everything the utility owns, including the money in its bank accounts, its inventory and stores, vehicles and equipment	Typical ways of misappropriating company property include: check and bank fraud by officials; theft of stores such a fuel and chemicals; and use of company equipment for private business, such as a small scale electricity generation business, or a construction business. Abuse of utility property can also include the utility providing vehicles for senior government officials and Ministers for their personal use, payment for travel for such people, or allowing utility staff and equipment to be used to maintain the houses and other property of senior managers and officials.	Section 5.5

Hotspot	Definition	Modality	Section Reference
Independent Power Producer (IPP) awards	The process of contracting with the owners of independent generation capacity to purchase electricity	Typically corruption would involve officials influencing the tender process to award electricity supply contracts to particular IPPs, either in return for a kickback, or because they have an ownership stake in the IPP. May involve renegotiation of the supply contract following a competitive award to inflate the price.	Section 7
Wholesale market operations	Wholesale electricity markets provide a venue for generators to sell electricity and retailers (or large users) to purchase electricity. They generally operate "spot" markets, that set short term prices for electricity, and in some cases determine the order in which generation plant will be used. There are usually also longer term contracts, which in many cases are negotiated between generators and offtakers, rather than traded in formal markets.	Corruption risk in wholesale electricity markets appears highest in the negotiation of hedge contracts between public distributors of electricity and private generators. These negotiations are generally not transparent, and resulting prices are often treated as confidential. Staff responsible for negotiating hedge contracts could take the opportunity to influence which generator the distribution contracts with, in exchange for a kickback. Detecting corruption in this area is made more difficult by general the lack of transparency around hedge contracts, and the complexity of determining "appropriate" hedge prices.	Section 8
Privatization or private participation transactions	The process of engaging a private firm to take on substantial responsibility for aspects of the utility's management or operations, either through sale of a government-owned company, or through the government contracting to give a private company certain management, operational and financial responsibilities.	Private firms may pay a government official to influence the award of a private participation contract or asset sale. Contracts, licenses and government-owned power assets are valuable, but the appropriate value is difficult to specify—thus, private utilities have an opportunity to inflate their price (or acquire assets for less than they are worth), and kickback some of the value to the public official. Sometimes this is done by the private utility giving shares in the project-company to influential officials or politicians, or through consulting contracts or other forms of payment.	Section 9

Hotspot	Definition	Modality	Section Reference
Relationship with regulator or contract monitoring authority	The way in which the utility deals with the government entities which set, monitor, and enforce tariffs and service standards, or other parameters and that have an important influence on the utility's financial performance.	Regulatory decisions, in particular on resetting tariffs, can have large financial consequences for a utility. Therefore, private firms may bribe regulators to give them favorable awards. Since the regulatory decision often involves considerable judgment, detecting that the decision has been influenced in this way can be difficult. Something similar may happen in private participation contracts such as management contracts and leases, where the private firm may pay the public official responsible for managing the contract in order to get more favorable treatment.	Section 9.3

Source List 4.1: Sector Assessment

Source	Description
Sector Performance and Efficiency Indicators	
Electricity Governance Initiative Indicator Toolkit	The Electricity Governance Initiative (EGI) Toolkit presents a framework for assessing and promoting good governance. It assesses the extent to which decision making processes in the electricity sector are transparent, allow for community participation, and are accountable to the public interests.[18] There are also reports on the applications of the EGI Toolkit in India, Indonesia, the Philippines, and Thailand available online.
Utility financial and operational statements	Looking directly at a utility's financial and operational statements, assuming they are available, is an essential first step at analyzing performance and efficiency indicators.
Sources on Stakeholder Complaints, Dialogue, and Media Reports	
National Anti-Corruption Agencies complaints registers	Many countries are now developing anti-corruption action plans (see Source List 3.1 on page 26) and anti-corruption agencies. Most agencies have complaint registers where stakeholder grievances are recorded.
Pezzullo, D. (1998) "Journalist training to curb corruption", *Economic Perspectives*, Vol 3(9)	Makes a strong case for training journalists to better enable them to investigate and report on corruption, rather than publish rumors.[19]
Soreide (2006) "*Business Corruption: Incidence, Mechanisms, and Consequences*"	Discusses limitations in relying on media reports. For instance, on page 26, it points out that "Whereas regular media coverage of corruption might inform on freedom of speech, the media can be biased and interested in scandalizing the problem, or it may be controlled by the state". It also points to the influence the media will have on individuals' perceptions, particularly when these perceptions are used in corruption perception indices.[20]
Transparency International's "Corruption in the News"	Scans international news services for corruption related stories, and publishes links to these stories on the Internet.[21]
Utility or regulator complaints register	Typically, utilities and regulators will have a channel for consumers to record official complaints. This is a useful place to start looking for stakeholder complaints.
Surveys of Corruption in the Electricity and Related Sectors	
Anti-Corruption Resource Centre, *"Designing a Taxpayer Baseline Survey in Uganda"*	This paper explores how the Uganda Revenue Authority (URA) could design and conduct a taxpayer survey to gather taxpayers' perception of the integrity of URA officials, and information on the incidence of corruption. It describes the major "causes" of corruption, a list of indicators that could suggest corruption may be taking place, and examples of tax revenue corruption assessment tools.[22]

