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INTERNATIONAL PROJECT FINANCE FUNDAMENTALS

By: Ayaz R. Shaikh

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Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C.**

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Ayaz Shaikh is a Member of the law firm *Mintz Levin, Cohn, Ferris, Glovsky and Popeo, P.C.*, and Chair of Mintz's Projects & Infrastructure practice. He is a widely recognized projects lawyer with experience in over 40 countries spanning five continents. Ayaz advises U.S. and international companies, Sponsors, developers, funds and other investors, lenders, multilaterals, and governments in a wide array of Energy and Infrastructure projects. His practice encompasses Project Finance, M&A (US and cross-border), Bankruptcies and Restructuring, and Clean Tech emerging company representations. Ayaz's experience spans a diverse spectrum of industries: from renewable energy to industrial facilities, mining to satellites, and railroads to sports arenas. His projects have often involved foreign governments and multilaterals (MLAs) in cross-border deals or public private partnerships (P3s).

Ayaz worked on some of the first independent power projects (IPPs) in Asia, the Middle East and Latin America. Some of his projects established the framework, concession structure, or model agreements for projects in a country. In 2000, Ayaz led the World Bank's first Prototype Carbon Fund investment to implement the Kyoto Protocol, creating the model contract for emissions credits generating clean energy projects (the first "ERPA") – a transaction that kicked-off the trade in renewable energy credits (RECs) and catalyzed the global clean energy revolution.

Ayaz is ranked among top lawyers in his field by *Euromoney*, *Chambers Global*, *Who's Who*, and *The Legal 500*, among others. He previously received Smart CEO's Esquire Award, was named a "Project Finance MVP" by *Law360*, one of five listed in the "Most Highly Regarded" category by *Who's Who*, and one of 30 in *Euromoney's* "Best of Best" guide. Ayaz received his BA from Yale University, and his JD from Georgetown University.

CHAPTER 1

Introduction

From its modern-day roots dating to the first half of the twentieth century,[1] "project financing" has grown to a multi-billion-dollar worldwide industry, with the capacity to attract vast amounts of capital for infrastructure development. The fundamental principles of a project finance transaction have not changed significantly over the years. Project financing has shown itself to be a highly versatile technique, adaptable to a broad and constantly growing array of applications, including some of the largest and most capital-intensive infrastructure developments in the world. These transactions appear across a wide range of diverse industries, and reach locations in every region of the globe.

The term "project finance" generally refers to a form of nonrecourse or limited-recourse financing that combines both debt and equity in order to fund the construction or refinancing of capital-intensive projects. The lenders to the project have no recourse, or limited recourse, to the assets of the project Sponsors for the repayment of project debt. Instead, the lenders rely solely on the assets of the project itself, including the cash flow generated by the project typically under long-term revenue-producing contracts, as collateral for the

[1] Precursors to modern-day project finance may be traced back to various points in history, including as far back as Greek and Roman times. During certain periods, rudimentary forms of project finance became prevalent in certain industries, such as exemplified by the voyage-by-voyage financing of numerous seventeenth-century trade ships. Present-day project financing practices, however, are more tangibly rooted in the innovations of twentieth-century bankers and lawyers.

repayment of their loans. Rather than the credit of the project Sponsor, the viability of the project itself forms the basis to attract debt as well as the terms and conditions under which the debt is committed.

In an early example of project financing in the 1930s, local governments in the United States would issue tax-exempt bonds on behalf of a private business and lend the proceeds to the private business to be used solely to develop an industrial facility in the locality. The loans would be secured by the industrial facility's assets. The government bonds would be secured by and payable solely from the proceeds of payments made by the private business in repayment of such loans rather than the full faith and credit of the governmental issuer.

Today, project financing techniques fund development in virtually every country, and constitute the most common structure for infrastructure development in the world. Project financing is employed to fund:

- Ports, airports, roads, bridges, tunnels, rail lines, and other transportation infrastructure.
- Energy infrastructure facilities, such as conventional electric power generating facilities, renewable energy facilities (wind, solar, geothermal, hydro, biomass, and municipal waste to energy), fuel cells and batteries, transmission lines, drilling platforms, oil and gas field development, LNG liquefaction and regasification facilities, gas pipelines, gas and pump storage facilities, and other energy-related plants and equipment.
- Satellites and telecommunications systems, including cell towers, fiber-optic cable lines, cellular systems, and similar facilities.
- Petrochemical complexes, water desalination facilities, pulp and paper facilities, steel mills, coke batteries, aluminum smelters, and cement, fertilizer, and other industrial facilities producing commodities for sale.
- Sports arenas, stadiums, commercial and residential buildings, hotels and hospitality ventures.
- Water and waste management infrastructure, including drinking water supply facilities, irrigation systems, and sewage infrastructure.
- Mining operations, minerals, and natural resource development.

Virtually any industry requiring major capital investment in plant and equipment to produce a large quantity of products or services for sale can make use of project financing.

The worldwide proliferation of project finance may be attributed to its adaptability, as well as its conceptual underpinnings, which provide the basis for insulating a project and its investors from the risks of the surrounding business and regulatory environment. Experience has shown, however, that even the perfect financing structure cannot fully insulate a project from all potential future risks. Every project is developed and exists in the context of a broader economic and political environment and is vulnerable to events that can undermine its aims, even in the face of perfectly crafted contracts, airtight regulatory permits, and a system of laws that supports the enforceability of contracts. For example, regardless of sound structuring, a transaction may ultimately be undone by transient local forces if its operating costs become excessive in relation to the prevailing market price for the output in the local economy, unless there is a creditworthy buyer indifferent to the local economy (such as an offshore purchaser). In other words, in practice, political and market forces can trump even the best-crafted contractual obligations.

These types of risks exist everywhere, to be sure, including in fully developed or industrialized nations. They can be particularly potent, however, in developing or emerging markets, where the local economies may be more fragile, currencies more volatile, governments less stable, and legal regimes less robust. Such issues take on a distinct significance in the project financing context, where the financed assets generally consist of tangible infrastructure equipment that, once installed, cannot economically be moved.

Notwithstanding these factors, project financing remains a common source of capital in such markets because, unlike developed and industrialized nations, many emerging market economies lack the funds or borrowing power

to implement large-scale capital-intensive projects, and have to rely on relatively expensive offshore private capital in order to pursue development.

In sum, project financing continues to be an attractive alternative for infrastructure development notwithstanding its risks and commensurate costs. Several reasons account for the widespread use of project finance. From the perspective of the project Sponsors, lenders and equity investors, the project finance structure is relatively robust in its protection of their private interests. From the perspective of a host government, the project's promise of providing essential output, bolstering employment, and advancing growth enables a political consensus that the project is worth the high cost. If the government creates and maintains a stable investment environment for foreign debt and equity capital, project-financed development ventures can be secure and profitable sources of returns, even for a relatively risk-averse project Sponsor.

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CHAPTER 2

Project Finance Structure and Key Participants

From modest-sized inside-the-fence power facilities to multi-billion-dollar gas pipeline systems that cross international borders, all project financings are based on the credit of the project assets that produce income. A key feature is that the Sponsors of the project do not own the project assets. Rather, the assets are owned by an entity (typically, a special purpose entity) whose only assets are the tangible production assets and associated intangible assets, such as contracts relating to the development, engineering, procurement, construction, and operation of the production assets.

Financing for the project is provided to this special purpose project Owner, secured by the project's tangible and intangible assets, with limited (or no) recourse to the credit of the project Sponsors. Thus, the credit base for the financing is the capability of the project to produce revenue sufficient to pay:

- Operating and maintenance costs of the project assets.
- Scheduled debt service (on market terms) on project borrowings, the proceeds of which are used to build and operate the project assets.
- A return on equity at rates sufficient to attract investment in the project assets.

The project's ownership structure, contractual undertakings, governmental permits and concessions, and financing terms must all be designed to assure that the anticipated income stream will be both reliably forthcoming and sufficient. The principal challenge in any project financing is

to anticipate all of the risks that could potentially affect the income stream during the life of the project, and devise strategies to protect the project from the adverse impact of those risks. When projects fail, it is typically because certain risks either were not identified or, if identified, could not be or simply were not adequately addressed.

Volumes can be written on this subject. Rather than provide a comprehensive guide covering all aspects of international project financing, our aim is to acquaint the reader with the basic objectives and structure of a typical project, identifying the types of risks a project may confront and providing insight into how those risks can be addressed in the context of an international project financing.

2.1 Project Parties

The large number of participants needed to achieve financial close and commercial operations marks a distinguishing feature of project finance. This is no accident: since the project is financed based on its revenue generating capacity rather than the underlying credit of its Sponsors, a typical project finance structure painstakingly covers all foreseeable events that may potentially pose risks to project revenues, and ensures such risks are addressed by parties capable of mitigating their effects on the project. At its core, project financing involves an exercise in risk allocation, with the aim being to allocate each identifiable risk to the party optimally situated to absorb or mitigate that risk.

Every project faces certain typical risks – casualty losses, late arrival of critical equipment, unavailability of spare parts, change in laws and tax regulations, and currency devaluations, to identify just a few – as well as certain risks not previously encountered. Market practices have long developed among Lenders as to how to address conventional risks. As to those risks not capable of proper allocation or full mitigation, the Lenders typically require

financial reserves or other protective devices to shield the project from their effects.

Generally, risks that the project Lenders will not permit to be borne by the project Owner must be contractually allocated to third parties – either government instrumentalities or private parties – whose activities, experience and creditworthiness uniquely enable them to manage such risks. Hence, projects come to involve multiple parties, each having a particular role in the implementation of the project. Figure 1 provides an overview of a typical project finance contract structure and offers a graphic illustration of this point.

Managing the requirements and expectations of these various constituencies is one of the major challenges confronting the project lawyer. The roles of these parties will be discussed in more detail later, but it is useful to describe briefly here each of the common parties to a project financing in order to show how these parties and their roles fit together in a well-structured project. A cursory understanding of these roles is necessary to appreciate the project's structure and the basic components of any project financing.

Figure 1 identifies the range of agreements involved in a standard project finance transaction. For simplicity, we have assumed that a single counterparty will enter each contract. In practice, multiple parties frequently fill many singular project roles. For example, the project Owner itself may be a partnership with multiple partners, each of which forms a special purpose entity to hold its interest in the project, which is, in turn, owned directly or indirectly by one of the project Sponsors. Alternatively, the turnkey Engineering, Procurement, and Construction (EPC) Contractor may consist of two parties, one to provide onshore services and the other to provide offshore procurement, in order to minimize the effect of local taxes.

The parties in a project financing may be rationally divided into two basic groups – parties that provide the debt financing and parties that provide the security, contractual, and other assurances that form the basis upon which the

Lenders will extend debt to the project. Unlike equity Owners, Lenders do not have expectations of "upside" gains: their returns are limited to the spread on their loans. Thus, Lenders, bondholders, monoline insurers, letter of credit issuers and others extending credit to the project must take care to ensure sufficient cover for their downside, in order to enable them to conclude that the risks actually assumed are commensurate with their limited return.

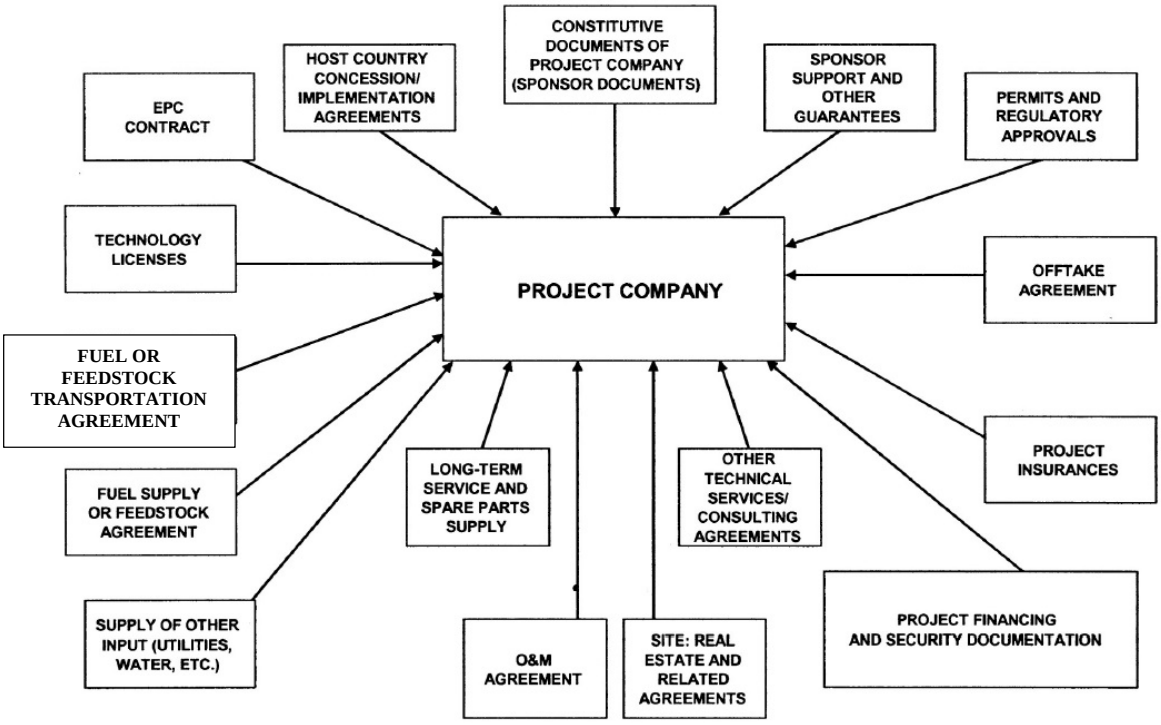

Figure 1

Example of a Project Finance Contract Structure

The following pages briefly describe the parties identified in Figure 1, their contractual or other relationship with the project, and (in the case of parties other than the financing parties) the risks they may be expected to undertake to provide the necessary protection of the project's revenue stream.

A. Project Owner

As illustrated in Figure 1, the project Owner is the central party in a project financing. The Owner is generally either a corporation, a limited liability

company, or a partnership whose partners consist of corporations or limited liability companies. In choosing the form of organization, the Sponsors' key objective is to achieve limited liability. The ability to insulate the Sponsors from the debts, obligations, or liabilities of the project Owner comprises the critical differentiating feature of a project financing. Accounting treatment and tax efficiency are likewise central in the selection of organizational structure. Tax treatment is a particularly important issue in international projects, where the Owner and the project assets may be in one taxing jurisdiction, and the Sponsors (the owners of the equity interests in the Owner) may be in one or more other taxing jurisdictions.

The Owner is the party that constructs, owns, and operates the production asset. The Owner holds the governmental concession (if any), and all permits, governmental approvals and other clearances pertaining to the development, construction, ownership, operation and financing of the project. Likewise, the Owner enters all contracts with project counterparties, including the contracts for construction, operation and maintenance, feedstock and other supplies, and project output sales, as well as the contracts providing for financing of the project.

B. Sponsors

The Sponsors hold the equity in the Owner. Historically, the majority equity owners are comprised of one or more strategic players in the relevant industry. For example, the majority equity Owner in an independent power generation project might be an independent power producer with a fleet of similar assets. Over the past two decades, private equity investors and hedge funds have invested significant sums into projects, attracted by the relatively stable returns and ratable income streams that project investments can produce. In international projects, offshore investors will typically include into their Sponsor group a local partner whose local presence, knowledge, and capabilities will be helpful in bringing the project to fruition.

Generally, the Sponsors will have an equity contribution obligation to the Owner in a specified amount, reflected in an agreement with the project's Lenders. While sometimes advance funded, this equity is more typically contributed simultaneously and pro rata with the making of loans by the Lenders to construct the production asset, with the entire amount accelerated and required to be contributed immediately if the Lenders declare an event of default and accelerate the loans.

Notwithstanding that the Sponsors may not be legally obligated to pay the debts and liabilities of the Owner, the identity, experience, reputation, and creditworthiness of the Sponsors constitutes a key consideration for the Lenders. In some cases, where particular risks are not otherwise covered by parties involved in the project, the Sponsors may agree to accept such risks on a limited basis, for example, by undertaking to fund a reserve to cover the particular risk or otherwise provide credit support to backstop the project Owner's ability to cover the risk.

C. Host Government

In a U.S. project, the government in the jurisdiction in which the project is located traditionally had a limited or marginal role in a project beyond the regulation and taxing of the project and the project's Owners and contractors. In an international project financing, however, and in particular in emerging markets, the host government plays a critical role in attracting foreign capital. A Concession Agreement or Implementation Agreement is typically entered into by the government to provide assurance of continuity of political support, legal recourse, and tax treatment for the investment.

Additionally, over the past two decades, governments all over the world have been willing to play an increasing role in private projects, providing more tangible direct benefits through project structures that have become widely known as "public private partnerships" or "PPPs" or, simply, "P3s". The role of the government in a P3 can vary greatly depending on the project sector, the

country involved, the specifics of the particular project, and the creativity of the participants involved.

One significant area of government participation is in the financing of the project, which can range from providing limited guarantees of project debt to incentivize lending, to direct participation in project debt or equity. The loan guarantees provided by the U.S. Department of Energy in favor of green energy projects are examples of the former. The role played by the Brazilian Economic Development Bank (BNDES) in directly financing projects is an example of the latter. BNDES, a state-owned institution established to fund infrastructure development, is compelled by law to provide debt or equity funding for Brazilian projects once specific development requirements are met. Beyond financing, P3s can involve a direct government role in the project as a commercial participant, including as the provider of an essential project input (such as feedstock), or the source of an essential project revenue stream. Certain infrastructure projects, for example, often involve some form of "availability payment" from the government as an essential component of the revenues required to obtain project financing.

D. EPC Contractor

An Engineering, Procurement, and Construction contract – or EPC Contract as commonly known – is a lump-sum turnkey contract in which the Contractor undertakes to design, procure all equipment, and build the project to the specifications of the Owner for a fixed price, by a guaranteed completion date (secured by delay damages). The Contractor also agrees to meet specified performance standards as to output, reliability, and efficiency. The EPC Contractor is selected by the Owner, and must be sufficiently creditworthy to stand behind the completion guarantees and continued warranty of the plant. Indeed, the creditworthiness and experience of the EPC Contractor is a critical factor in the willingness of the Lenders to finance the construction and completion of the project.

E. O&M Contractor or Operator

Often, the Owner employs an O&M (Operations and Maintenance) Contractor or Operator to operate and maintain the plant. One reason for the employment of an Operator (as opposed to the Owner operating the plant), is that the Lenders may prefer to have a third party to whom the Lenders can turn to recover some measure of damages in the event of any failure in plant operations. A third party operator also better enables the Lenders to monitor operations and ensure that operating costs remain within the parameters assumed in the project's economic model.

F. Fuel/Feedstock Supplier

In order to achieve a predictable and secure revenue stream that will adequately cover debt repayment after payment of operating costs, it is critical to control the main elements that comprise a project's operating costs. As expected, for industrial projects like a power, petrochemical, or processing facility, chief among these concerns is the cost of fuel or feedstock. In addition to the cost of the commodity itself, there will also likely be a transportation cost associated with bringing the fuel or feedstock to the plant.

Generally, the Owner contracts with the Fuel or Feedstock Supplier. In some power cogeneration facilities, the fuel or feedstock may be supplied by an industrial host that also consumes all or part of the power and steam generated by the cogeneration facility. Thus, the cogeneration facility and the industrial host's facilities may be mutually interdependent. In addition, some projects are subject to tolling arrangements under which the feedstock is supplied by the same party that will offtake the project's output. In such a case, the project Owner is using the project to provide the Offtaker with a service, namely, converting its feedstock into the offtake product (for example, converting natural gas supply into electrical energy).

G. Long-Term Service and Spare Parts Provider

It is common for the supplier of major plant equipment to enter into a long-term service contract to provide spare parts, operational advice, and supervision to a project Owner. Such a contract may have a number of beneficial effects for both the Owner and the supplier. For example, it may permit the supplier to provide a longer and more secure warranty than it could otherwise have provided if the plant were serviced by providers in whom the supplier might not have as much confidence.

H. Insurer

During construction, the EPC Contractor typically carries construction period casualty and liability insurance. Once construction is complete, and control of the plant turned over to the Owner, the Owner's casualty and liability insurance becomes the primary coverage. The Lenders to the project are named as additional insureds and the Lenders' agent is named as loss payee. In addition, no changes may be made to the insurance policy without the Lenders' consent.

I. Output Purchaser

As the source of the project's revenues, the output purchaser or Offtaker is the most critical party in a project financing. The duration and terms of its agreement to purchase output are central to the economics of the project, and its creditworthiness is often the single most determinative factor in the creditworthiness of the overall project. The role of the Offtaker, along with that of the EPC Contractor, Fuel Supplier and O&M Contractor is discussed in greater detail in Chapter 4.

J. Financing Parties

Many types of parties provide financing or extend other forms of credit to infrastructure projects. Among them are banks, institutional investors (such as pension plans or insurance companies), multilateral and bilateral institutions,

export credit agencies, the World Bank and its constituents, bond funds, private equity funds, hedge funds, as well as credit enhancers such as monoline insurance companies and letter of credit issuers. Major international projects typically have to access capital from a number of different sources, which complicates the financing arrangements significantly. The various types of financing parties and their involvement in project transactions are described in more detail in Chapter 3.

K. Swap and Hedge Providers

Traditionally, swap providers have provided interest rate protection in project financing transactions. Most common are interest rate hedges in which the variable rate obligation undertaken by the Owner is swapped for a fixed rate obligation, thereby locking in the interest cost to the project. Again, this technique is used to lock in the cost of the financing. While the locked rate will be higher than the prevailing variable rate, Lenders often insist that the Owner swap all or a majority of its debt to a fixed rate to provide the assurance of a known financing cost. In addition, hedges may be used in connection with project financings to provide an assured cost for commodity supply to the project or an assured revenue stream for a project output sold into the spot market on a merchant basis.

Swap or hedge providers are often also part of the lending syndicate. The project's obligations to them are generally secured equally and ratably with the loans. Since breakage obligations to hedge providers can be very large and unpredictable in amount because they are subject to market forces, a great deal of attention has been focused on hedging terms and inter-creditor issues between the hedge providers and the Lenders.

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With the multiplicity of parties in a project financing, it is easy to see why the documentation for such transactions is complex. Each party's obligations address a particular aspect of the project's development, construction, and

operation, and the obligations of all parties must fit together as seamlessly as possible. In addition, all of the rights of the Owner are subject to the security interest of the Lenders, who require the entry of each contractual third party into a consent and recognition agreement (often called a "Direct Agreement") that creates privity between the third parties and the Lenders, and confirms the obligations of the third parties to the Lenders in an event of default.

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CHAPTER 3

Project Structuring

The structure of a project will largely depend on the requirements of the host government. In emerging market countries, infrastructure development through the use of foreign capital is often part of an overall plan to improve or expand a particular sector. Thus, for example, the government might adopt an enterprise development system to expand its electric generation and transmission capability, permit foreign investors to own and operate the project for some time to recover their capital and achieve a reasonable return, and then provide for the project assets to be turned over to the government. This is the governmental objective that underlies concessions for BOT (build-operate-transfer), BOOT (build-own-operate-transfer), and similarly structured projects in emerging markets.

Other projects, such as those that seek to monetize natural resources or create jobs, are based on the host government's desire to increase foreign capital flowing into the country and improve the local economy. These projects are frequently based on concessions, and are supported by the development and sale of natural resources or products on the world markets using local assets and workforce to generate foreign currency. The concessions may have termination dates that limit the availability of the resource for development by the foreign investor. Alternatively, they may have a feature that permits the host government to succeed to ownership on a basis that requires the host

government to provide the foreign investors with a sufficient return on their capital to make the initial investment attractive.[2]

As noted previously, over the past twenty years there has been an increasing focus on P3s – that is, project development structured with the participation of both host government and private capital support. Government participation in P3s often comes in the form of some type of financing, backstop, or credit enhancement to the project. Government support can also come in the form of direct commercial participation in the project as a project counterparty. In some cases, it may also come in the form of outright ownership of an essential project asset or facility. For example, in a large dam project that has public benefits such as irrigation and environmental mitigation, the government might pay for and own the dam, while a private party might fund the construction and installation of the essential power generation equipment used by the private party to generate and sell electricity under a long-term Power Purchase Agreement.

The financing of an international project can stem from a variety of sources. A principal objective of multilateral agencies is to provide development financing in emerging markets. The World Bank has been a significant source of such financing, both directly and through its investment arm, the International Finance Corporation (IFC). There are also regional multilateral Lenders that provide investment funds, such as the Asian Development Bank, the African Development Bank, or the Inter-American

[2] In designing the ownership structure and economics for any project (whether for the development of local infrastructure or the development of export products), project Sponsors must understand the markets, political environment, law, applicable regulatory regimes, tax system, and a host of other factors that will affect the project during the period of its useful life. The ability of the Sponsors to generate the necessary revenues to operate and maintain the project, pay its debt service, and generate a sufficient return on investment is dependent on these surrounding circumstances. The learning curve for such projects is steep, and Sponsors are therefore incentivized to maximize their activity in a particular jurisdiction in order to make maximum use of this effort. At the same time, Sponsors may be reluctant to concentrate their portfolio of capital investments in a particular jurisdiction, recognizing the desirability of diversifying country risk by spreading project investments among a number of different jurisdictions.

Development Bank. In addition, many industrialized countries have export credit agencies whose objective is to encourage the use of equipment manufactured in their country by providing financing on favorable terms, or to assist in the development of markets for their country's products.

In addition to these sources, private commercial banks all over the world are involved in providing credit to fund project development and construction on the basis of project financing structures. Long-term bond funding that includes U.S. investors may also be provided under a Rule 144A structure (as discussed in Section 6.2). Frequently, private capital will join with multilateral sources to provide the large amount of capital needed for a significant infrastructure development plan. In emerging markets in particular, because of the importance to the country of continuing access to multilateral sources of funding, the inclusion in the financing group of such sources increases the comfort level of the private Lenders as to the stability of their investment.

Typically, a project financing consists of construction loans provided under a credit agreement or an indenture, disbursed into a construction fund, against requisitions supported by invoices and other evidences of incurred costs. At completion, the financing typically converts to a longer "term loan" structure, with a payment schedule that amortizes in accordance with the project's pro forma financial statements, and provides a coverage cushion based on the project's anticipated net cash flows.

The financing also typically includes letters of credit to cover guarantees to contract counterparties, such as major suppliers and purchasers of output, and funded reserves to cover anticipated costs such as routine and major maintenance, operating costs, and a debt service reserve to provide a cushion against cash shortfalls. These reserve funds can also be provided through letters of credit that are permitted to be drawn down upon stated contingencies.

The financing is secured by all rights, interests, and property of the Owner, including: the production assets, the real estate on which the asset is located, and related rights such as easements, governmental permits and approvals, all revenues from the sale of the project's output, and all contractual rights of the Owner, including all of its rights under the Concession Agreement or Implementation Agreement with the host government (if any), the EPC Contract(s), all Offtake/Output Contracts, all Fuel/Feedstock Supply Contracts, the O&M Contract, and any and all other rights, contractual or otherwise, relating to the development, construction, ownership, and operation of the plant.

A project financing is highly dependent on the security rights of the Lenders and the enforceability of all project contractual rights. In many host jurisdictions, the forms of security are not as developed as compared to industrialized countries. Hence, in order to be more competitive in attracting foreign capital, many jurisdictions have had to revise their laws, including, specifically, their laws relating to the perfection of security interests, enforceability of arbitral awards, and insolvency. These improvements help to mitigate some of the risks associated with investment in international projects.

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CHAPTER 4

Risk Allocation in Key Project Documents

This chapter will discuss several of the key project documents typically found in project financing. Our aim, in these pages, is to identify the principal risks addressed in the typical project documentation, and the risk allocation methods employed to manage these risks. The actual risks confronted in any project are, of course, far more complex than can be summarized in any publication, and will vary based on the country or region, industry, technology, parties, site location, environmental condition, political climate, and a host of other factors.

The key project documents for most projects generally include the agreements that provide for: the concession from the host government to develop a project; the acquisition of the rights to the project site; the design, engineering, and construction of the project; the throughput or delivery of the feedstock or fuel needed to produce the project's output; the purchase of the project's output providing for its income stream; the operation and maintenance of the project; and the financing required to develop and construct the project. A typical project will also require many other project documents. For example, a project may require joint venture or shareholder agreements (in the case of multiple Sponsors), interconnection agreements, transmission agreements, technology licensing agreements, long-term equipment service agreements, equipment supplier guarantees, and utility supply agreements, just to mention a few.

As the number of agreements required is, generally speaking, directly proportional to the number of parties involved, the involvement of multiple Sponsors or parties playing multiple roles in the project will inevitably lead to a multiplicity of project agreements, and often side agreements between individual parties. These agreements will together comprise the set of collective rights and obligations of the project company. As noted, the full array of documents involved in any project will vary, often considerably, from project to project. The key agreements that are the focus of this chapter, however, are likely to be the principal documents required for most projects. They collectively cover the major aspects of any project development.

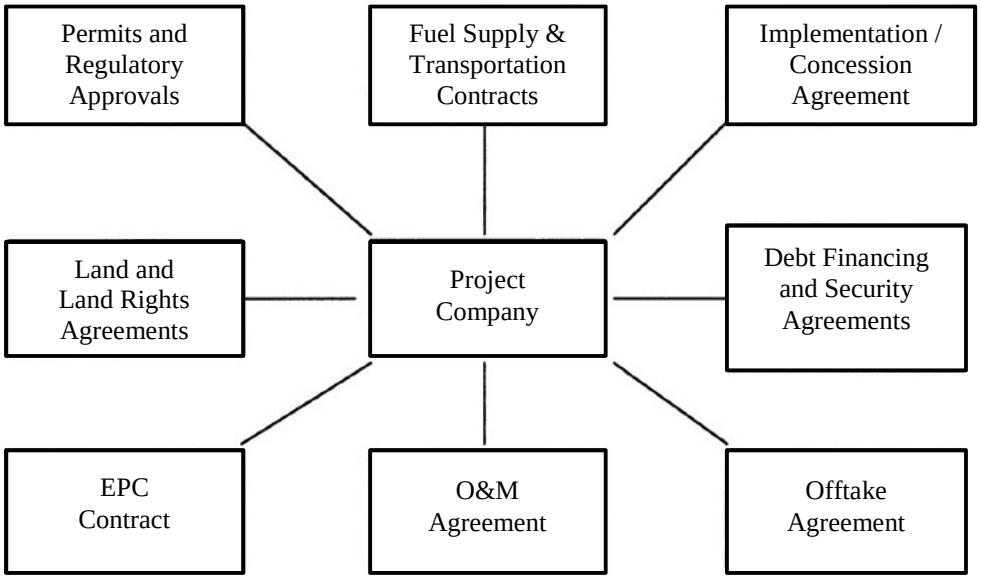

Figure 2

Key Project Contractual Relationships

All of the documents identified in Figure 2 for any type of infrastructure project are interrelated and must be carefully coordinated to allocate risks consistent with each party's intent. Figure 2 is an abbreviated version of the diagram in Figure 1, depicting only the key project documents mentioned in the previous paragraph.

The risks inherent in most international projects may be characterized as principally being either commercial or political in nature. Commercial risks generally include construction phase risks and operating phase risks[3]. Political risks include the direct risks posed by the political climate, but can also extend to include both legal infrastructure and physical infrastructure risks.

At an early stage of the development of any project, the Sponsors may create a detailed risk matrix that will identify the key risks in a particular project, specify the major project agreements, and describe how each project agreement allocates the particular risk. The risk matrix may also attempt to quantify roughly the probability of risk occurrence on a risk-by-risk basis, assess the impact of risk occurrence on the project, and identify the principal risk mitigating factors. Accounting for risk impact and probability early on will enable proper prioritization and planning.

4.1 Commercial Risks

As discussed, the commercial risks encountered in projects are primarily allocated contractually through the various project agreements.

A. Construction Phase Risks

The principal construction phase risks encountered in an infrastructure project are the risks of cost overruns, completion delays, and the failure to satisfy required performance standards. These risks are allocated between the project company and the contractor under the EPC Contract, and also, to a certain extent, between the project company and the Offtaker in the Offtake Agreement. The mechanisms for allocating risks in the EPC Contract and the Offtake Agreements are discussed later in this section.

[3] The risk of environmental liability is present (in varying forms) during both the construction phase and the operation phase. Proper management of environmental risk is essential in any project. Environmental risks will be allocated in the Site Acquisition Agreement, the Engineering, Procurement and Construction Contract, the Operation and Maintenance Agreement and sometimes in the Offtake Agreement.

B. Operating Phase Risks

The principal operating phase risks include operating performance shortfalls, operating cost overruns, fuel or feedstock risk (consisting of price, supply and transportation risk), and market risk (consisting of demand, price and inflation risk). These risks are principally allocated in the Fuel Supply or Feedstock Agreement, the O&M Agreement, and the Offtake Agreements, each of which is discussed in greater detail later in the next section.

4.2 Political Risks

Political risks are encountered in virtually every international project. While the specific political risks encountered will vary based on the project, the principal risks can be categorized as summarized briefly below. Political risks may be mitigated through reliance upon host country laws and regulations, and by including national, regional and local participation in the project. The risks can also be managed through contractual protections and through political risk insurance.

A. Principal Political Risks

The principal political risks facing any major international project are expropriation risk, regulatory risk, contract risk and currency risk. These risks are discussed in greater detail in Chapter 13 in the context of the unique risks that arise in projects involving foreign investment, but are summarized briefly here for purposes of this discussion. Expropriation risk includes the risk of an outright nationalization of project assets or project rights, or the equity ownership in the project company, in a discriminatory or arbitrary manner or without just compensation. In contrast, "creeping expropriation," which is more common, can occur through a combination of taxes, fees or other assessments used by the government to increase gradually the government's share of the project's profits.

Regulatory risks for a project often arise as a result of lawful changes to the regulatory environment which make a project unprofitable or less profitable. This can occur in a number of ways, including, for example, restrictions on imports or exports and the imposition of foreign investment review procedures. Contract risk is the risk that the project agreements may be deemed unenforceable in the country or may be repudiated by a government-controlled counterparty to the project agreements. The risk of nonperformance by a contract counterparty may always be present, but this risk is greater when a governmental entity is the counterparty, and greater in a country without a developed legal system. For example, following a change in political power, the new government faced with agreements entered into by its predecessor may be motivated to repudiate a contract. A contract may also be effectively repudiated when a counterparty refuses to perform on the basis that the contract has been rendered commercially impracticable. The defense of impracticability is common in many countries and is often argued to mean the contract is no longer economically profitable to the counterparty.

Currency risk includes the risk of inconvertibility of the host country currency and the exchange risk encountered when the project's revenues are denominated in a different currency than its debt and other project expenses. Currency risk also includes the risk that the project company will not be able to transfer currency out of the host country for debt payments and repatriation of equity capital. Restrictions on currency transfers can range from a limitation on amounts transferred to the need to obtain central bank or other approvals prior to the transfer.

B. Legal Infrastructure

In many regions of the world – particularly in emerging countries – the legal system presents a unique set of risks. Many countries place restrictions on foreign investment into their markets. For example, the company laws or foreign investment laws of some countries require that the majority interest in

a domestic enterprise be held by a domestic party. Some countries have burdensome tax regimes, which could include generally higher tax rates, filing fees, stamp taxes and other duties. The absence of a developed body of regulatory and administrative laws, or a predictable and reliable jurisprudential system, can also be a common feature in developing market countries. It presents particular problems with respect to project agreements if those agreements are required to be governed by local law. Site acquisition agreements are generally always governed by local law, as are most agreements with governmental entities. While the financing agreements entered with the Lenders are typically not governed by local law, the security agreements generally are given that the cover assets are physically located in the country. When there is uncertainty as to whether a local security interest is perfected and enforceable, this can make financing difficult.

The risks of a change in the legal or regulatory regime during a project's life is, of course, greater the longer the life of the project. If a project's lifespan is anticipated to be between 20 and 30 years in duration, one can anticipate that the regulatory landscape will likely change over this period, particularly in regards to environmental issues. In countries with underdeveloped environmental standards, it is reasonable to conclude that such standards may become more exacting over the life of the project. Sponsors often mitigate this risk by designing a project to comply with the environmental standards of their home jurisdiction regardless of the less stringent requirements of the host country. In addition, project finance Lenders generally require that the project satisfy World Bank guidelines for environmental liabilities when those guidelines are stricter than local regulations.

C. Physical Infrastructure

Physical infrastructure risk relates primarily to the difficulty in having free access to the infrastructure and other items necessary for construction and operation of the project. The supply of water, utilities, and other necessary

consumables can often be unpredictable with respect to both availability and pricing. Unless a project is located in an industrial area, it may confront a lack of pipes, roads, ports, and other transportation for completion and operation of the project and transportation of the output to the Offtaker. The ability to obtain such infrastructure on commercially reasonable terms must be accounted for at an early stage in the project's risk analysis.

D. Managing Political Risks

In order to manage political risk, it is best to consider first the host country's perspective. An understanding of the host country's social, economic and political goals is a good place to begin analyzing political risk and how to manage it. To the extent a country is prone to radical political shifts, however, it can be difficult to determine these goals, as they often change dramatically when a new political party gains control of the government. Another means of managing political risk includes the use of government participation in the project. Host government participation can come, for example, in the form of performance undertakings to protect the project against changes in law, expropriation, and political force majeure. The use of an Implementation or Concession Agreement (or another similar form of undertaking), or the inclusion of a governmental entity as one of the major participants in the project, can help manage political risks. In the latter case, it is predicated on the hope that the government will not take actions against its own interests. In a similar vein, it is also beneficial to include local parties as participants in the project. Local parties can participate as co-Sponsors or by serving as sources or suppliers of equipment, spare parts, essential services, labor, or even financing. While far from a panacea, local participation can reduce the likelihood that the project will be unexpectedly confronted by adverse political forces.

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CHAPTER 5

Major Project Documents

As previously noted, all of the project documents are interrelated and must be negotiated with each of the other project documents in mind. The function of each of the key project documents – the Implementation (or Concession) Agreement, the Site Acquisition Agreements, the Engineering, Procurement and Construction Contract, the Offtake Agreement, the Fuel Supply Agreement and the Operation and Maintenance Agreement – and the means by which these project documents allocate project risk, is described in this section.

5.1 Implementation or Concession Agreements

An Implementation or Concession Agreement can take many forms but is generally an agreement with a government entity. The Implementation or Concession Agreement is used by a host government to encourage a capital intensive project to be built in the host country. It is the principal agreement through which most political risks will be managed. Not all projects will benefit from an Implementation or Concession Agreement, or other direct governmental participation. If a country has a favorable investment climate or a history of successful foreign investment, then an Implementation or Concession Agreement may not be necessary. For example, if the government of Trinidad and Tobago desired to have a power project built, there might be no need for an Implementation or Concession (or similar) Agreement to support the local utility's power purchase obligations. On the other hand, a

power project developed in Pakistan, where the investment climate lacks a similar history, would likely require an Implementation or Concession Agreement to attract desirable Sponsors and financing packages.

An Implementation or Concession Agreement will address many of the host country's political, regulatory, legal, and financial risks. It will include performance undertakings by the host government with respect to issues such as the project term, change in laws, expropriation and political force majeure, foreign exchange availability and transfers, waivers of sovereign immunity, buyouts of the project company in certain events, local content requirements, and tariff, tax, and other investment incentives.

The term of an Implementation or Concession Agreement should be at least as long as the related Offtake Agreement. For most energy or infrastructure projects, this can range from ten to thirty years. The term must be long enough to ensure complete debt repayment and a reasonable return on Sponsor equity. Ideally, an Implementation or Concession Agreement will remain in place for the life of the project. The Implementation or Concession Agreement may require a specific amount of local content for a project, including to meet project labor and equipment requirements. Usually one of the host government's goals, in addition to spurring investment, is to increase employment and train the local labor pool in higher-skilled jobs, as well as to increase capital flow to local suppliers.