Source	Description
Davis, J. (2003) "Corruption in Public Service Delivery: Experience from South Asia's Water Sector" ***World Development***	Pages 54 and 55 of this articles focus on a description of the methodology used to survey corruption among several public water bureaucracies in South Asia. While focused on water utilities, the survey provides a useful illustration of what practitioners can achieve from commissioned surveys of corruption.
Dehn, J. (2001) ***"Basic Service Delivery: A Quantitative Survey Approach"*** **Washington, DC: World Bank**	This paper discusses the main features, strength, limitations, and potential uses of Quantitative Service Delivery Surveys.[23]
Enterprise Survey	The Enterprise Survey collects data on various investment climate indicators. These include indicators of corruption, such as the percentage of firms expected to give gifts to get an electricity connection. The Survey also collect general information on the electricity sector, including percentage of firms reporting electricity as a major barrier to business development, days/year of power outages reported, delays in obtaining electricity connections.[24]
Quantitative Service Delivery Survey	The Quantitative Service Delivery Survey (QSDS) determines the efficiency of service provision, and gathers information on public expenditure management reforms, service delivery reforms, reforms to improve efficiency of public expenditures, and cross-cutting sector reforms. This is a useful tool for examining the efficiency of public spending and incentives, and various dimensions of service delivery in provider organizations. It is also useful for quantifying the factors affecting quality of service such as incentives, accountability mechanisms, and the relationships between agents and principals.
Reinikka, R. and Svensson, J. (2001) ***"Explaining Leakage of Public Funds"*****, Washington, DC: The World Bank**	This article describes using Public Expenditure Tracking Surveys (PETS) as a tool for assessing the leakage of public funds in education in Uganda. Whilst it does not deal with infrastructure services, it provides a detailed example of PETS, and how evidence of public funds leakage had a direct impact on policy.
Sohail, M and Cavill, S. (not dated) ***"Combating corruption in infrastructure services: A tool-kit"*****, WEDC Institute**	This document is intended to provide tools for combating corruption in infrastructure services for policy makers, professional staff of utilities, regulators of infrastructure services, and consumers of these services. It is separated into three sections with tools for users, operators, and regulators. Many of the "tools" provide examples of where it could be used, pointing to red flags for identifying corruption that a certain tool can help combat. It also provides case studies of different types of corruption practitioners can look out for. This toolkit includes tools to assist practitioners in working with communities, NGOs, media, and other outside stakeholders, and a discussion on anti-corruption agencies.

Source	Description
Transparency International, (2002) "*Corruption in South Asia Insights & Benchmarks from Citizen Feedback Surveys in Five Countries*",	This document presents the findings of a survey of corruption in five South Asian countries: Nepal, Pakistan, India, Bangladesh, and Sri Lanka. The survey covered households' experiences of corruption in a range of sectors (health care, education, power, land administration, taxation, police and the judiciary). Section 4.3 of the report presents results for the power sector across the five countries surveyed, including details on the mode of corruption, types of sector staff involved, and cost of corruption (value of payments required).[25]
UN Habitat, The Urban Corruption Survey	The Urban Corruption Survey is a tool designed to help stakeholders understand the existing reality of corruption, transparency, and quality of governance in a given city. With a better understanding of the current state of corruption in a city, stakeholders will be better equipped to develop systems that encourage probity in the future. While not focused on the electricity sector, this resource does provide relevant advice on preparing corruption surveys.[26]
WBI Country Diagnostic Surveys	The WBI's Country Diagnostic Surveys allow countries to map and measure critical public sector governance issues. Using this information, countries can plan participatory and targeted reform. Countries with diagnostic surveys include: Benin, Bolivia, Brazil, Burundi, Colombia, Ecuador, Ghana, Guatemala, Guinea, Haiti, Honduras, Kenya, Madagascar, Malawi, Mozambique, Paraguay, Peru, Sierra Leone, and Zambia.[27]
Mapping Corruption Risks	
Gulati, M. and Rao M.Y. "Corruption in the Electricity Sector: A Pervasive Scourge" in Campos, J. and Pradhan, S. (2007) *The Many Faces of Corruption: Tackling Vulnerabilities at the Sector Level*", Washington, DC: The World Bank	This chapter of *The Many Faces of Corruption* focuses on the electricity sector. Tables on pages 127 and 127 list areas in the electricity sector that are vulnerable to corruption in customer-interfacing activities, and theft of electricity.
Kalnins, V. (2005) *"Assessing Trends in Corruption and Impact of Anti-Corruption Measures"*, Anticorruption Network for Transition Economies	This paper provides a useful analysis of different types of governance indicators and includes a "wheel" for identification of corruption risks. This wheel distinguishes between five "zones" of corruption risk: 1. Supervision or control function 2. Authority to deal with financial means and property of state or local government 3. Making of decisions, which are binding upon other persons 4. Authority to carry out investigation and administration of punishment 5. Authority to deal with classified information.

Source	Description
World Bank (2006–2007) *Detailed Implementation Review: India Health Sector*, Washington, DC: The World Bank	The World Bank's Department of Institutional Integrity carried out a Detailed Implementation Review (DIR) of projects in India's health sector. This review searched for "red flags", or indicators, of corruption in project implementation units, procurement agencies, suppliers, contractors and other who could divert or misuse project funds. The DIR found "significant" indicators of corruption in all five projects it investigated.
Asset Observation	
Assets disclosure by public officials	Some countries have laws and rules that require public officials to declare their assets, thereby reducing the chance of corruption. Most laws prescribe: the coverage of the requirements (that is, which public officials must make asset declarations); what officials must include in the declaration; frequency and method for declaration; and punishments for breaches. The full text of asset disclosure laws from 18 countries is available on the Internet, on the World Bank's website[28]
Philippine Center for Investigative Journalism's "*Investigation Corruption*"	This paper provides a sample checklist of what to look for, and the types of questions to ask, when investigating corruption.[29]