As noted previously, expropriation risks are particularly present in jurisdictions lacking a long history of private ownership of domestic resources or assets in industries generally owned and operated by a local government entity. When these risks are present, the Implementation or Concession Agreement should provide protection against the risk of the government taking or otherwise confiscating the project assets. The project Sponsor will ideally define "expropriation" very broadly to include "creeping expropriation" that, as discussed, can occur as a result of changes of law or losses of permits that will

effectively prevent the project from operating at full capacity or generating anticipated profits. In the event of creeping expropriation, the project will not be expropriated as a result of the government taking over the project, but the effect of the creeping expropriation will eventually make the project commercially less viable. A remedy in the event of an expropriation may include a buyout of the project by the government in an amount sufficient for the project company to repay its financing obligations and provide for a return on the Sponsors' equity.

Project permits will be required from various national and local government entities. In order to facilitate the ability to procure essential permits, the Implementation or Concession Agreement should include a covenant by the government counterparty to provide cooperation in the permitting process. This may be in the form of an obligation to use best (or all reasonable) efforts to assist the project company in obtaining all permits. Since the government counterparty is not the permitting agency in all cases, this will not guarantee success in obtaining all permits, but can still be beneficial to the project company.

An Implementation or Concession Agreement should also address the risks of foreign exchange availability. Since most projects are financed with international commercial bank loans or through capital markets, it is essential for the project company to have access to foreign exchange to repay the debt obligations, and for the project Sponsors to be able to repatriate their profits in foreign exchange. As discussed elsewhere, the issue of access to foreign exchange is particularly relevant for a project whose revenues are denominated in the host country's currency. In projects that generate product for export, foreign exchange is not as acute a concern because the revenues are often paid in foreign exchange directly into accounts located in international money centers (for example, New York or London). This, however, is not a complete protection against currency risk. For example, in 2003, Argentina required

exports of certain natural resources (or products derived from natural resources such as propane), to be diverted to domestic needs and at a price inconsistent with the market price for such resources. Despite having long-term sales contracts that generated foreign exchange, projects in Argentina were required to divert their export sales to internal sales. This change ultimately impacted many projects in Argentina that had previously remained viable despite the Argentine financial crisis. It resulted in a limitation of exchange for debt repayment because the payments for the natural resources were made in Argentine pesos and the price paid for the propane was no longer market. Most, if not all, of the project financings in Argentina prior to the 2001 Argentine political crisis did not benefit from an Implementation or Concession Agreement because Argentine political risk was generally viewed as acceptable.

An Implementation or Concession Agreement will often provide investment incentives in the form of tax benefits and customs duty relief. Tax benefits are often in the form of a "tax holiday" – a negotiated period of time during which the project company is exempt from tax liability in the host country. A tax holiday is often considered necessary to make a project commercially viable, especially during the period in which the project company will have debt service obligations. A tax holiday is justifiable from a local perspective because of the benefits the host country will derive from attracting large infrastructure projects, such as the creation of local jobs and the provision of necessary equipment and services.

The risk of a change in law following the committing of project capital comprises one of the key risks in an international project. The Implementation or Concession Agreement should address change of law risk. The Implementation or Concession Agreement may effectively "grandfather" the project so as not to subject it to a change in law that adversely affects the project. Or it may give the project company the benefit of a most favored

nation provision, which will allow the project company to take advantage of subsequent favorable changes in law or policy which would otherwise not be available to it.

An Implementation or Concession Agreement should also include a specific waiver of sovereign immunity by the government counterparty. The lack of a sovereign immunity waiver can ultimately prevent a party from enforcing the rights granted in the Implementation or Concession Agreement. Many countries have laws that provide that a foreign sovereign or an instrumentality of a foreign sovereign is immune from suit unless there is a statutory exception permitting such a suit. Waivers are often among the statutory exceptions to sovereign immunity, but waivers must strictly comply with the applicable law or otherwise they may not be enforceable.

5.2 Site Acquisition Agreements

All infrastructure projects require a site for the project and easements or rights-of-way for access to and from the site. Rights to the site itself may be granted through the grant of fee title, the grant of a leasehold or easement estate, or a permit or other authorization from the government for government-owned land. A fee simple grant is ideal and easier to finance, but in some situations outright ownership of the site is not possible. In some countries, for example, a fee simple estate (or its equivalent) may not be granted to a private entity, or there may be restrictions on foreign ownership of land. In other situations, the Sponsors may obtain a lease or a permit to use the site for the project. If this is the case, the lease or permit must be for a period no shorter than the useful life of the project. In addition, the leasehold interest must be mortgageable to the Lenders. If the project company is unable to assign collaterally its leasehold interest, the project will not be financeable.

The project Owner must also coordinate with local counsel in order to determine any preexisting rights to or restrictions over the project site. Many developing countries do not have real property title insurance. In the absence

of title insurance, title risks can be mitigated by a review of the title report or survey map by an engineer, a physical inspection of the property, adequate representations and warranties in the site acquisition agreement and, finally, a title opinion from local counsel. Local counsel should also be able to advise as to title exceptions or encumbrances. Such encumbrances may include easements or other similar rights held by third parties, financial liens on the project site, covenants, conditions and restrictions that run with the real property. In addition, local counsel should advise as to preexisting rights with respect to the site, including rights as to which the project company may be deemed to have constructive knowledge such as rights discernible from public title records or a site inspection.

Site acquisition is generally dealt with primarily through the use of local counsel. Yet, one cannot rely solely on local counsel for this purpose. It is ultimately international project counsel that will have a full understanding of the project's overall requirements. This is particularly the case, as countless experiences have shown, with respect to tracking the rights-of-way needed for construction activities, as well as the transport of feedstock and product output to and from the project site.

One must also consider environmental risks in connection with site acquisition. The risk of preexisting environmental conditions on or impacting the site will be addressed in the site acquisition documentation. Preexisting conditions require an analysis of soil and groundwater contaminants (on the project site and its neighboring environs). Likewise, Sponsors must consider the risks posed by the presence of existing structures on the property, endangered species and historical, archaeological, and religious artifacts. A project Sponsor can mitigate certain of these risks by employing a competent environmental consultant, commissioning an environmental site assessment (especially to identify preexisting conditions), retaining local counsel to advise on environmental issues, and procuring an environmental indemnity for

preexisting conditions at the site from the seller. Environmental issues have become an area of particular sensitivity to Sponsors and Lenders alike. As will be discussed in greater detail later, Lenders increasingly apply stringent World Bank or other applicable standards in situations where the local laws would otherwise have granted the project greater latitude.

5.3 Engineering, Procurement, and Construction Contracts

The Engineering, Procurement, and Construction Contract (EPC Contract) is an agreement between the project company and an international EPC Contractor providing for the construction of a fully completed project on a turnkey and timely basis. It will require the EPC Contractor to deliver a plant that meets detailed specifications and performance criteria by a date certain. The EPC Contract will allocate to the EPC Contractor the full responsibility to provide for plant design and engineering, procure all equipment, machinery and parts required for plant construction, perform all construction activities required to build and erect the plant, and start up, commission, and test the plant against specified performance targets. The project company will want the EPC Contractor to provide all of these services on a turnkey basis for a fixed price. Although the EPC Contractor will subcontract many of its responsibilities to other parties, the EPC Contract will provide that the EPC Contractor is the sole party responsible for the entire scope of services and work required to construct the project, and is accordingly the single party that will bear full liability for the same. To the extent there are warranty or performance issues due to the work of a subcontractor, the EPC Contract will make clear that the EPC Contractor must bear full responsibility for all the work and will not require the project company to make claims against the subcontractors.

A. Mechanisms for Allocation of Risks

Since the goal of the EPC Contract is to provide a fully completed project on a timely basis, the EPC Contract will allocate certain price risks (including the risk of cost overruns), performance risk and delay risks to the EPC

Contractor. The EPC Contract will use the following mechanisms to allocate and mitigate these risks:

(i) Structuring the EPC Contract as a fixed price lump-sum "turnkey" contract;

(ii) Contractually prohibiting scope of work increases without the use of change orders;

(iii) Establishing specific performance criteria and a date certain for completion;

(iv) Providing for liquidated damages for failure to meet schedule deadlines and performance criteria; and

(v) Providing for extended warranties covering the project equipment and materials.

B. Lump-Sum Turnkey Contract; Selection of Contractor

When the EPC Contract is structured as a lump-sum turnkey contract, the EPC Contractor will assume the full risk of timely completion against guaranteed performance standards under a fixed price contract. In such a structure, the EPC Contractor will be responsible for all engineering, procurement and construction services and will assume the risks inherent in the design, construction, supply, installation, testing, pre-commissioning, and commissioning of a project, including the risk of on-time completion and compliance with strict performance guarantees.

An EPC Contractor will be required to stand behind or guarantee the performance of all aspects of the plant, regardless of the source of any particular equipment or part, and bear full responsibility for the work of subcontractors and the cost of materials, construction and fabrication. The concept of an EPC Contractor standing behind the obligations of various third parties to provide the project company with a fully completed, guaranteed and warrantied project in a timely manner is referred to as a "wrap." As a fixed price, date certain contract, the EPC Contract will permit increases in the contract price or extensions of the time for completion only through a detailed change

order procedure. The benefits of a fully wrapped EPC Contract will come at a price to the project company in the form of premium pricing. A project may be constructed using an alternative contracting method, but these methods can make financing more difficult. A construction project that is not wrapped will likely require significant Sponsor support during the construction period, including Sponsor completion guarantees. The Sponsors may even be required to fund all construction work with their balance sheet and only pursue project financing after the project has been completed.

An alternative contracting structure is to construct the project based on a cost-plus contract or a variation thereof. This form of contract requires the project company to pay for all actual costs incurred by the contractor on a pass-through basis and also pay an agreed profit component. Although this form of contract will eliminate the built-in contingency premium of an EPC Contract, it allocates to the project company all construction cost overrun risks and could ultimately result in much higher overall costs. For example, assume the project has a large steel requirement. The price for steel is volatile and fluctuates greatly depending on market forces. The price can change dramatically between the period of contract award and the date the order is procured. In an EPC Contract, this price risk will be allocated to the EPC Contractor. In a cost-plus contract, the project company bears this risk. Indeed, during the period of China-U.S. trade friction (2017-2019), the uncertainty of steel prices reverberated throughout the construction industry, greatly taxing negotiations and prompting some contractors to seek price adders or other forms of pass-thru treatment of higher steel costs, even in fixed price EPC contracts.

In order for a wrapped EPC Contract to be of sufficient value, the EPC Contractor must be an internationally recognized and experienced party, with an established name, proven reputation, experience in the technology used in the project, an understanding of the local markets, and the ability to use local

labor. Most notably, the EPC Contractor must be a creditworthy entity capable of financially assuming the liability associated with a project of significant size and magnitude.

C. Scope of Work

The EPC Contract should have a detailed scope of work provision and accompanying schedules that specify complete design and engineering criteria and technical specifications for the project. The procurement obligations should be comprehensive and provide for the obligation to procure all materials and equipment, machinery, tools and consumables (for example, fuels, chemicals and utilities). The EPC Contract should also require the EPC Contractor to provide all of the qualified, experienced and licensed personnel that are required to complete the work. The procurement obligations should allocate to the EPC Contractor the risks of importation and transportation of all equipment and materials to the site.

The EPC Contractor's scope of work should also include a training program. The EPC Contractor will be required to train the project company's personnel and the project's Operators. The EPC Contractor will also be required to produce various documentation for the project company, including manuals, as-built diagrams for startup, operation, maintenance, quality control, safety procedures and training. The EPC Contract should carefully identify the permit requirements for the project and the party responsible for obtaining each permit. The project company and the EPC Contractor will each have obligations to procure certain permits. Typically, the Owner is responsible for obtaining permits pertaining to the right to build a certain type of plant meeting certain specifications on site, while the EPC Contractor is responsible for all permits pertaining to the construction itself and all construction related activities.

The project company, too, will have certain additional, though limited, obligations under the EPC Contract. Failure to comply with these obligations

will generally be a defense to certain of the EPC Contractor's guarantees or give the EPC Contractor the right to a change order for an increase in the contract price or an extension in the construction schedule. These additional obligations will usually include the obligation to provide access to and the provision of a project site, including an area for construction, lay down areas, storage facilities, interconnection lines, temporary roads, and parking. The project company will likely be required to procure fuel and certain utilities (water, sewer, telephone) in defined quantities. This will include fuel for startup, testing, and commissioning the project.

D. Performance Guarantees

An EPC Contract will establish strict performance targets, usually for project output, efficiency, and reliability, which the project must meet in order to achieve completion. These performance guarantees are set at negotiated levels, and the procedures under which the plant is tested in order to determine whether the guaranties have been satisfied are likewise negotiated and expressly covered in the EPC Contract. When plant construction has reached a stage where the plant is deemed to have achieved mechanical completion, it will undergo a series of tests under the agreed procedures to determine compliance with the performance guarantees.

In the case of certain projects – power projects, for example – the performance guarantees (at least for output and efficiency) are two-tiered. The full contracted guarantees will be set as the higher tier, which the EPC Contractor will aim to obtain in order to achieve final completion. A lower minimum guarantee level will also be established, the achievement of which will be an absolute requirement in order for the EPC Contractor to be able to deliver the plant to the project company. Upon achieving the minimum guarantee levels, the plant will be deemed to have achieved "substantial completion." Upon substantial completion, the project company is typically permitted to take control of the plant and declare the plant commercially operable.

Thereafter, the EPC Contractor may be required to continue to perform work or improvements on the plant, in order to achieve the higher contracted full performance guarantee levels. The failure to achieve the full guarantee levels can be remedied through the payment of specified liquidated damages.

E. Liquidated Damages/Bonuses

The EPC Contractor's principal obligation is to deliver a completed plant on time and in compliance with the specified performance guarantees. Timely completion and the achievement of the performance guarantees are usually enforced with the use of liquidated damages, and incentivized through the payment of bonuses. Liquidated damages for delay (Delay LDs) will typically be based on a specific amount payable per day for each day of delay in achieving substantial completion beyond the target date specified under the EPC Contract. The use of delay damages will usually only partially mitigate completion risks, however, because the EPC Contractor's liability for delay liquidated damages will typically be subject to a contractual cap.

In addition, rarely can the delay damages be set at a level that keeps the project company whole with respect to costs or penalties incurred or revenues foregone during the period between the guaranteed substantial completion date and the actual substantial completion date. While the daily amount payable as liquidated damages is theoretically calculated to take into account additional interest during construction costs, liabilities under the offtake and fuel supply agreements, and lost revenue under the offtake agreement, Delay LDs (under present market conditions) are not typically set to recover all these costs. In practice, the Delay LDs are set at levels to incentivize the EPC Contractor to achieve completion as soon as possible. If the amount of the Delay LDs is too small, the EPC Contractor may be incentivized to mobilize labor to another project with more demanding liquidated damages. On the other hand, if the delay damages are so high that the EPC Contractor quickly hits the cap on liability, the EPC Contractor may determine that completion is

not possible within the short time period and may elect simply to pay the maximum delay liquidated damages and divert personnel to another more profitable project.

In the event that, after final testing, the project does not satisfy the full performance guarantees, the EPC Contractor will be liable for performance liquidated damages (Performance LDs). The Performance LDs are amounts calculated based on the margin by which the project fails to satisfy the specified performance targets. These Performance LDs will also be subject to a cap. As mentioned, a typical EPC Contract will also have a minimum performance guarantee which must be satisfied by the EPC Contractor. The failure to achieve the minimum level cannot be cured or remedied by the payment of performance liquidated damages. In fact, the Performance LDs are only payable once the minimum performance guarantees are met (and substantial completion has been achieved), based on where plant performance (as tested) actually falls between the minimum performance standards and the higher contract full performance guarantees. Failure to achieve the minimum performance levels will subject the EPC Contractor to either unlimited liability (in some instances) or to liability up to the amount of the full EPC Contract Price (in most instances).

An EPC Contract may also use bonus payments to incentivize the EPC Contractor to complete the project early, or for exceeding the performance guarantees. If the Offtake Agreement permits the project to commence commercial operation early, then in addition to reducing the project company's interest during construction, early completion can allow the project company to begin generating revenue sooner. In such a situation, bonuses would be a fair incentive to offer the EPC Contractor. Likewise, the Offtake Agreement may provide for a capacity payment based on the contract capacity of the project. If the project tests at a contract capacity higher than the nameplate capacity, the project company would benefit from higher capacity payments

and can, hence, offer a portion of this benefit as an incentive bonus to the EPC Contractor under the EPC Contract.

F. Change Orders

A fixed price EPC Contract should only permit changes to the contract price through the use of change orders. A change order is a subsequent agreement between the EPC Contractor and the project company whereby some element of the project is altered and the EPC contract is amended, or deemed to be amended, thereby. Change orders should also be the only means by which the EPC Contractor is entitled to schedule extensions to achieve substantial completion, final completion, or other earlier interim milestones. Change orders cover situations in which either:

(i) Project company requests changes in the EPC Contractor's scope of work;

(ii) EPC Contractor suggests changes in its scope of work; or

(iii) EPC Contractor is entitled to a price increase or schedule extension due to external circumstances (like force majeure) based on the terms of the EPC Contract.

Change orders requested by the project company are negotiable and generally require the agreement of the EPC Contractor, unless the EPC Contract allows for cost-plus based change orders. Change orders suggested by the EPC Contractor will be at the project company's discretion and also subject to negotiation. In most cases, the project company should ensure that a mechanism for in-scope cost-plus based change orders is provided under the EPC Contract so that the project does not become sidetracked by extended

negotiations when a price for such change orders cannot be readily agreed. An EPC Contract will also identify a limited set of circumstances under which the EPC Contractor will be entitled to require the project company to issue a change order. These circumstances are usually limited to increases in contractor costs or extensions of time required as a result of changes in law, the project company's breach or default, the discovery of unusual and unforeseen site conditions, and certain force majeure events. From the project company's perspective, there must be limits to the EPC Contractor's ability to request a price increase or an extension of time for completion, and that there be a clear procedure for making such claims. The EPC Contractor should be obligated to notify the project company within a short period after the EPC Contractor has notice or knowledge of a potential claim. Failure to make a timely claim should result in a waiver of the claim. Without procedural and timing limitations, the project company may receive a large claim for change orders at the end of construction that date back to the beginning of the project.

A critical issue related to change orders that parties often fail to consider when negotiating the EPC Contract is the issue of which party owns the "float." As discussed, an EPC Contract will have a date certain for achieving substantial completion, which determines when Delay LDs begin accruing. To arrive at this date certain, the EPC Contract will have interim milestone dates by which key components of the project must be completed in order to reach completion or commercial operation by the date certain. These agreed interim milestone dates will be developed by the EPC Contractor and will have a built-in time cushion to protect the EPC Contractor for unanticipated delays. This cushion is referred to as the "float." In simplified terms, if the EPC Contract only entitles the EPC Contractor to an extension of time because the underlying event giving rise to the delay would reasonably be expected ultimately to delay completion past the date certain, then the project company is considered to own the float. However, if the underlying event causing the delay would not reasonably be expected ultimately to result in a delay past the date certain, but nevertheless

the EPC Contract entitles the EPC Contractor to a schedule extension, then the EPC Contractor is considered to own the float. For example, assume the EPC Contactor is entitled to a schedule extension as a result of a force majeure event which prevents the EPC Contractor from accessing the project site for ten days, but, in actuality, this delay would not reasonably be expected to cause the EPC Contractor from achieving a particular key milestone. The delay would take ten days of float out of the EPC Contractor's internal schedule. If the EPC Contractor is entitled to a change order for a schedule extension as a result of this event, then the EPC Contractor is considered to own the float. If the EPC Contractor is not entitled to such a change order, then the project company is considered to own the float.

An EPC Contractor may be entitled to a change order as a result of unusual and unforeseeable site conditions that result in construction cost overruns and delays. Usually, the project company will try to allocate to the EPC Contractor the risk of all site conditions and will, accordingly, request representations of the EPC Contractor that it is familiar with the site's condition, topography, weather conditions and access. The project company should also seek a representation that the EPC Contractor has undertaken studies of surface and subsurface conditions as necessary. Quite often, however, an EPC Contractor may bid for a contract without the time or information necessary to perform detailed site work. If the EPC Contractor is given sufficient time to do a site inspection, then the EPC Contractor should largely accept the risk of site conditions. In the event there are unusual site risks which would not reasonably be detected from a reasonable site inspection, the project company will likely be required to bear this risk. Unusual site conditions include latent or concealed conditions, and unusual physical conditions that differ from those typically found in the area. Because Lenders are usually unwilling to accept site risks, especially risks related to environmental conditions, preexisting site risks that cannot be allocated to the EPC Contractor must be allocated to the counterparty under the site acquisition agreement.

G. Payment Terms

The typical EPC Contract payment terms call for the payment of a fixed lump-sum price in installments based on the milestone or progress payments. Milestone payments are conditioned on meeting certain project milestones, the achievement of which will usually require a certificate from an independent engineer confirming that the project milestones have, in fact, been satisfied. The payment terms will usually allow the project company to withhold as "retainage" a percentage of each payment due. The purpose of retainage is to provide the project company with economic leverage to ensure completion of the project, particularly in circumstances where the EPC Contractor has failed to meet its performance guarantees. The retained funds may also be used to facilitate completion of the project by the existing contractor or a replacement contractor. The amount of retainage will vary, but generally will be in the range of 5% to 10% of each payment. The EPC Contract should be specific as to when the project company is permitted to apply the retainage amounts. For example, the project company should ordinarily be entitled to apply retainage to cure contract defaults, to complete unfinished construction, to offset amounts owed by the EPC Contractor (such as liquidated damages) and to pay any unpaid subcontractors. An EPC Contract will often permit the EPC Contractor to provide a bond or letter of credit in lieu of retainage. EPC Contractors usually take advantage of such a provision to increase cash flow and facilitate their payment obligations to subcontractors. An EPC Contractor will usually request that the amount of retainage be reduced after the project has achieved the substantial completion milestone (when the contractor would no longer be subject to Delay LDs). The rationale is that, at this point, the retainage amount may be much greater than the potential liability intended to be secured by such retainage. If the project company requires the EPC Contractor to pay for a bond or letter of credit in the full amount of the retainage, the costs for obtaining the bond will usually be passed through to the project company.

Another issue that often arises in connection with payments under an EPC Contract is whether the project company is entitled to withhold payments to the EPC Contractor in the event of a material breach. EPC Contractors will generally object to such a clause because these projects have relatively thin profit margins for EPC Contractors, such that any sizeable withheld payment may put the EPC Contractor into a liquidity squeeze and jeopardize its ability to pay its own subcontractors (who in term may seek to put liens on the project if not paid). For this reason, the right to withhold payment gives the project company additional (but somewhat questionable) leverage in a dispute. If an EPC Contractor agrees to permit the project to withhold payments in the event of a material breach, the EPC Contractor should include similar rights in its material subcontracts.

H. Defaults and Remedies

The EPC Contract will have provisions defining the events that constitute a default and provide specific remedies for such defaults. The defaults will include customary defaults, such as breach of payment and performance obligations, breach of representations and warranties, and bankruptcy-related defaults. The EPC Contractor's failure to reach substantial completion or commercial operation by the guaranteed substantial completion date will also typically constitute a default. The project company's remedies should include the right to take possession of work in progress, the right to assume all contracts with subcontractors, and the right to complete the construction in the event of a material breach of the EPC Contract. These rights are both customary and critical for the project company. If construction is already delayed, the inability to take possession without delay in an attempt to complete the project as soon as possible will have adverse ripple effects through the Offtake Agreement, the Fuel Supply Agreement and usually the financing agreements.

I. Dispute Resolution

Disputes under an EPC Contract are often resolved with the use of international arbitration tribunals. In these cases, the EPC Contact should require that the EPC Contractor continue working during a dispute. If the EPC Contractor is permitted to suspend work while a dispute is being resolved, there will be inevitable delays in the project that likely will not be subject to Delay LDs and will give the EPC Contractor additional leverage in negotiating a settlement to the dispute. Likewise, the project Owner should require that the EPC Contractor have similar provisions in the EPC Contractor's major subcontracts.

J. Split EPC Contracts

Often, EPC Contractors request that the EPC Contract be split into an onshore EPC Contract and an offshore EPC Contract, predominantly for tax reasons. Local counsel should be consulted to confirm the intended tax benefits that will accrue from such a split. If appropriate, such a structure would reduce the EPC Contractor's local tax liability for equipment procured and services performed outside the host country. Such a structure adds to the complication of the project documentation and will result in at least three separate EPC Contracts: an onshore EPC Contract, an offshore EPC Contract (sometimes referred to as a supply contract), and a coordination agreement that confirms the two EPC Contracts work together as if one EPC Contract. The project company will need to assure the absence of gaps in coverage between the split EPC Contracts with respect to specifications, scope of work, performance and warranty obligations, timing, liquidated damages, and overall liability.

K. Miscellaneous Considerations

The EPC Contract must be carefully coordinated with the other project documents. The Offtake Agreement may require that the project company begin performance by a date certain and the Feedstock Agreement may

require the project company begin receiving fuel or other feedstock by a date certain. If the project has not achieved commercial operation by such dates, the project company will begin to incur costs and penalties. In addition, the EPC Contract must ensure that the project is capable of meeting minimum guaranteed deliveries under the Offtake Agreement and minimum guaranteed receipts under the Fuel Supply Agreement. The EPC Contract must provide for the appropriate level of performance guarantees for plant output, efficiency and reliability, in order to achieve these minimum requirements. Liability caps under the EPC Contract must be carefully considered with the obligations and liabilities under the other key documents. Proceeds from liquidated damage claims for performance guarantees will often be applied to repay a portion of the project financing debt. In the event of damages and other penalties, the proceeds must also sufficiently cover these risks or such risks will fall on the project company. If the risks fall on the project company, the Lenders will often require equity contribution guarantees from the Sponsors, since Lenders will usually not permit the project company to accept residual performance risks.

5.4 Offtake Agreements

Offtake Agreements provide for the all-critical revenue stream to the project company. Hence, Offtake Agreements typically receive the most attention in negotiations by the Sponsors, and the most scrutiny in review by the Lenders. In a power project, the Offtake Agreement will usually be a Power Purchase Agreement or a tolling agreement. In a petrochemical project, it will be the contract that governs the sale of the chemical produced by the project. A long-term Offtake Agreement with a creditworthy counterparty is usually required in order for an infrastructure project to be financeable. Some projects can be financed without an Offtake Agreement covering all or a significant portion of the product produced. These projects are referred to as merchant projects, and the key to successfully structuring a merchant or a semi-merchant project is the ability for the project company to demonstrate, usually through

the use of an independent third party market consultant, that there is adequate demand for the product such that a long-term Offtake Agreement is not necessary. After the high profile failures of many U.S. merchant power projects, the ability to finance purely merchant projects has become more difficult unless the merchant portion of the project is limited, or hedging contracts are entered to approximate a fixed offtake agreement. If there is a long-term Offtake Agreement that provides sufficient revenue to service the debt, the Lenders may allow the Sponsors take the merchant risk for the excess capacity.

A. Types of Offtake Agreements

In international projects, Offtake Agreements can take the form of take-or-pay contracts, take-and-pay contracts, long-term sales agreements, spot sales agreements, or tolling agreements. We address each of these in turn.

In a take-or-pay contract, the purchaser of the output will be required unconditionally to pay for product regardless of whether the purchaser actually received the product. A take-or-pay contract is often entered into with one or more of the Sponsors. It effectively serves as a guarantee of the project and is often reflected as a guarantee on the Sponsor's balance sheet. A true take-or-pay contract will permit limited exceptions to the purchaser's obligation to pay for product that it did not receive. The purchaser will, of course, try to negotiate exceptions to the take-or-pay obligation. To the extent a take-or-pay contract is deemed necessary for financing, if the project Owner cannot adequately demonstrate that a risk retained by the project company is allocated to another creditworthy party under another project agreement, the Lenders will require the take-or-pay Offtaker to accept the risk in the Offtake Agreement.

In a take-and-pay contract, in contrast, the purchaser of the product is required to take product received or pay for such product, if the project company was capable of production. The amount required to be paid by the purchaser (in the situation where the Offtaker is unable to take delivery) is

usually based on the fixed costs of the project company, and will typically be calculated to cover debt service, fixed operation and maintenance costs, and a fixed equity return.

In a long-term sales contract, the purchaser agrees to purchase specified amounts of product. The amount during any period will often be a range, with a specified minimum and maximum quantity requirement over any given period. The obligation to accept the product is only to the extent the product is produced and if it meets established quality specifications. If the purchaser does not take a negotiated minimum amount of product, then the purchaser may be required to pay damages for failing to accept the minimum amount; however, these damages are not necessarily linked to the project company's fixed costs.

Spot sales contracts are usually short-term sales contracts in which the product purchased is based on the existing market price at the time of the sale. There is no obligation to pay for any minimum amount of product. These contracts are not considered to support a project's revenues and projected revenues from spot sales are not generally included in the Lenders' base case projections for a project. Unless a project generates product with significant projected long-term demand, the Offtake Agreements cannot be based solely on spot sales arrangements. However, taking such price and production risk may yield commensurate returns. Unlike most take-or-pay or take-and-pay contracts, spot sales contracts allow the project company to take advantage of temporary price spikes in the commodity produced by the project. Accordingly, some projects may structure the offtake arrangements in a way that permits the project company to take advantage of market price increases through spot sales.

Under a tolling agreement, the Offtaker agrees to supply the fuel used at the plant and to purchase the electricity produced, and the project company agrees to convert the fuel (usually gas) into electricity. The Offtaker pays for

the project's conversion service rather than the energy. The key advantage of a tolling agreement for the Offtaker is that it allows the Offtaker to trade around the "spark spread." If gas prices are high and electricity prices low, the Offtaker can sell the gas and leave the plant idle. Conversely, if electricity prices are high, the Offtaker can supply the gas to the project and purchase the electricity produced. The significant rise of gas prices in the United States in the early 2000s put many Offtakers out-of-the money in their tolling agreements.

Facilitated worldwide by advances in power technologies allowing for decentralized and smaller generating facilities, and related changes in regulatory and market structures, retail Offtake Agreements are a growing part of the offtake market. A retail Offtake Agreement can take the form of some of the other Offtake Agreements summarized above. The defining characteristic of a retail Offtake Agreement is that the Offtaker is the consumer of the energy delivered under the Offtake Agreement, as distinct from an Offtake Agreement with an Offtaker that, in turn, resells the power it has purchased to its own customers for consumption. The generating facility underlying a retail Offtake Agreement may be physically located on the Offtaker's property and physically interconnected with its infrastructure, or it may be located offsite, with the energy physically delivered by the local distribution system owner through the electric distribution system.

B. Key Provisions

The key provisions of most international project offtake agreements include the following:

(i) The term of the offtake agreement;

(ii) Conditions precedent to effectiveness;

(iii) Purchase and sale obligations;

(iv) Construction obligations;

(v) Restrictions on the Offtaker's ability to resell the product;

(vi) Pricing and payment;

(vii) Plant outages;

(viii) Measurement or metering;

(ix) Operating obligations;

(x) Force majeure;

(xi) Changes in law;

(xii) Events of default and remedies;

(xiii) Credit support obligations;

(xiv) Assignment prohibitions;

(xv) Indemnification;

(xvi) Limits of liability; and

(xvii) Dispute resolution.

A form of these will appear in most offtake agreements regardless of the nature of the product sold. For purposes of analysis, the discussion below will focus on how some of the foregoing terms are handled in the context of a Power Purchase Agreement (PPA). The concepts discussed below are also applicable to other common offtake agreements for industrial commodities beyond electric power.

C. Term of Offtake Agreement

Power purchasers are usually public utilities, concessionaires, and regulated companies. In certain cases, they are owned by the government. More recently, where regulatory structures allow in the United States and abroad, and particular to renewable power, power purchasers also include private corporations and businesses that have established policies to support and procure clean energy, as well as potentially lower their energy costs. The project company will usually hold an authorization, concession, or other governmental permit enabling it to operate as an independent power producer.

In addition, the PPA may also be executed by guarantors/sureties, transmission companies, and other entities with an interest in the transaction. The term of a PPA will depend on the location of the project, but should generally be for a base term that will provide for complete debt repayment and an equity return. In turn, the term of the PPA will drive the tenor and amount of the debt, and the profile of the preferred equity payments. The base term may also be renewed for a certain number of renewal periods, upon the agreement of both parties. A renewal may require the renegotiation of certain commercial terms. A PPA may also provide for an early termination in favor of the power purchaser. In such an event, there will generally be a requirement that the power purchaser purchase the project at a price sufficient to retire all debt and to provide a reasonable equity return. The term of the PPA will have a direct impact on the term of the financing. The longer the term, the less the exposure of the project company to energy market price variations, since the power purchaser will take certain amounts of energy and capacity at a pre-agreed price. On the other hand, the longer the term of the PPA, the further off the ability of the project company to capture the upside of higher than contract power prices. The term of the PPA should also coincide with the terms of other major project agreements, and principally the Fuel Supply Agreement.

D. Construction; Environmental Issues

An international PPA will also address certain construction obligations of the project company. Power purchasers in the United States are generally only interested in plant output and not in its physical construction. In many international PPAs, however, the PPA will address construction obligations. Such construction obligations may include the obligation to construct the plant in accordance with certain specifications. Since the power purchaser may ultimately be purchasing the project itself, the power purchaser should ordinarily assure that the project meets specifications. The Owner, in turn should ensure that these specifications are also included as a baseline in the

EPC Contract. In the event the project does not meet the specifications required under the PPA, the project company will need to be able to pass through any resulting damages to the EPC Contractor. The PPA construction obligations may also include schedule milestones and bonus and penalty provisions for not satisfying such milestones, as the power purchaser will prefer to have certainty as to when it can rely on the energy produced by the project. These milestones similarly need to be integrated into the EPC Contract. If the construction obligations under the PPA are not properly allocated to the EPC Contractor under the EPC Contract, then the project company will bear the gap risks. Generally, Lenders will not accept such risks and will require some form of Sponsor support as cover in order for the project to be financeable.

In some instances, the PPA will also deal with environmental issues. When the PPA requires the power purchaser to purchase the project in certain events, environmental concerns will need to be addressed in detail. The project company should carefully analyze the environmental conditions of the project site and allocate responsibility accordingly.

E. Testing and Commissioning

The PPA will likely also include specific testing obligations for the plant. Failure to satisfy certain tests will likely result in reductions in revenue payments to the project company. If the project company fails to satisfy the required tests, the power purchaser could decide to "downgrade" the amounts of assured capacity acquired under the PPA, which would result in the reduction of fixed payments along the life of the PPA. Since revenue reductions will make debt service obligations more difficult, the EPC Contract must provide for corresponding performance liquidated damages so that the proceeds of these damages can be used to prepay indebtedness. If properly structured, the debt prepayments would reduce the debt in such a way that the project is not materially disadvantaged as a result of failing to satisfy the testing requirements under the PPA. There may also be an acceptance requirement

by the power purchaser and a deadline by which the plant must be commercially operational. These requirements should be reflected in the EPC Contract acceptance and commercial operation date provisions. The acceptance provisions are key for the power purchaser because they describe how the plant will be deemed capable to produce energy. It is unlikely that the plant will operate at full load from the outset, but rather will undergo a series of operations tests. During the test period, fuel will be consumed and certain energy (though not assured) may be produced. In some cases, the project company will be allowed to sell the energy generated during testing, but since test energy is not continuous, the power purchaser will only be willing to pay for the electricity actually delivered, and not the capacity charge associated with overall plant availability during the operations period. The power purchaser will inspect the facilities and equipment and, once found acceptable, the plant will be "commissioned." Thereafter, the plant will operate commercially, which means that the full supply and payment obligations of the respective parties will become effective.

F. Conditions Precedent

A PPA may also have conditions precedent which must be satisfied prior to the agreement becoming effective. The key conditions precedent should include the availability of adequate fuel supply, procurement of key permits, and achievement of financial close. If the conditions precedent are not satisfied in a timely manner, then the PPA may be terminated without further liability. This protects both the project company and the power purchaser. If the project company cannot obtain financing, adequate fuel supply and key permits, it will not want to incur liability to the power purchaser. The power purchaser, for its part, will not want to be indefinitely bound under a PPA with a project company that is incapable of getting the project developed and financed in a timely manner, and would rather prefer to look for an alternative Sponsor group or put the project out to bid after a date certain. To the extent possible, events

under the control of one of the parties to the PPA should not be included as conditions precedent to effectiveness.

G. Outages

A "forced outage" refers to a temporary and short curtailment of a power plant's delivery obligations that becomes necessary to prevent major damage to people or property. A "forced outage" generally means an outage for which the project company is excused under limited circumstances from its ordinary availability requirements before being subject to liquidated damages or other penalties. The power purchaser will generally refuse to accept the risk of supply failure or outage arising as a result of an Operator error. An outage due to the failure to run the plant correctly, or failure of the project company's equipment, will generally be a forced outage as to which liquidated damages will usually apply. To the extent possible, the project company should be permitted to pass through these damages to the plant Operator under the terms of the Operation and Maintenance Agreement. In an international project, the project company may be able to obtain broader relief from its performance obligations under the PPA in the event of a forced outage. Particularly in the situation where the plant will ultimately be purchased by the Offtaker, the Offtaker is generally more inclined to excuse the project company's performance in order to address the causes of the outage, because otherwise the overall damage to the plant could be much worse.

H. Pricing

The price paid to the project company under the PPA is usually comprised of a contract capacity charge and an energy charge (for the energy actually provided). The concept of capacity is unique to PPAs because of the unique nature of electricity. Electricity cannot be stored and must be used as soon as it is generated, and must be generated as soon as it is required. Power purchasers generally buy the ability to generate electricity on demand up to a certain amount, in addition to the actual energy generated. Capacity payments

are sometimes referred to as demand charges, since the charge is based upon the power purchaser's peak demand for energy at any given time. The price paid by the power purchaser for the ability to demand purchased capacity is referred to as the capacity charge. In order to determine if the project company has available the required capacity, the PPA will usually require scheduled capacity tests to determine whether the plant will generate the contracted quantity of energy. Determining a power plant's capacity at any given time can be important in a natural gas fired power plant, because such plants may have a degradation factor of between 2% to 5% per year until the next major maintenance. In the event the tested capacity is less than minimum contracted capacity, the project company may be required to pay a penalty. If the tested capacity is higher than the contracted capacity, the project company may be entitled to an increase in the capacity payment.

The level of the capacity payments should be structured to pay for the project's fixed costs, including fixed operation and maintenance costs and financing costs. The capacity payments will usually begin once the power plant achieves commercial operation, but from that point on, the project company must also make the capacity available to the purchaser. In many jurisdictions, such as the United States, the declaration of commercial operation is usually at the discretion of the project company and not of the power purchaser. Although declaration of commercial operation will commence the flow of capacity payments, a project company will not declare commercial operation until it is willing to assume the risk of damages for failure to make available the stated capacity.

A PPA may require an annual, monthly or daily determination of the availability of the power plant. The availability factor is used to determine whether the project company is in compliance with its obligation to provide the assured capacity. In order to calculate the amount of electric capacity that is available, the PPA will establish an average availability calculation. The formula

for calculating the availability will not consider permitted shutdowns such as scheduled outages and maintenance and certain events of force majeure. The availability formula may allow a "cushion" to the project company which permits minor variations in availability for which the project company will not be penalized. An availability requirement of 92% to 96% of the contract capacity is typical, and during peak periods, the requirement may be as high as 98% of the contract capacity. Alternatively, the PPA may impose an extra penalty if the project company does not maintain certain capacity levels during peak hours.

A PPA will also have an energy payment based on energy produced by the power plant. The energy payment should be designed to cover the project's variable operation and maintenance costs and fuel costs. The component of the energy payment to account for fuel may be in the form of a straight pass-through of fuel costs, thus passing fuel price risk to the power purchaser. In such a situation, the power purchaser may have the right to approve the Fuel Supply Agreement at the outset and ongoing consent rights with respect to subsequent amendments thereto. Another alternative will be a fuel charge component to the PPA energy price calculation based on an index-based price, which may index the price of natural gas, alternative fuels or even a basket of fuels. The PPA may provide that energy payments become payable during the testing period rather than the commercial operation date. Often, the energy payment during the testing period will not be at the same level as after commercial operation, but should at least cover all or a significant portion of the fuel cost during the testing period.

For renewable power facilities such as wind and solar, however, the price impact of fuel on the PPA is not a function of commodity price volatility, because there is no market price for sunshine or wind. For these projects, the fuel volatility, and thus the cost as factored into the PPA energy price, is based on available quantities rather than on commodity price. The lower the

irradiance from the sun or the speed and frequency of the wind, the higher the operating costs and financing costs (per unit of energy produced) for the generating facility. The PPA energy price charged to the Offtaker will, in turn, reflect such higher costs. Some Offtakers will require a minimum production or delivery guaranty regardless of actual meteorological conditions. In these PPAs, the project company has various tools available to mitigate its risk, depending on the specific context of the PPA. Typical examples include (i) using various studies that analyze and predict sunshine and wind for the location based on historical models to set a minimum production or availability threshold that the project company believes it can meet; (ii) entering into weather derivatives (financial instruments used to hedge against the risk of weather-related production shortfalls) designed for power facilities dependent on intermittent energy resources; and (iii) in some cases, the O&M Operator assuming some or all of the production risk for a fee.

In some PPAs, payments may be subject to indexation and revision. Indexation may be tied to an inflation index or provide for periodic currency adjustments. Since a PPA usually provides for revenue in the host country's currency, exchange risk is a concern for both Sponsors and Lenders in any international power project. Where payments under the PPA are in local currency, the agreement's pricing formula may index certain cost components to a foreign currency. In addition to indexation, a PPA may permit revisions to the purchase price in the event of changes in certain market conditions, increased taxes or changes in law.

In a PPA that adopts a take-or-pay obligation, the power purchaser assumes the obligations to pay for a certain quantity of capacity and energy, regardless of whether the power purchaser has actually taken such energy. Such obligations must be well-defined so the Lenders and the Sponsors are ensured a continuous flow of revenue. The project company will also be under an obligation to produce a minimum amount of energy and must meet a

minimum level of availability in order to be entitled to the capacity payments. There has been substantial litigation over take-or-pay obligations in the United States that are relevant in the international context as well. Some of the issues involved may be ameliorated by structuring the provisions to establish a fixed charge for the capacity that is payable even in the event of an outage, and a variable charge for energy produced that reflects all variable costs. This structure will have a similar result – a fixed stream of revenues will be available to the project company to allow the project company to repay project debt. Under this structure, however, the power purchaser is not paying for power it did not receive.

I. Operating Obligations

The PPA will usually impose on the project company operation and maintenance obligations for the plant and interconnection facilities, and establish performance standards against which to measure compliance. The power purchaser will wish to make clear that the project company will not be relieved from liability by assigning its operation and maintenance obligations to third parties. Hence, the project company will, in turn, seek to make sure that its operation and maintenance obligations under the PPA are included in the scope of the Operator's obligations under the Operation and Maintenance Agreement.

J. Metering and Measurement

Metering and measurement provisions provide procedures whereby the project's output quantities are measured, discrepancies in measurement are resolved, and the metering devices are maintained and tested periodically. These provisions permit the parties to assess penalties, calculate losses, and issue invoices. In certain jurisdictions, most rules on metering and measurement are pre-established in the regulations (particularly in the case of integrated plants). The metering and measurement provisions will not need to be as detailed when pre-established metering and measurement regulations exist.

5.5 Fuel/Feedstock Supply Agreement

Because the costs of fuel or feedstock supply typically constitute the single largest component of a project's operating costs, the price, delivery and other terms of fuel or feedstock supply agreements are critical to the feasibility and economics of the project. For convenience, this section will discuss only fuel supply, but analogous principles will also apply to agreements for the supply of other feedstock.

In a traditional project financing structure, the cost of the fuel is borne by the Offtaker of the project output as a component of the variable or operating charge. In addition, however, it is essential that the quantities, schedules and quality terms of the fuel supply be compatible with the Offtaker's requirements as provided in the project's Offtake Agreement. As noted above in Section 5.4, however, for renewable power facilities such as wind and solar, the fuel is meteorological and weather-dependent and is not a physical commodity that can be contracted, scheduled, or otherwise controlled. So while the fuel supply

risk for traditional power generally is fuel price volatility with resulting impacts on operating costs, there is no commodity cost for wind and solar. Instead, the fuel risk is quantity – how much will the sun shine or the wind blow? The lower the quantity of the fuel, the higher will be the unit price of energy in order to support the cost of financing and operating the project for the Offtaker. These risks can be mitigated to some extent in various ways, including optimizing the geographic location of the project to the availability of the energy resource, subject to the availability of adequate transmission capacity to deliver the energy to Offtakers at a reasonable cost.

A. Nature of Fuel Supply Obligations

The nature of the supply obligations under a Fuel or Feedstock Supply Agreement can vary over a wide range. "Firm" supplies are the most secure, requiring the delivery of fuel in virtually all events, other than defined force majeure circumstances. Not surprisingly, these supplies bear the highest prices, and supply failures are subject to liquidated damages. Supplies of fuel can also be "interruptible," and within that category are degrees of interruptibility: interruptible supply can range from a quasi-firm supply obligation, to an obligation to use reasonable commercial efforts to supply fuel, to an obligation to supply fuel only if and when fuel is available. The contract pricing will vary depending on the degree of supply interruptibility.

Thus, a trade-off exists between price and supply availability, which must be factored in choosing the appropriate fuel supply arrangements for a project. Many project variables will be relevant in making this determination, including:

(i) The output supply terms of the Offtake Agreement (if the project has a firm supply obligation with respect to the output, it will need a firm supply of fuel);

(ii) The project's operating characteristics (such as its fuel requirements during peak demand and low demand periods);

(iii) The revenue generation capabilities of the project, as compared with the fuel cost in various scenarios;

(iv) The availability of on-site storage or of backup or alternative fuel supplies; and

(v) Lender requirements.

B. Commissioning and Testing of the Project

The project Owner will seek to ensure that the fuel supply arrangements sufficiently accommodate the commissioning and testing of the project. Setting a defined commencement date for the fuel supply and fuel transportation services can typically achieve this aim, with the commensurate need to pay liquidated damages for each day of delay in accepting the supplies or transportation services. In addition, depending on the nature of the fuel supply and the location of the project, lateral pipelines, rail connections or other facilities may have to be constructed to bring the fuel to the project. In such cases, the project may be obligated under the terms of a fuel supply or transportation contract to provide adequate notice to permit these facilities to be completed in order to be available in time for the commissioning and testing of the project.

C. Term of Fuel Supply Agreement

Generally, the term of the Fuel Supply Agreement will be coextensive with the Offtake Agreement, or at least cover the term of the projected debt. However, as discussed below, if there is assurance as to adequate nearby fuel supply and transportation availability, a project company may be able to have a shorter term Fuel Supply Agreement or several alternative fuel supply arrangements.

Shorter term Fuel Supply Agreements can present both opportunities and risks for the project company. There are methods for mitigating these risks. Likewise, a project may be financeable if all parties can get comfort on effectively creating a firm fuel supply obligation through the use of several interruptible fuel supply agreements. In order to be financeable, an independent third-party fuel supply report acceptable to the independent

engineers is usually required. In the context of interruptible or short-term fuel supply arrangements, fuel cost and availability risk will receive extra scrutiny from Lenders. By contrast, Lenders will be more comfortable with a structure where fuel availability and price are passed through to a creditworthy Offtaker, such as in a tolling agreement.

D. Fuel Supply and Transportation Pricing

The pricing for fuel supply can vary substantially based on the type of fuel, location of the project, and the liquidity and depth of the market for the commodity. In projects dependent upon a single source of natural gas supply and transportation, or in situations where market liquidity presents an issue, the Fuel Supply Agreement may be structured to provide both a variable component (based on units of energy supplied), and a fixed component escalates on an annual basis and varies based on the daily contract quantity (DCQ) to be provided. In contracts structured on this basis, a DCQ may be established for the term of the contract. The applicable daily quantity operates as a limit on the amount of fuel the project company may nominate for delivery on a particular day.

Some fuel supply or transportation agreements contain a take-and-pay obligation. Under such a provision, a percentage of the monthly contract quantity (the DCQ multiplied by the number of days in the month) is required to be paid for by the project company/buyer whether or not the buyer requires the supplies. The take-and-pay quantity, which is sometimes as high as 75% to 85% of the monthly contract quantity, operates as a minimum quantity for each monthly period (subject to offset for amounts that the supplier is unable to supply). Many contracts with take-and-pay payment requirements also have "make up" mechanisms that permit the buyer to recover the value of the take-and-pay payments for some period after the take-and-pay payments are made, through later deliveries of quantities of fuel without charge, after the buyer has

taken a certain percentage (usually higher than the take-and-pay percentage) of the monthly contract quantity.

In addition, it is typical for the fuel supplier to negotiate for some form of security for the project's obligations. This security may take the form of a letter of credit or a performance bond, covering the payments for some period of time, or less frequently, a lien on the project assets subordinate to that of the Lenders.

E. Failure to Deliver

In contracts with fixed quantity terms, the list (usually limited) of events where the fuel supplier is relieved of the obligation to deliver the DCQ marks a key point of negotiation. Maintenance outages and force majeure events typically excuse the failure of fuel delivery. To the extent that a project company agrees to such excuses, it must provide for corresponding relief from delivery duties under the Offtake Agreement.

In international projects, fuel supply agreements frequently contain a relatively expansive definition of what constitutes a force majeure event. A standard definition of force majeure will include unforeseeable events beyond the reasonable control of the person affected, the effects of which could not have been avoided by the affected person. Most definitions also provide a list of certain events which qualify as a force majeure, which include acts of God, wars, and riots. In the context of Fuel Supply Agreement negotiations, the project company would be well advised to limit the degree to which the term "force majeure" incorporates events of economic hardship or changes in market condition.

In addition, care must be taken to ensure that the force majeure under the project's Fuel Supply and Transportation Agreements does not extend beyond the scope of force majeure under the project's Offtake Agreement. Otherwise, the project may have the onus of making deliveries under its Offtake Agreement when it does not have a fuel to produce the output. Similarly, in

the case of unexcused failures to deliver fuel, the project Owner should negotiate the level of damages available to it under Fuel Supply Agreement to provide sufficient cover for the damages payable by the project company under the Offtake Agreement.

Unless carefully negotiated, the Fuel Supply Agreements can be drafted to be quite disadvantageous to the project company. For example, they may require continued payment of some portion of the fixed component of the price, and only excuse the variable component. If the project company's Offtake Agreement provides for continued payment of capacity charges, or to the extent that the project company has business interruption insurance in amounts intended to cover the charges under the Fuel Supply Agreements, then it may be reasonable and feasible for the project company to agree to continue paying some portion of the fixed fuel charge.

Unless excused by force majeure or other specific events, the fuel supplier will generally face default under its Fuel Supply obligations if it fails to make available the nominated quantities of fuel up to the DCQ. The project's remedy in such event will depend on whether the project company can obtain an alternative source of supply. If so, then typical contract cover damages will offer an adequate remedy – the difference between the costs incurred to acquire alternative fuel supply and the cost otherwise payable by the project company to the fuel supplier. If an alternative source of fuel is unavailable, the revenues lost by the project company as a result of its inability to deliver the project's output would provide the measure of damages payable by the fuel supplier. The liability of the fuel supplier may also be subject to a cap. If so, the liability to the output purchaser under the Offtake Agreement ought to be similarly capped.

F. Feedstock Supply to LNG Receiving Terminals

The feedstock supply arrangements for an LNG receiving terminal project are quite different from the fuel supply arrangements for a typical power

project. A power project, whether gas or coal fired, may often have several potential sources of supply and transportation. In addition, there are well-developed practices and conventions adopted to achieve coordination between the fuel supply arrangements and the offtake contracts for a typical power project.

In contrast, an LNG receiving terminal has limited supply and transportation options. The supply needs of such a facility are long-term, and are not tied to a daily schedule. As a result of these different business characteristics, among others, there is a developing trend toward obtaining LNG supplies on the spot market for LNG receiving terminals. Spot market sourcing can complicate the fuel supply arrangements for an LNG receiving terminal and increase the project's fuel supply risk. It seems likely that over the medium to longer term, LNG receiving terminals will opt for a mix of firm or long-term supply arrangements for a base load amount, combined with spot market agreements.

Another issue for LNG receiving terminals arises from the reality that, in contrast to power plants (which have well developed conventions for coordinating fuel supply and offtake arrangements), the fuel supply for LNG receiving terminals may not fit well with the terminal's offtake obligations, especially when the receiving terminal is located in a country with a developed competitive natural gas market, such as in the United States, the United Kingdom, and other parts of Europe. In such cases, the project would seek to mitigate this risk by negotiating its offtakes to conform as closely as possible to local natural gas supply arrangements.

For example, LNG supply arrangements may not provide cover damages for failure to deliver, and generally have a very broad definition of force majeure. In addition, quantities required to be delivered under an LNG supply agreement are usually based on minimum contract quantities rather than daily quantities. In the case of a failure by the LNG supplier to supply a daily quantity

that is needed by the terminal, the project company may not be excused from its product supply obligation, and may have to purchase natural gas in the market or pay its Offtaker cover damages for loss of the bargain, based on the difference between the spot price of natural gas and the price of natural gas under the Offtake Agreement. This risk usually cannot be passed on to the LNG supplier under the market standard LNG supply agreement.

In addition, there may be exposures to the terminal Owner resulting from the mismatch between the typically broad force majeure provisions in the LNG supply agreement and the narrow force majeure clauses that are typical in standard U.S. gas supply agreements. In this situation, if the receiving terminal does not receive LNG due to a hurricane that delayed the LNG vessel, for example, the LNG supplier will not have liability, but the project company may not have an excused failure to deliver its output. While market practice continues to evolve in this area, there remains significant gaps between LNG supply agreements and the domestic form of natural gas supply. Identifying and eliminating or allocating these risks comprises a key step in developing and financing successful LNG receiving terminals. Providing for flexibility in receipt obligations to permit variations due to dispatching and to account for fuel requirements for transport, such as fuel for compressors or boil-off for LNG tankers, likewise reflects prudent practice.

5.6 Operation and Maintenance Agreement

Most infrastructure projects enter into an Operation and Maintenance Agreement (O&M Agreement) with a third-party Operator, or, in some cases, an affiliate of the Sponsor. In either case, the Lenders will require the Operator to be a party with a proven name and reputation in the operation and maintenance industry, direct experience with a similar project or similar technology, experience in the country in which the project is located, human and technical resources, and creditworthiness. In the case of a third-party Operator, these issues will find relevance not only to Lenders, but also to the

Sponsors, because the Operator must have the capacity to support the contractual obligations, which will typically include performance guarantees, warranties, indemnities and liquidated damages.

The O&M Agreement establishes the standards to which the Operator must adhere in its operation and maintenance of the project. These standards require the Operator to act in accordance with prudent operating practices, and operate the plant to comply with all project documents and warranties and in accordance with applicable laws and permit requirements.

The payment terms under an O&M Agreement can vary and are frequently heavily negotiated – there may be a fixed periodic fee plus out-of-pocket costs as negotiated, or a cost-plus arrangement. Generally, there are also bonus and liquidated damages provisions that depend on contractually established performance standards, with the liquidated damages usually capped at the total amount of the fees payable pursuant to the contract under international norms.

The central feature in an O&M Agreement will be the description of the scope of work delegated to the Operator. The scope of work will generally include: operations, maintenance, and repair; administrative obligations; the requirement to coordinate with the EPC Contractor upon project completion (including to hire and train personnel, to monitor warranties under the EPC Contract or equipment supply contracts, to manage and/or purchase the supply of all inputs, such as raw materials, parts, fuel, and labor, to obtain and maintain permits, and to maintain inventory for spare parts and consumables); and various reporting obligations concerning financial and operational results.

There are generally three project phases covered in an O&M Agreement: the mobilization phase, the pre-operational phase, and the operational phase. During the mobilization phase, the Operator provides input into budget preparation, equipment recommendations and reviews project documents to understand how the project documents work together and how the project

company earns revenues and incurs costs. In the pre-operational phase, the Operator will identify, recruit, hire, and train the required personnel, develop operation and maintenance procedures and manuals, establish tools and spare parts requirements, support startup and testing with the EPC Contractor, and provide other necessary coordination with the EPC Contractor. Finally, during the operational phase, the Operator will control operations, maintenance, and repair of the facility. This will include, among other things, the preparation and monitoring of budgets, and interfacing between the project and the local community.

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CHAPTER 6

Project Financing Documentation

The financing documentation for infrastructure projects takes many different forms, depending on the financing sources and the phase of project implementation being financed. The sources for project finance funds or credit can include commercial banks, institutional investors, multilateral and bilateral funding agencies, export credit agencies, private equity or hedge funds, and monoline insurers among others. The structural and other issues presented by the use of these different sources are discussed in turn.

6.1 Commercial Bank Financing

Commercial bank financing is frequently used to fund the construction phase of a project, and can also be used as the basis for long-term financing after the completion of construction during the commercial operations phase of the project. For large projects, a syndicate of commercial banks will typically provide the financing, led by a commercial bank acting as the administrative agent.

Commercial bank financing provides significant flexibility to the project borrower. During the construction period, funds can generally be drawn down on a monthly basis, enabling the project to borrower only as needed, thereby minimizing interest costs.

On the other hand, because of the close monitoring of a project credit, commercial bank financings tend to have a tight covenant package. Accordingly, many changes that may occur during the course of an operating

project (such as amendments to contracts, replacement of supplies, and similar events) require consents or waivers from the commercial bank Lenders.

Traditionally, commercial bank financings of projects consisted of a construction loan facility converting into a term loan facility that amortizes over a long-term period after project completion. In time, commercial banks, particularly in the United States, became reluctant to hold long-term assets on their balance sheets. A common structure to address this latter issue, known as the "mini-perm" loan, came to the fore. A mini-perm is a loan in which the commercial operations phase of the financing is amortized over a long-term schedule, but with a bullet maturity of the entire principal amount after a relatively short period (say, four years). This mini-perm period provides the project with a reasonably sufficient time horizon to arrange for long-term financing.

The relatively short mini-perm period creates refinancing risk which the Lenders seek to mitigate through the imposition of tight debt service coverage ratios and other conditions to limit the amount of cash that can be distributed to the Owners. When this structure came into common use in the 1990s, refinancing risks were not considered to be that worrisome. However, especially in the U.S. power sector due to overbuilding and other structural issues, many of the power projects financed in this manner could not find long-term take-out financing, resulting in widespread defaults and Lender takeovers of project assets.

Commercial bank financing also can create interest rate risk for the project because it is typically floating rate financing at a spread over LIBOR or some other base rate. The floating interest risk can be partially mitigated with the use of interest rate hedges, but the providers of these hedging arrangements require security, and the exposures under the interest rate hedges in the event of adverse events affecting the project can increase the project's risk profile. In addition, the existence of the hedges operates to limit

significantly one of the advantages of floating rate debt, which is the ability to prepay at any time without premium. If the interest rate risk has been hedged, and the hedges are out of the money, then there can be very substantial penalties involved in breaking the hedge to permit the prepayment.

Finally, the global financial crisis of 2008–2009 severely impacted commercial bank financing for projects. The immediate wake of the crisis saw a de facto virtual suspension in project financings from the 4th quarter of 2008 through the 2nd quarter of 2009. Thereafter, several major U.S. and European banks exited the project finance market entirely or elected to remain active in advisory rather than lending capacities. The banks that have remained in the market are subject to tighter regulation of bank capital under the Basel III accords. Basel III increased the liquidity that banks are required to maintain for long term commercial debt, placing pressure on project debt financing. One result of these factors is a reduction in commercial bank credits available for project financings. Another result is a shift in the nature of the financing provided. Commercial banks have increasingly demanded shorter loan terms, enhanced recourse options against project Sponsors, less leverage, and tighter lending covenants. As a consequence, while commercial bank lending remains a staple feature of project financings, project Sponsors increasingly look also to other viable options.

6.2 Capital Markets Financing

Capital market financings of projects that include U.S. investors are traditionally done as "144A" debt financings, although projects have also been financed through bond offerings registered with the U.S. Securities and Exchange Commission. Rule 144A permits the resale of securities at any time to a qualified institutional buyer (QIB) without requiring such securities to be registered under U.S. federal securities laws. A QIB is defined as an entity that owns and invests at least US$100 million in the securities of unaffiliated companies, and can include pension funds, insurance companies, and other

sophisticated investors. In a typical 144A structure, the 144A securities are initially sold in a private placement exempt from registration to one or more investment banking firms, who then resell the debt securities to QIBs in reliance on the Rule 144A exemption.

Capital market financings are usually structured for a one-time drawdown of funds. This mechanism works well as take-out financing for a construction loan after the project reaches completion, but is not well suited for construction financing. The main reason is the so-called "negative arbitrage," which results from borrowing funds before they are needed for project construction. In a project financing, the funds borrowed and not immediately used must be held in trust, to be disbursed over the construction period. During that time, they are invested in very highly rated, but very low yielding, investments. Thus, the interest rate being paid on the 144A securities will be higher than the amount being earned on the amounts held in trust, giving rise to the negative arbitrage.

It is possible to mitigate this adverse result to some extent, for example, by negotiating a fixed drawdown schedule based on the expected construction schedule. Given that the construction schedule will surely vary from initial expectations, the project will still be faced with disparities between the scheduled drawdowns and the amounts needed from time to time, so that the project may either be paying interest on funds it does not need or, worse, have insufficient funds to carry it through a drawdown period. This latter issue can be addressed through a contingent equity facility or similar device, but Sponsors are frequently not willing to commit their capital to contingent equity obligations.

The availability of a market of potential investors, and the resultant liquidity of these investments, permits the project debt issuer to obtain relatively favorable fixed interest rates. In some large financings, the debt is "tranched," with different maturities bearing interest rates that are tied to the

tenor of the tranche and the associated risk profile. This can result in optimizing the overall interest cost to the project issuer. Fixed rate paper generally has a period during which it cannot be prepaid without a prepayment penalty. In many cases, the penalty rests on an assumed redeployment of the funds into an alternative investment, and is intended to compensate the investors for any loss arising from this redeployment as compared to the debt securities being prepaid. Such "make whole" provisions are a disincentive to a borrower who might otherwise seek to prepay a capital market financing to take advantage of a drop in prevailing interest rates.

Capital market financings tend to have longer tenors than commercial bank financings and, if the project does not also have a tranche of commercial bank debt, will usually have a looser covenant package. This gives the project greater flexibility to make changes without having to obtain Lender consent, as the project would be required to do in a commercial bank financing. However, in the circumstance where the project requires a waiver as a result of a change in circumstances not envisioned when the covenant package was developed, it may be significantly more difficult to obtain a waiver (since the consent of a majority, supermajority or all of the bondholders will be required). Even if a waiver can be obtained, it may require the payment of a sizable consent fee which may depend on whether then-prevailing interest rates are higher or lower than the rate on the project's 144A securities.

The longer tenor, fixed rate features and deep pool of capital available through the capital markets are all attractive benefits for many energy and infrastructure projects. These advantages are particularly appealing in a world where commercial bank lending to projects has tightened since 2008. Pension funds and insurance companies are some of the major institutional investors in project bonds. A highly rated project bond offering can enable the investment managers of such assets to move up the yield curve from traditional U.S. treasury securities, while securing a steady long-term revenue stream to meet

long-dated liabilities. In the United States, bond financing for energy and infrastructure projects has become more common since the financial crisis, and further advanced through government support. For example, tax benefits to private bond investors through the Transportation Infrastructure Finance and Innovation Act (TIFIA) has incentivized new investments in the road sector. Likewise, innovative programs like the Europe 2020 Project Bond Initiative and the UK Guarantee Scheme have also placed greater emphasis on capital market financings for infrastructure development in Europe.

A portion of a project's financing may also be through a capital markets offering of the project company. The source of funds for this equity may come from international or local equity markets. These types of transactions are not as common as debt financings. An example of a project partially financed through a local equity offering is a power plant located in the Gaza strip. A portion of this project was financed through a public offering of the equity in the project company in the local Palestine market.

6.3 Combination Commercial Bank and Capital Market Financing

Some project financings combine a commercial bank tranche and a capital markets tranche during both the construction and commercial operation phase. Structuring this arrangement during the construction stage can be difficult. The commercial bank tranche and the capital markets tranche will typically be based upon pre-agreed percentages, and structuring the drawdowns to stay as close as possible to this agreed percentage can be tricky. In addition, drawdowns under the commercial bank tranche typically only require a few days' notice prior to drawdown date, whereas the institutional tranche will require a long advance notice period, or most likely a fixed drawdown.

In addition, commercial banks and institutional investors may have quite different agendas in a troubled situation. For example, in a default situation, a commercial bank may wish to grant a waiver and look to restructure the debt,

while the institutional investor may wish to simply call the loans, foreclose, and take a write-off. Some of these variations arise from their differing regulatory or reporting environments. Whatever the reason, divergent interests among the Lenders can create a very difficult situation if the project suffers adverse circumstances and has to be restructured.

6.4 Lease Financing

Lease financings are sometimes used in jurisdictions in which the access to collateral may be weak because of local legal issues, or the availability of regulatory or tax benefits make it advisable for the ownership to be held in an entity other than the user. Lease financing is also common in Islamic (or Shari'a compliant) financings, in which the payment of interest is prohibited. Under a lease financing, an entity other than the project company owns the asset, and leases it to the project company under a long-term lease. The financing is obtained at the lessor level, and the lease payments are designed to be sufficient to pay the financing and other costs. Often, these leases are structured as triple net leases, in which the lessee is obliged to bear all operating costs, costs of insurance and tax liabilities relative to the leased property. The lease between the project company and the lease financing entity will contain similar covenants and events of default as in a commercial bank financing.

A lease financing has several benefits for the project company. The project company will maintain control and use over the project as if the project company owned the project. Depending on the terms of the transaction, the Sponsors may be able to contribute less Sponsor equity than is required in a conventional debt financing, and the project company may enjoy more favorable tax treatment than if it owned the project. For example, if structured correctly, the entire lease payment by the project company may be tax deductible as an operating expense, which could be more favorable than the combination of deductions for interest payments and depreciation.

6.5 Local Financing

In international financings, it is becoming more common to include a tranche in a project financing sourced from local markets. Although this tranche can add to the complexity of the financing arrangements, the host country generally views such participation favorably because it allows local financiers to participate in a project with significant social ramifications, and can improve the image of the project locally. It can also help to mitigate political risk, as the government may be more hesitant to take actions adverse to a project that can impact a local financial participant. While historically, developing countries generally lacked the capacity to finance large projects entirely through local sources, this has changed tremendously over the past decade, particularly in Middle East, but also in parts of Asia and Latin America. The financing for many large-scale infrastructure projects in the Arabian Peninsula come entirely from local sources, affording the project companies a reduced financing cost as well as several other advantages.

6.6 Multilateral and Bilateral Agencies; Export Credit Agencies

Many international projects, particularly in emerging markets, have a component of multilateral or bilateral agency funding. Structurally, these loans tend to be more like commercial bank loans than like capital markets loans, although they may be for a longer term than commercial bank loans, and often have fixed interest charges. Participation by these agencies can be a great advantage to a project, because their presence lends credibility, thereby attracting other capital. Because their participation is based on unique policy objectives, however, their requirements in terms of both designing the financing structure and implementation can be quite different from those of other Lenders. This divergence of interests can present many challenging issues when agency financing is combined with other financing sources, as is frequently the case. A more complete discussion of the role of multilateral and

bilateral agencies in international project financing transactions is contained in Chapter 14.

6.7 Subordinated Debt

Various types of entities may provide subordinated debt to projects. Sponsor equity is sometimes contributed in the form of subordinated debt. In addition, key suppliers (such as the EPC Contractor) may make investments in the project in the form of subordinated debt. The finance markets may take a favorable view of contractor-provided subordinated debt because it aligns the interests of the EPC Contractor with that of the holders of the senior debt. However, the inclusion of subordinated debt in the capital structure will introduce inter-creditor issues, and otherwise increase the complexity of the financing.

6.8 Hedge Funds/Term B Loans

Second lien financings, also referred to as Term B Loans, are a form of project financing that has come to the fore over the past two decades. Frequently, the Term B Lenders are private equity or hedge fund investors. Term A/Term B financings are tranched debt. The "Term A" tranche is conventional senior secured debt and the "Term B" tranche is *pari passu* in right of payment with the Term A debt, but subordinated in right of security. In effect, the two tranches have comparable rights pre-default and pre-bankruptcy, but in an enforcement of remedies situation, the Term B debt is subordinated.

While these structures have been used in power plant acquisition financings, they may be difficult to use in construction projects because of credit issues affecting the lending commitment of the Term B Lenders for the delayed draw. This is due to the reality that the Term B Lenders are frequently hedge funds or private equity funds, which do not have a credit rating. The alternative to the delayed draw is a single drawdown, which can result in

significant negative arbitrage exposure if all funds are advanced upfront, because the carrying cost of the debt exceeds the amounts that can be earned on unexpended construction funds that are held in trust.

6.9 Back-Leverage Financing

Driven by tax incentives, clean energy procurement mandates, and the environmental, social, and governance (ESG) initiatives of lenders, investors, and businesses, renewable power is continuing to see significant growth globally. Historically in the United States, most renewable power projects have included a tax equity financing component in order to take advantage of the tax benefits currently available, and provide needed capital to fill the funding gap between debt and the total costs to develop and construct projects. In this context, back-leverage financing has developed as a variation of commercial bank financing for projects that involve tax equity, in order to accommodate the tax equity investors that do not want to invest in projects where lenders have the right to foreclose directly on the assets of (or equity in) the project company. Tax equity financing is described in Section 6.10. Broadly defined, back-leverage financing is debt financing provided to the upstream entity (often referred to as the "Holdco") that holds the Sponsor's equity interest in the tax partnership that owns the project company. The Holdco borrows against, and the debt is repaid only from, the cash distributions allowed to be made to the Holdco as provided in the partnership agreement between the Sponsor and the tax equity investor. The collateral for the debt is only a pledge of equity in the Holdco; the Holdco lenders have no recourse to the project company or to its assets.

The cash flow analysis for back-leveraged financings therefore focuses not only on the usual project metrics for modeled cash flows, but also on the priority rights of the tax equity investors to the project's net cash flows after payment of operating costs and before cash distributions to the Holdco.

The documents governing the tax equity investment will determine the allocation of distributable cash. As discussed further in Section 6.10, in the earlier years of the project, the tax equity investor typically will be allocated a larger share of distributable income than the Holdco receives until the tax equity investor achieves a target internal rate of return. Thereafter, the Holdco will be allocated a greater share of distributable cash. The amortization of the back-levered debt will follow the trajectory of the agreed distributions to the Holdco.

In addition to the normal allocation of distributable cash, however, the tax equity investor also may be entitled to claim additional project cash, referred to as a "cash sweep," to cover the indemnity obligations guaranteed by the Holdco in the event that the tax equity investor suffers losses resulting from certain specified events, such as covenant breaches and breaches of representations and warranties that impair the tax credits. Back-leverage lenders will be especially concerned about the scope of cash sweeps allowed in the tax equity documents and the potential impact on the cash flow available for debt service. Sponsors are aware of this tension and will try to negotiate into the tax equity documents requirements that limit cash sweeps to provide for sufficient cash flows to the Holdco to pay debt service. In many cases, the lenders and the tax equity investor will also enter directly into a consent agreement providing for cash sweeps to be mitigated to the extent necessary to cover debt service. Such agreements also provide for the lenders to forbear from exercising remedies against the Holdco or to agree to certain transfer restrictions relating to any foreclosure on the Holdco's interest in the tax partnership.

6.10 Tax Equity Financing

In the United States, tax equity financings arise when tax-sensitive investors – frequently financial institutions and corporations, but also individuals – invest in renewable energy projects that qualify for either the

production tax credit (PTC) or the investment tax credit (ITC), as well as accelerated depreciation. As most project Sponsors do not have the tax liability to take full advantage of the tax credits, and because U.S. tax rules require that tax equity investors have an ownership interest in the project company that owns the project eligible for the tax credits, tax equity financing is typically structured as a partnership between the project Sponsor and one or more third-party tax equity investors in which the bulk of the tax credits are allocated to the tax equity investor together with a preferred return and certain indemnity protections. Tax equity financings are prominent in financings of wind projects (eligible for either PTC or ITC), and solar projects (eligible for ITC), and require detailed tax analysis to ensure that the tax equity investors are allocated their expected tax benefits.

The prevalent form of tax equity financing is the partnership flip structure. In a typical partnership flip structure, the project developer and the investor enter into a tax partnership (which comprises the project company), with the developer never being allocated less than 1% of all partnership items and the investor never being allocated less than 5% of all partnership items. The investor is allocated 99% of gross income and loss (and thus, under the tax rules, 99% of all PTCs or ITCs relating to the project) until a date determined by reference to either partner's after-tax return, or a fixed date, known in common parlance as the "flip date." The investor may also be allocated significant pre-flip cash allocations during one or more pre-flip periods; in some ITC deals, the investor's allocation may temporarily drop to 67% after the first twelve months of investment. Post-flip, the developer is allocated 95% of the gross income and loss allocations, as well as 95% of the cash, leaving the investor with a 5% residual interest. Under these circumstances, subject to various rules intended to ensure that the investor assumes sufficient risk for its investment to constitute equity and not debt for tax purposes, the IRS generally will treat the investor as a partner in the project company and respect the partnership allocations of the relevant tax benefits.

In another common tax equity financing structure, the inverted lease, the developer contributes an ITC-eligible project to a lessor SPV, which in turn leases the project to a lessee SPV owned by the tax equity investor. The lessor SPV then elects to pass the ITC to the lessee SPV, as permitted by the ITC rules. The lessee SPV, which is responsible for maintaining the project and paying rent, receives payments from the sale of power directly from the Offtaker. In contrast to the partnership flip structure, the inverted lease structure puts the economic risk of the project's power purchase agreement on the investor and generally does not permit the investor to receive depreciation tax benefits and state-level tax credits unless it also invests in the lessor SPV (which arrangement may carry some tax exposure). On the other hand, the lack of a direct partnership with the investor may help the developer to get back-leverage more easily, and the project can be sold by the lessor SPV to any third party (except for a tax-exempt person) without triggering the ITC recapture that otherwise would accompany such sale within five years of the "placed in service" date. Some advisors may recommend that the lease between the lessor SPV and the lessee SPV have certain features to ensure that the tax equity investor's lessee SPV has sufficient economic risks and rewards to be considered a true lessee for tax purposes (for example, a substantial rent prepayment or a lease term that is substantially longer than the underlying power purchase agreement). Since the PTC rules require that the recipient of the PTC both own and operate the project, the inverted lease is suitable only for projects for which the ITC is claimed.

In yet another form of tax equity financing, the sale-leaseback, the developer contributes an ITC-eligible project to a lessee SPV, which sells the project to a lessor SPV owned by the tax equity investor. Immediately after the sale, the lessor SPV leases the project back to the lessee SPV. Typically, the lessee SPV has an option to purchase the project from the lessor SPV at fair market value when the lease terminates. This structure permits the tax equity investor to receive the tax benefits associated with the project. As with sale-

leasebacks generally, various aspects of the transaction, such as the value and remaining life of the project upon the termination of the lease, must be scrutinized to ensure that the investor-owned lessor SPV is the true owner of the project for tax purposes. Similar to the inverted lease structure, because the PTC rules require that the recipient of the PTC both own and operate the project, the sale-leaseback structure is suitable as a tax equity financing strategy only for ITC-eligible projects.

In all three structures, the timing of the tax equity investor's investment can have a major economic impact. In order for ITCs to be allocated to the investor, the investor must invest before the project is placed in service (although a special rule effectively permits sale-leasebacks to take place within three months of the project being placed in service). While the PTC regime allocates credits based on the owner and operator at the time of energy production, because the PTC is available for only ten years from a project's placed-in-service date, investors typically invest soon after the project is placed in service in order to avoid PTC leakage.

In addition to the timing of the investor's investment, various other tax issues – such as the project's eligibility for ITCs and PTCs, the amount of the project's "eligible basis" for the ITC, and whether the tax equity investor has assumed sufficient economic risk for the structure to be respected for tax purposes – must be considered in evaluating whether the investors will receive their anticipated tax benefits. The extent to which these risks remain with the investor, or are covered by the developer's indemnity, comprises a key aspect of the commercial negotiations in a tax equity financing.

While tax equity financings are generally associated with wind and solar projects in the context of the ITC or PTC, the U.S. 2017 tax reform measure gave rise to a carbon oxide sequestration credit, based on the amount of carbon captured in a taxable year by certain carbon capture facilities. The IRS has issued detailed guidance blessing the use of the partnership flip structure for

such projects, and it is expected that tax equity financings for carbon capture facilities ultimately may become as widespread as tax equity financings for wind and solar projects.

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IMAGE HERE

CHAPTER 7

Standard Terms in Financing Documents

The standard terms in financing documents for a project finance transaction are, to a certain degree, similar to such terms in a fully secured corporate financing. However, a few differences exist that should be considered by the Sponsors.

7.1 Limited Recourse

The distinguishing feature of project financing transaction is that it should provide for limited recourse to the Sponsors. The only recourse to the Sponsors should arise from the limited guarantees provided by the Sponsors, which will usually be limited in amount and duration. For example, Sponsors must often guarantee a minimum equity contribution to the project. The equity can be required to be contributed up-front (in advance of debt financing) or in parallel with the loan drawdowns. In some instances, Sponsors are asked to guarantee the offtake of a project. This is a disguised form of guarantee that can operate to undercut a Sponsor's objective to obtain true limited recourse financing. In other instances, Sponsors may be required to provide construction guarantees, effectively assuming the delay and performance risks not allocated to the EPC Contractor. If the Sponsors are able to avoid providing such overarching construction guarantees, they may still be required to guarantee or otherwise cover specific construction risks that the Lenders are unwilling to accept. Each of these guarantees should be limited and terminate at a specified time. At such time, the project will be considered nonrecourse to the Sponsors, and the

Lenders' will have recourse solely to the security package, which will include collateral assignments of all rights necessary to construct, own and operate the project. In comparison, in a corporate financing (whether unsecured or secured), Lender recourse will not be so limited.

7.2 Representations and Warranties

Project financing documents feature representations and warranties similar to those in a corporate financing. These include the traditional representations and warranties addressing formation formalities, existence, good standing, power and authority, due qualification, legal enforceability of the agreement, possession of consents, absence of litigation, and compliance with laws. Project financing representations will be expanded to give the Lenders comfort that the relevant facts pertaining to the project are consistent with the Lenders' understanding and analysis that formed the basis for the Lenders' internal approval for the financing. These representations will be tailored to the specific project and will focus on the essential elements of the project financing, including, in particular, the project documents, budget and projections. The representations relating to the project budget and projections will focus on the construction budget and the expense and revenue projections for the project. The customary representation with respect to the construction budget is that it fairly reflects the construction costs for the project. The customary representation with respect to expense and revenue projections is that they likewise fairly reflect anticipated expenses and revenues.

These representations will form the basis of the financial model prepared by the project company and accepted by the Lenders. The financial model, in turn, forms the basis for determining whether a project is financeable. The model will determine a base case for the project. This base case projection will project the most likely results of revenues and expenses and must be reviewed and accepted by the independent engineer. There will also be models based on varying cost and pricing assumptions covering both optimistic (or upside)

and pessimistic (or downside) scenarios. Generally, for a project to be financeable, the likely downside projections should still project funds sufficient to service the project's fixed costs, including fixed operation and maintenance costs, taxes, and debt service.

In the context of renewable power projects using technologies that depend on intermittent energy resources such as wind or solar irradiance, the financial model will take into account the statistical probabilities of energy resource availability and will size the debt to the cash flows based on those probabilities. Because the renewable power sector is still maturing, the accuracy of the statistical models is not yet fully established.

The representations and warranties relating to the project documents will include representations that the project company has provided the Lenders with true and correct copies of each project document on the date of closing, that the project documents are enforceable, that there are no breaches or force majeure events existing under the project documents, and that the performance of such project documents do not violate any other project documents or applicable laws. The representations and warranties will also include a provision stating that the project company has obtained all required permits and licenses to operate the project in accordance with applicable law and in accordance with each of the project documents. Finally, the representations and warranties should include a statement that the project company has all rights necessary or required at that point in time for the construction and operation of the project for its intended purpose.

7.3 Covenants

A financing agreement for a project will also have many covenants that are included in a typical corporate credit facility. Some of these relate to the need for the Lenders to maintain the project as expected and not to permit the project company to take actions or fail to take actions that may adversely impact the project or the Lenders' collateral. These covenants are often

restrictive and subject to significant negotiation. It is the covenant package that typically gives Sponsors pause in deciding whether to project finance a transaction. A few of the more commonly negotiated covenants are described below.

The project company will be obligated to maintain stringent insurance requirements. These requirements can be costly for the project company and often do not provide for changes in market conditions. For example, projects financed before September 11, 2001, generally required terrorism insurance. After September 11, 2001, terrorism insurance generally became unavailable or cost prohibitive. Many project financings required waivers or amendments to the terms of the agreements pertaining to the maintenance of terrorism insurance. A well-crafted covenant to provide insurance should ensure that the obligation to provide insurance is based upon what is reasonably available and commercially feasible in the commercial insurance market. This will be a heavily negotiated provision because such a provision allocates a degree of insurability risk to the Lenders.

The project company will be limited with respect to what it can do with proceeds from claims received under the EPC Contract or any other project document or with respect to insurance proceeds. The negotiation will usually relate to whether the proceeds will be used to repay indebtedness or whether the project company can use the proceeds to repair the damage or pay damages that may arise under another project document.

The project company will be obligated to cause the project to be constructed in accordance with the EPC Contract. The project company will be limited in its ability to enter into any change orders under the EPC Contract without Lender consent. There will usually be a de minimis exception for change orders that do not exceed a negotiated amount individually or in the aggregate with all prior charge orders. The project company will also be

prohibited from changing the construction budget or the construction schedule without consent from the Lenders.

A project company will be limited in its ability to enter into additional material contracts and obligated to assign collaterally to the Lenders any such contract entered (as well as provide a consent from the counterparty with respect to such assignment). The key negotiation point with respect to this covenant is the materiality standard. The project company will desire the ability to operate the business in the ordinary course and to enter freely into contracts in the ordinary course. The Lenders will desire to limit the project company's ability to enter into long-term financial commitments, which might increase project risk or decrease the Lenders' collateral value.

The project company will be required to deposit all project revenues into a collateral account and will be required to use all proceeds of the project in a narrowly tailored manner. When project revenues are deposited into a collateral account, the revenues will not be accessible by the project company except in accordance with the waterfall provisions of the collateral account agreement. A project company will also be limited in its ability to effect any material disposition of assets. This restriction may not appear too different from a typical secured credit facility, but it will often provide far greater limitations as to what assets can be disposed of without Lender consent.

One of the more heavily negotiated covenants in a project financing credit facility is the clause dealing with restricted payments. The project company will be restricted from making any distributions, dividends, or other payments to the Sponsors unless certain conditions are satisfied. These conditions are highly negotiated but usually include the following:

(i) the project shall be completed;

(ii) there is no existing default or event of default;

(iii) certain historical debt service coverage ratios and projected debt service coverage ratios are satisfied; and

(iv) certain reserve accounts are funded up to a minimum threshold amount.

Another highly negotiated covenant relates to restrictions with respect to the project documents. The project company will be prohibited from:

(i) canceling or terminating material project documents or consenting to or accepting the cancellation or termination of the material project documents prior to the scheduled expiration thereof;

(ii) selling or assigning any of its interest in any of the material project documents;

(iii) waiving defaults under or breaches of material project documents, or from failing to enforce, or releasing, material rights under the material project documents; or

(iv) amending or modifying any material project document.

The negotiation of this covenant generally relates to certain exceptions as to the project company's ability to take certain immaterial actions or actions that do not adversely affect the Lenders' rights in the collateral.

Finally, the project company will be required to provide monthly construction reports and monthly operating reports and annual operating budgets. These reporting obligations add additional administrative burdens not typical in a corporate financing arrangement.

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CHAPTER 8

Security Documents

In project financings, the borrower's obligations to the Lenders will be secured by all of the assets of the project company for which a security interest can be granted. These include a security interest in all personal property of the project company (e.g., the plant, equipment, spare parts, and other physical assets as well as technology licenses, intellectual property, and other intangible assets of the project company), a pledge of the equity interests of the Sponsors in the project company, and a mortgage over the real property rights of the project company, whether based on a fee interest or leasehold interest in the project site. Project financings usually contain provisions requiring all drawdowns under the financing package and all revenues generated by the project, including liquidated damages, to be deposited into a deposit account with a depositary bank. The funds in these deposit accounts are pledged to the secured parties. Finally, the collateral assignment of the material project agreements comprises a key feature of the security package in any project financing.

8.1 Personal Property

The granting of a security interest in the project company's physical assets is usually governed by the laws of the state, region, or country where such assets are located. The assistance of reliable local counsel will be required for purposes of preparing the security documentation, and establishing,

registering, and perfecting the security interest. The granting of a security interest in the project company's intangible assets may be a matter of local law or the law governing the license, property, or contract over which a security interest is granted.

8.2 Real Property

The granting of a mortgage over the real property comprising the project site is a matter of local law. Sometimes, a project company will only have a leasehold interest in the site. In such a situation, the project company will be required to enter into a leasehold mortgage. The terms of the leasehold mortgage will be similar to a mortgage over a fee simple interest, but will also require a separate agreement with the lessor, under which the lessor consents to the mortgage of the property and agrees to provide quiet enjoyment during the term of the lease, as long as the project company is in compliance with the lease terms.

8.3 Pledge of Deposit Accounts

Project financings contain strict controls on the project company's use of borrowed funds and on all revenues received by the project company, whether through Offtake Agreement sales, the receipt of insurance proceeds, or other project document claims. Borrowed funds will usually be deposited into some form of a disbursement account and all disbursements will usually require a certification from the independent engineer confirming that construction can be completed on or before the scheduled date certain, and that the project company will not suffer cost overruns to complete the construction based on firm debt and equity commitments.

Once a project has achieved commercial operation, all revenues generated by the project company will be deposited into a separate collateral account, often called the revenue account, and will also be subject to strict disbursement requirements. The ability to access the funds from the revenue

account will be based on the use of the funds. The provisions governing the disbursement funds from the revenue account are typically referred to as the "waterfall" provisions. Waterfall provisions can be quite complicated. Funds from the revenue account will usually be disbursed in an order such that the project company can continue to operate, make debt service payments, pay taxes, fund revenue accounts, and finally fund the distribution account. The term "waterfall" refers to the requirement that revenues be disbursed to fund fully first the account at the highest priority level, prior to funding the account at the next priority level, and so on down the waterfall. Some of the more difficult negotiations will relate to where debt service payments will be placed in the waterfall. Obviously, the Lenders will desire debt service to be at as high a level as possible. The project company, however, will seek to make sure that certain mandatory payments are made so that the project company can operate at a minimum level. For example, fixed operating and maintenance costs and payment of taxes are often above debt service because the project assets will quickly lose value if not operated and maintained at a minimum level. Tax payments are also high in the waterfall so as not to run afoul of a country's revenue service.

Another negotiated provision will relate to the required reserve accounts for the project, the minimum amounts required for these reserves, and their placement in the waterfall. Every dollar deposited into a reserve account will result in ultimately less revenues left over for the distribution account. Reserves will almost always include a debt service reserve account, which will often require the reservation of funds sufficient to pay six months of debt service. Another common reserve account is dedicated to meet major maintenance requirements. As mentioned above, ordinary operations and maintenance costs will be paid even before debt service in the waterfall, but major maintenance will only be required from time to time on a relatively predictable schedule. Major maintenance is usually funded from the major maintenance reserve account, and this reserve account will likely be funded after debt

service and the debt service reserve in the waterfall. The primary negotiation issues surrounding the major maintenance account will relate to its size and how it should be funded. The project company may prefer the amount to be as low as possible, and want the ability to fund on a pro-rata basis. For example, if major maintenance costs are projected to be US$10 million in a particular year, the project company would prefer to fund one-twelfth of this amount during each month. All revenues in excess of this amount would drop further in the waterfall and ultimately become available for distribution. Sometimes in lieu of a major maintenance reserve account, the Lenders may accept (or require) that the project company enter into a long-term service agreement with the equipment supplier, which will include the costs of a major overhaul. Under a long-term service agreement, the project company will pay a flat monthly amount to the equipment supplier for scheduled maintenance and overhauls and priority service in the event of an outage.

8.4 Collateral Assignment of Project Documents

In order for a project to be financeable, the project documents must be negotiated with a project financing in mind. The secured parties must be able to foreclose on the entire project and rely on the project documents to operate the project. Accordingly, the project documents must permit collateral assignment to the Lenders. Upon a project company event of default under the loan documents (and the Lenders' decision to exercise their rights thereunder), the documents must contemplate the ability of the Lenders (or their designee) to step into the role of the project company and perform the project company's obligations under the underlying project contracts, and further must obligate the counterparties under such contracts to perform their respective obligations thereunder in favor of the Lenders or their designee.

Most project documents have provisions allowing the project company to assign collaterally the project documents to the Lenders and reflecting the agreement of the contract counterparty to execute consents to such an

assignment. The Lenders will always require a consent to the assignment executed by the project contract counterparties. These are sometimes difficult to negotiate because the assignment process (and negotiation of the consent permitting the assignment) usually occurs during the financing phase, long after the underlying project document has been executed. The Lenders will sometimes seek, through the consent, to amend the underlying project agreement, changing the agreed terms in ways the Lenders believe are necessary to achieve a financeable project. This will, of course, require further negotiation among the Lenders, the project company, and the counterparty to the specific project agreement in question.

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CHAPTER 9

Common Concepts in All Project Finance Documents

This chapter addresses several provisions included in the documentation of all project finance transactions. These provisions do not necessarily relate to the specific substance of the underlying transaction, but rather identify mechanisms to anticipate potential issues that would arise in any project transaction, and provide a structured framework for resolving such issues. This chapter addresses four of these concepts: force majeure, choice of law, dispute resolution, and default and remedies.

9.1 Force Majeure

The term "force majeure" refers to an event that is beyond the control of a party and prevents the party from performing its obligations under the contract. Examples of such events include natural disasters (often referred to as "acts of God"), war and other political risks, and broad-based (as opposed to project or site-specific) labor strikes. Most definitions of force majeure will also require the claimed force majeure to be an event that is unforeseeable and could not have been avoided by the exercise of reasonable diligence.

Ordinarily, a party that cannot perform its contractual obligations will be in default and liable for damages under the contract. The occurrence of a force majeure event excuses the performance of the obligations of the party claiming relief to the extent that such obligations cannot be performed due to the occurrence of such force majeure event. A well-crafted force majeure provision

usually obligates the party claiming relief to notify the other party upon or within a reasonable time period after the occurrence of the force majeure event, and to take all reasonable steps to alleviate the effects of the force majeure event as soon as reasonably possible. In addition, there may be a provision allowing the counterparty to terminate the agreement if the claiming party has not resumed performance within a specified time period after claiming relief. Typically, force majeure provisions will not grant the claiming party relief from the performance of the contract for any period longer than the period during which the event actually impairs (or could reasonably be anticipated to impair) the claiming party's performance.

In recent years, there has been a propensity towards elaborate force majeure definitions that include descriptions of every conceivable "act of God" type event that could affect the project, with a catchall at the end intended to include "any other similar or dissimilar event" that could impair the performance of a party's obligations. A well-crafted provision will qualify each of the items listed as force majeure events by a requirement that the event claimed actually be beyond the reasonable control of the party claiming force majeure. As a simplified example, "explosions" are sometimes included in the kitchen-sink variety of force majeure definitions. The occurrence of an explosion should not, by itself, however, end the inquiry. If the explosion occurred due to the failure of a party to conduct its work or performance in a manner contractually or customarily required, then the failing party should not be entitled to the benefit of the relief afforded by a balanced and well-crafted force majeure provision.

Labor disruption constitutes a unique variety of force majeure because of the capacity to reach a resolution through negotiation. While largely dependent on the relative bargaining power of parties, force majeure provisions will typically exclude labor disruptions limited to the site or the party in question, on the rationale that the risk of such disruptions should rest with such parties. Accordingly, labor disruptions must usually be industry or region-

wide to constitute force majeure, or at least broader than those aimed solely at the project or party in question. Once a labor disruption falls within the defined realm of force majeure, however, the party confronting the disruption usually has the latitude to settle the dispute at its discretion, without violating the terms of the force majeure provision.

Far more essential than the negotiation of force majeure in any individual agreement lies the need to ensure that the force majeure provisions operate seamlessly across all project documents. A mismatch among force majeure provisions in the different project documents can result in one party being relieved of obligations under a contract, while the contract counterparty (who relies on the relieved party's performance to meet its own obligations under a separate contract) does not obtain the benefit of corresponding relief under the separate contract. As a simple example, if force majeure relieves an EPC Contractor for a power project from its date certain performance obligations for a period of time, then the Owner should be afforded relief of similar duration from its obligation to produce output by a date certain under the Power Purchase Agreement. The interplay between the force majeure provisions in project contracts can be quite complex. Among other things, the project contracts may be governed by the laws of different jurisdictions, or subject to arbitration in different forums. In such an event, even identical force majeure definitions could be interpreted differently, leaving an unwanted exposure for the project.

In sum, force majeure provisions comprise an important part of project finance documentation. Such provisions include procedures for claiming force majeure relief and an obligation to remedy the effects of a force majeure event as soon as reasonably possible. Force majeure provisions may also take into account any special circumstances surrounding a particular project. Finally, force majeure provisions should, to the extent possible, operate seamlessly

across all project agreements in order to avoid gaps in relief among the parties to a project finance transaction.

9.2 Choice of Law

In any complex transaction involving multiple parties with differing goals and incentives, disputes will likely arise. In order to achieve the goal of structuring a project to eliminate or assign foreseeable risks, project finance contracts must contain provisions that address the risk of disputes. The choice of law and dispute resolution provisions offer the relevant places to do so.

A choice of law provision specifies the jurisdiction whose law will govern the agreement and be used in interpreting it and adjudicating any disputes arising in connection with it. One cannot overstate the importance of a carefully considered choice of law provision, especially in international transactions.

The law governing any project contract sometimes depends upon the location of the contract's performance. A particular jurisdiction may insist, as a matter of public policy, that its law be applied with respect to certain types of agreements or with respect to a particular class of assets, regardless of the dictates of the relevant agreement's choice of law provision. Further, prudence dictates a high level of attention to those areas where a dispute is subject to the extraordinary jurisdiction of a local court. These areas can often include, among others, disputes regarding the usage, possession, and ownership of immovable property. In such disputes, local courts are typically free to give effect to the parties' choice of law provision, so long as the contractually selected law is consistent with the laws of the country. In the event of an inconsistency, a local court in such a matter will generally give effect to the local law. Accordingly, the risks of undermining the parties' contractual choice of law highlight the necessity of retaining knowledgeable local counsel that can provide guidance regarding choice of law provisions, as well as other local laws or customs impacting the relevant agreements.

Alternatively, even in the absence of an overriding public policy imperative, the host country may insist (as a negotiating matter) that its law govern the principle documents between the project Sponsor/Owner and the government or its instrumentalities. In other instances, Sponsors have the bargaining power to insist on the selection of a neutral choice of law governing the essential contracts between the parties. This is particularly the case in emerging countries that are newly inviting foreign investment into a particular sector, and do not have the leverage to dictate critical provisions such as choice of law.

This issue of which law should govern the project documents can be controversial. Lenders will generally prefer that the project documents be governed by the laws of a neutral jurisdiction (often New York, or England and Wales) rather than the laws of the jurisdiction in which the project is located. Certainly in the loan or financing documents, the Lenders are likely to insist on the application of either New York or English law. Beyond concerns of neutrality, these jurisdictions are perceived as having a sophisticated and well-developed body of law applicable to complex commercial (including, specifically project finance) transactions and documentation. Hence, in international project finance transactions, New York or English law is quite commonly selected even if such jurisdictions bear no apparent relation to the transaction at issue. New York, for example, has a statutory provision enabling the selection of New York law as the governing law by contractual parties, regardless of whether the contract bears any relationship to New York, provided that the contract has a transaction value of at least US$250,000.

Notably, the security documents in a project financing will be governed by the law having jurisdiction over the particular asset pledged as security. For physical assets, this will be the law of the jurisdiction where the asset is located or registered. Hence, the security documents are generally governed by the law of the country where the project is located. Reliable local counsel will be

required to assure that the security arrangements are effectively documented, registered, and perfected.

9.3 Dispute Resolution

All project documents should include a clear dispute resolution provision, which can help avoid unpredictable and inconsistent resolution of disputes that may arise. Efficient resolution of disputes is necessary to avoid schedule delays, limit distractions from project development, construction, or operation, and minimize the expense of a protracted conflict.

A dispute resolution provision will generally specify that parties to a contract must either litigate or arbitrate any disputes that may arise. Litigation and arbitration each has its own advantages and setbacks, but this determination often depends on the point of view of the party involved.

Traditionally, arbitration is considered faster and cheaper than litigation. Its advantages are expected to be lower legal fees and shorter delays while disputes are resolved. In addition, arbitration is viewed as emphasizing compromise between the parties, rather than strictly enforcing the relevant agreement. It can sometimes be difficult for a particular party to know going into a transaction, however, whether this emphasis on compromise will prove to be beneficial.

If the relevant agreement provides for arbitration of disputes, then it must also specify the relevant arbitration procedures, including the procedural rules that will apply, the method of selecting arbitrators, and the location of the arbitration. There are several organizations that specialize in providing an administrative and procedural framework for arbitrations, as well as arbitrators, including the American Arbitration Association (AAA), the International Chamber of Commerce (ICC), and the United Nations Commission on International Trade Law (UNCITRAL).

A common pitfall confronting arbitration clause drafters is the allure of over-drafting the provision by providing for elaborate procedures and strict deadlines, with the aim of preordaining a highly synthesized and orderly method of dispute resolution applicable to every dispute. Disputes, however, are rarely predictable or capable of resolution in such a fashion. Once the practical realities of a particular dispute depart from the detailed requirements of such a provision, the workability or effectiveness of the entire arbitration provision can be called into question. For example, sometimes such arbitration provisions mandate the holding of a hearing and the issuance of an arbitral award in the time period during which the parties in an actual arbitration would select an arbitral panel. Once off-schedule from the outset, such provisions offer little guidance in managing the direction of the arbitration. For these reasons, it would be prudent to collaborate with experienced arbitration or dispute resolution counsel in preparing an arbitration provision, as well as in deciding whether arbitration may be the optimal forum to resolve disputes under a particular contract.

Another common mistake made by parties in negotiating an arbitration provision is the failure to address clearly the applicable arbitration rules. Occasionally, parties will assume, incorrectly, that the arbitration rules of a particular country will apply if the venue or seat of arbitration is in that country. To avoid this pitfall, separate provisions should set forth the rules governing the arbitration and the seat of arbitration.

Traditionally, Lenders prefer to avoid the uncertainty of the "negotiated" outcome of an arbitration, opting instead for the binding nature and fact-based approach of litigation. Courts are perceived as offering Lenders the ability to obtain strict and literal enforcement of their financing and security documents. Additionally, courts have the power to order quick provisional relief through the issuance of preliminary injunctions or other immediate temporary relief.

The Owner, on the other hand, may prefer to arbitrate in certain situations, such as in disputes with Lenders, the host country, or parties located in the host country (certainly, with respect to the latter two, in contrast to litigating in a foreign court against a local party). In other situations, however, the Owner may prefer to avoid arbitration. A dispute with an EPC Contractor might be one such situation, since the EPC Contract is drafted primarily to impose specific obligations on the EPC Contractor against a strict deadline. In such a case, the Owner may have greater leverage in a dispute where the resolution mechanism presages the prospect of a strict enforcement rather than a compromise oriented approach.

Increasingly, whether arbitration or litigation is selected as the method for final dispute resolution, project documents include provisions that call for the parties to take formal steps to mediate the dispute through friendly negotiation before submitting to a confrontational proceeding. Typically, these mediation procedures are nonbinding and tiered, commencing with discussions among the lead officers for the parties at the project level, and sometimes proceeding upward to the chief executive of the parent company of each party involved (depending on the nature of the dispute). Sometimes, in an effort to avoid the time and cost of either arbitration or litigation, the parties may agree that disputes below a certain threshold dollar amount must be resolved through mediation and, failing agreement, through some predetermined formulaic disposition of the amounts in dispute.

The type of dispute resolution that is best for a project cannot be decided in the abstract. The correct decision will vary based on the project, the parties, the location, the type of contract and the expected nature of the disputes. In addition, as explained in the foregoing, it is quite rational for two separate parties to the same contract to take opposite views on the optimal method for dispute resolution.

In all cases, choice of law and dispute resolution provisions are among the most significant in a project contract. These provisions help to ensure a stable and predictable framework for resolving conflicts that may inevitably arise from time to time in connection with a project. Having workable frameworks in place can save time and money when a dispute does arise.

9.4 Default and Remedies

All project documents will contain a section that enumerates events of default and the counterparty's remedies. In general, there are several common events of default that will be identified in all project documents, including the bankruptcy of a party, abandonment by a party, failure to make timely payment, and breach of other material covenants or representations.

The events of default provision in a project contract will also contain specific defaults that are particular or unique to the contract and to a particular party under the contract. For example, under an EPC Contract the EPC Contractor would be in default if it failed to achieve substantial completion by a date certain, and an Owner would be in default if it failed to provide key permits or full and free access to the site. However, the consequences of these defaults, and the respective remedies of the EPC Contractor and Owner will vary greatly. As another example, under a Fuel Supply Agreement the Fuel Supplier would be in default if it failed to provide the required amount of fuel meeting express project specifications, and the Owner would be in default if unable to take delivery of the minimum monthly quantities specified under the contract.

In certain instances, the project documents may contain cross-default provisions, pursuant to which a default under one document triggers a simultaneous default under a separate document. For example, under a Power Purchase Agreement the power purchaser may be required to provide credit support for its obligation to pay for the power. The Owner may want the right to terminate the Power Purchase Agreement in the event that there is a default

under the related credit support documents, even if the power purchaser is not otherwise in default under the terms of the Power Purchase Agreement.

Project agreements typically provide for specific cure periods associated with each type of default, during which the defaulting party has the right to cure its default and resume performance in full compliance with the contract. Cure provisions are often two-tiered, providing for an initial period during which the defaulting party may cure its default, as well as a second time period extending the initial cure period, provided that the defaulting party is in the process of attempting to cure in good faith.

Like events of default, remedies will also be tailored to each particular contract and contract counterparty. For example, in the event of a material default by an EPC Contractor, the EPC Contractor might be obligated to pay delay liquidated damages to the Owner based on the length of delay that results from such default. Additionally, after certain material events of default by the EPC Contractor, the Owner would be able to take possession of the project, assume any contracts with subcontractors, and arrange for completion of the project. The EPC Contractor may become liable for any excess completion costs incurred as a result of its default. In contrast, failure by the Owner to perform its limited obligations under the EPC Contract might relieve the EPC Contractor of certain of its affected performance obligations, but will not result in the Owner having to pay liquidated damages or other similar amounts to the EPC Contractor.

As with other contracts, the ability to obtain specific performance as a remedy is rare in project contracts as well. It may be available in situations where performance is unique and cannot be replicated or remedied fully by monetary damages. The delivery of land comprising the project site, or the obligation of an EPC Contractor to perform work in accordance with the EPC Contract and achieve the minimum performance guaranties required by the

contract, are often two prominent examples where project contracts may expressly make available specific performance as a remedy.

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CHAPTER 10

Environmental Issues

This chapter provides an overview of the framework for environmental compliance standards applicable to many international project financings. It focuses on developments within the International Finance Corporation (IFC), the World Bank, the OECD, and among private financial institutions that are affecting this landscape. While environmental standards have generally evolved over the last few decades, the last few years in particular have seen significant developments that are the focus of this chapter.

Environmental compliance presents a distinct transaction cost and project risk to be managed and structured within the context of an overall project. One way that project participants have sought to manage environmental transaction costs in projects is through standardization. The trend in this area has been for project parties to apply the IFC's environmental and social sustainability policies to their projects, in many cases, regardless of whether a multilateral institution (such as the IFC) is involved in the particular project. As discussed at the end of this chapter, this approach has been reflected in adoption of the Equator Principles by leading private financial institutions, and the best practices of many project Sponsors, governments, and multilateral institutions such as the OECD and the World Bank.

In view of this convergence around the IFC's environmental policies, Section 10.1 provides a summary description of the IFC policies and a primer on developments relating to the IFC's wide-ranging 2012 Sustainability Framework. Section 10.2 provides a discussion of the World Bank's Extractive

Industries Review, which began in 2000, and its implications for international projects Section 10.3 contains a discussion of the 2004 OECD Guidelines for Multinational Enterprises that have an environmental application. Finally, Section 10.4 introduces the Equator Principles launched in 2003 and ends with a few concluding remarks regarding the tendency toward standardization in the area of environmental compliance.

10.1 IFC Sustainability Policy and Performance Standards

As noted in Section 4.2, the IFC is the private sector investment arm of the World Bank Group, which unlike the World Bank, lends directly to private entities. In 1998, the IFC adopted ten environmental and social policies (Safeguard Policies) to which projects were expected to adhere in order to receive IFC financing. The Safeguard Policies were in effect for investments prior to April 30, 2006, at which time the IFC adopted a new Sustainability Framework that applied to investments from April 30, 2006, to December 31, 2011. The Sustainability Framework was further updated effective January 1, 2012, with the 2012 Sustainability Framework. The 2012 Sustainability Framework consists of the following standards and policies:

- Policy on Environmental and Social Sustainability, which sets forth environmental and social sustainability guidelines
- Performance Standards, which set forth the procedures that a project company must follow to manage its environmental and social risks
- Access to Information Policy, which sets forth transparency guidelines

The Policy on Environmental and Social Sustainability and the Performance Standards focus on the following areas:

- Environmental and social risks
- Labor and working conditions
- Resource efficiency and pollution prevention
- Community health, safety, and security
- Land acquisition and involuntary resettlement

- Biodiversity conservation and sustainable management of living natural resources
- Indigenous peoples
- Cultural heritage

Generally, the IFC's approach – from the Safeguard Policies to the 2012 Sustainability Framework – leans in the direction of imposing more stringent requirements on projects from the perspective of both environmental practices and social protections.

A. Environmental and Social Review Summary

Performance Standard 1 under the 2012 Sustainability Framework is the requirement for each IFC financed project to maintain a system for the "Assessment and Management of Environmental and Social Risks and Impacts." As part of this system, IFC prepares an Environmental and Social Review Summary based on the project company's internal assessment studies and, consistent with its transparency guidelines, provides this summary to the public on its website. The purpose of the Environmental and Social Review Summary is to:

- Identify the Performance Standards applicable to the particular project
- Provide recommendations to the IFC's Board of Directors regarding the risks and impacts associated with the Performance Standards
- Delineate the mitigation efforts undertaken by the project company
- Analyze the project company's community engagement in respect of the Performance Standards

B. Environmental and Social Action Plans

If the potential risks and impacts identified by the project company and IFC are significant, IFC will require the project company to prepare Environmental and Social Action Plans (ESAP) to address them. Each ESAP is highly customized on a project-to-project and country-to-country basis. It must carefully address all risks and impacts associated with a particular

Performance Standard, which in turn may necessitate the preparation of specific plans tailored to address the risks identified.

IFC looks both at the project site as well as the project's "area of influence" in determining whether an ESAP is necessary and the content that must be included in the ESAP. IFC will broadly construe an area of influence to include project impacts that are transboundary or global in nature, as well as areas potentially affected by the cumulative impact of the project. The ESAP need not, however, address impacts that would potentially occur independently of the project.

C. Environmental and Social Categorization

The size, scope, and scale of the project company's required assessment, the ESAP's parameters and the degree of transparency required, will ultimately depend significantly on the IFC's classification of the project into one of several categories:

- Category A: *Business activities with potential significant adverse environmental or social risks and/or impacts that are diverse, irreversible, or unprecedented.*
- Category B: *Business activities with potential limited adverse environmental or social risks and/or impacts that are few in number, generally site-specific, largely reversible, and readily addressed through mitigation measures.*
- Category C: *Business activities with minimal or no adverse environmental or social risks and/or impacts.*
- Category FI: *Business activities involving investments in financial intermediaries or through delivery mechanisms involving financial intermediation. This category is further subdivided into additional subcategories.*

D. Communication and Disclosure

IFC requirements for disclosing the results of its assessments will depend in part on the categorization of the project. Generally, assessments for Category A projects must be fully disclosed, while Category B assessments

need only be disclosed to affected groups and local nongovernmental organizations. However, project categorization is not the only determinant of the degree of information that needs to be communicated to various stakeholders. IFC has additional sector-specific disclosure requirements for each of the sectors in which it is active. For instance, in the extractive industries sector, IFC will require that projects disclose material project payments to the host government and the relevant terms of key agreements with the host government. Additionally, as part of its social and environmental assessment process, IFC will require that Sponsors establish consultation and grievance reporting mechanisms with the local community.

10.2 World Bank Extractive Industries Review

In addition to the IFC's sector-specific guidelines, the World Bank has many of its own sector-specific lending policies which impose environmental compliance standards on international projects. Although on an aggregate basis, extractive industries (oil, gas, and mining) represent a small portion of the World Bank's overall lending, World Bank participation in extractive industries project financings is highly visible to a variety of stakeholders. For this reason, the World Bank's policies on lending to such projects comprise a key element in the environmental compliance landscape, influencing project financings outside of the extractive industries as well.

As noted above, IFC standards for environmental compliance have had a wide ranging impact on international project finance, even if the IFC is not involved in a particular project.[4] This is reflected in the World Bank's extractive

[4] There are also sources of international law that have developed over the past decades which have helped to establish common international standards for environmental protection. These primarily include the following treaties: "Agenda 21" and "Rio Declaration on Environment and Development," adopted by the United Nations in 1992; the World Charter for Nature, U.N. General Assembly Resolution 37/7; the Basel Convention on the Control of Transboundary Movement of Hazardous Wastes and their Disposal of 1989; the Convention on Environmental Impact Assessment in a Transboundary Context on 1991; and the Convention on the Protection and Use of Transboundary Watercourses and International Lakes of 1992.

industries review (EIR), and is relevant to project finance because many World Bank investments in the extractive industries are through project financings. The EIR began in 2000 when the World Bank announced it would conduct a comprehensive assessment of its activity in the extractive industries sector through an independent stakeholder consultation process. Upon completion by the independent assessor in 2004, the World Bank's management proposed a number of recommendations regarding policy in the extractive industries that its board of directors agreed to implement. One recommendation was that the clarity and accessibility of its environmental policies be continually improved. Other recommendations pertained to the use of social and environmental assessments, increasing community participation and transparency, and establishing certain "no-go" zones in environmentally sensitive regions of the world. These policies and their implementation will all be heavily influenced by the IFC's Safeguard Policy Update. In fact, the World Bank deferred a number of decisions regarding the implementation of the EIR until the IFC concludes its update.

10.3 OECD Guidelines for Multinational Enterprises

The Organization for Economic Cooperation and Development (OECD) Guidelines for Multinational Enterprises (Guidelines) offer yet another set of standards for environmental compliance for international projects. The Guidelines are recommendations promoted by OECD governments to multinational enterprises operating in or from OECD member countries and apply to global conduct by multinational companies from OECD member countries. In many cases, the Guidelines call for adherence to host country or international law. They also provide guidance in instances where such laws are absent or deemed insufficient. First issued in 1976, the Guidelines have been updated five times since, including most recently in 2011. All twenty-four OECD member countries have adopted the Guidelines, as well as Argentina, Brazil, Colombia, Costa Rica, Egypt, Latvia, Lithuania, Morocco, Peru, Romania, and

Tunisia. Although the Guidelines are voluntary, they reflect a set of best practices applicable to Sponsors and to financing parties. One chapter of the Guidelines is specifically focused on environmental performance.

In addition to such topics as public consultation and disclosure of environmental, health and safety impacts, the Guidelines focus on the establishment and maintenance of environmental management systems (EMS). While an EMS is meant to be applied at the enterprise, rather than the project level, the OECD's discussion of environmental management systems shares a lot in common with the IFC's social and environmental management plan. The EMS contemplated by the Guidelines should include procedures to:

- Collect and evaluate adequate and timely information regarding environmental, health and safety impacts
- Establish measurable objectives for improved environmental performance
- Monitor progress toward objectives or targets

OECD publications regarding implementation of the Guidelines stress that there is no "one size fits all" EMS and differentiate between externally certified and performance-driven EMSs. In terms of project finance, the trend in EMS design leans toward performance, or outcome-based EMSs, as reflected in the IFC's Sustainability Framework, based on the actual operating requirements of a project. However, as a best practice for compliance with the Guidelines for large companies, external EMS certification obtained through compliance with ISO 14001 standards or the European Union's Eco-Management and Audit Scheme (EMAS) is not uncommon.

10.4 Equator Principles

The Equator Principles consist of a set of environmental standards that affect international project financings. First adopted by ten leading banks in 2003, the Equator Principles have since been widely adopted by financial

institutions worldwide (collectively known as the Equator Banks). The Equator Principles are a baseline framework for environmental compliance standards applicable to projects with a total capital cost of US$50 million, or higher. When a financial institution voluntarily adopts the Equator Principles, it signals its intent to provide loans only to projects that comply with the IFC Sustainability Framework. In addition to the US$50 million threshold, the Equator Principles apply globally to project financings in all industry sectors. The major implication of the Equator Principles for project Sponsors is that projects will need to comply with such policies, regardless of whether the IFC or another multilateral institution that requires compliance with IFC policies is involved in the project. Effectively, this makes the IFC's assessment program mandated by its Sustainability Framework now essentially the norm for large-scale project financings.

The precise manner in which Equator Banks will apply IFC policies to projects without any IFC involvement remains to be seen. The IFC policies are not a set of steadfast procedures or rules. Rather, they reflect a body of thought and approach to environmental compliance. The Equator Banks' application of the policies may turn out to be different from the IFC's. For instance, it remains at the discretion of the Equator Banks to determine whether a project cannot comply fully with the Equator Principles, and if so, whether to proceed with project financing. In addition, the interpretation and implementation of IFC policies requires significant time, expertise, and judgment, and different Equator Banks may apply the Equator Principles in a divergent manner, either in their capacity as co-Lenders on a particular project or from one project to the next. Although the Equator Principles mark a significant step in conforming market standards for environmental compliance in international project finance, the process is still in its early stages and it is difficult to predict its evolution. As a result, market precedent from landmark project financings, combined with the evolving recommendations of multilateral organizations such as the World Bank Group and the OECD, will

continue to play role in determining the landscape for environmental compliance in international project finance.

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CHAPTER 11

Insurance

Insurance is another tool that can be used to assign and mitigate certain project risks. In general terms, insurance is equally critical to both Sponsors and Lenders. In the event of a major casualty, insurance is the protection of last resort covering the value of the Sponsors' equity investment and the Lenders' financing. Hence, while certain nominal risks can be self-insured, the vast majority of insurable risks will be covered by a policy provided by a third-party insurance provider.

Insurance requirements will vary by project, and within each project there will be variation among project documents depending upon the specific risks involved. Generally, however, Lenders will require an Owner to obtain, or insist that the counterparties to the various project agreements with the Owner obtain, one or more types of insurance, and that the insurance obtained cover certain enumerated risks. There will likely also be a requirement that the insurance policy deductibles not exceed a certain amount and that the insurance provider possess and maintain a credit rating above a certain specified threshold. Additionally, the insured party will be required to furnish its counterparty and the Lenders with proof of insurance coverage.

It is useful to divide the types of insurance customarily obtained for project transactions into two categories based on the stage of the project: construction phase insurance and operating phase insurance. The following brief list identifies the principal types of insurance necessary during both the construction phase and the operating phase of a project:

- *Employer's liability/workers' compensation insurance:* Covers liability for injuries to employees during construction and operation of the project.

- *Environmental liability insurance:* Covers liability for, or injury resulting from, any violation of environmental laws during construction or operation of the project.

- *Transit insurance:* Covers any losses or damages that occur while equipment or spare parts are in transit from a supplier to the project site during construction or operation of the project.

- *Political risk insurance:* Covers certain political risks of the host country (see Section 13.5).

The principal forms of insurance required solely during the construction phase include the following:

- *Contractor's all risks insurance:* Covers any direct losses or damages that occur during project construction. This insurance generally provides broad coverage for all risks except for those that are specifically excluded from the policy, and terminates once construction is complete.

- *Delay-in-startup insurance:* Covers the increased costs resulting from a delay in project completion caused by an insured loss. This is intended to offset against the greater-than-expected cost of interest during construction and the loss of revenue arising from the delay.

The principal forms of insurance required solely during the operating phase include the following:

- *Operator's all risks insurance:* Covers loss or damage after operation has begun. This insurance generally provides broad coverage for all risks except for those that are specifically excluded from the policy.

- *Operator's loss of revenue (or business interruption) insurance:* Covers loss of revenue that results from damage to the project caused by an insured loss.

The allocation of responsibility for the maintenance of the foregoing insurance among the parties to a project transaction will vary from project to project. Typically, however, as can be expected from the discussion in other

parts of this chapter, the party required to obtain insurance will be the party to whom the underlying risk being insured against is most optimally allocated. For example, the risk of environmental liability arising from preexisting site conditions is typically an Owner's risk to be covered by Owner-procured insurance, whereas the risk of environmental damage from construction risks should be borne by the EPC Contractor and covered under its all risks insurance policy or separately procured by the EPC Contractor. Generally, the EPC Contractor's all risks policy will provide the principal insurance covering the project and the site during construction, with the responsibility for maintaining the operations phase insurance shifting to the Owner or Operator after construction.

In addition, insurance is sometimes procured at the project level (on a project-by-project basis), and in other instances provided through an insurance program at the parent corporate level (for both Sponsors and large international contractors). This latter approach can sometimes afford parties the ability to leverage better rates and provide for a more efficient way to manage a party's global exposure. If such insurance at the corporate level is provided by the Owner, it is referred to as an "owner-controlled insurance program" or OCIP, and if by the Contractor, as a "contractor-controlled insurance program" or CCIP. Among the advantages of the OCIP/CCIP approach is that it can reduce project costs (as each project participant is not marking-up its pricing to include insurance), provide the owner with greater certainty regarding the absence of gaps in coverage and greater control over picking coverage, eliminate the need to obtain additional insured endorsements, decrease the likelihood of finger-pointing litigation, and avoid the situation where a claim under another project against a Project Participant's Insurance policy affects the insurance coverage available under the Owner's project.

Several typical issues arise with insurance in the context of an international project financing transaction. These include:

(i) policy cancellation or expiration without renewal, or an adverse change in the offered policy after the project has commenced;

(ii) the occurrence of a loss that falls outside the policy coverage, or is expressly excluded;

(iii) the insurance carrier seeking to void the policy on grounds of nonpayment of premiums, nondisclosure, fraud, misrepresentation, or failure by the insured to comply with other policy requirements;

(iv) failure by the insured to make a timely claim or provide timely notice of an insured event;

(v) delay in the processing, analysis, and payout of a claim by the insurance carrier; and

(vi) insolvency of the insurance carrier.

The Lenders will attempt to address and minimize the likelihood of each of the foregoing risks in the project financing documentation.

As with other project agreements, the Lenders will insist that all insurance policies procured by a project company be assignable to the Lenders in case the Lenders foreclose on a project. Additionally, Lenders may insist that any payout under an insurance policy be deposited into a special account that the Lenders can control. Finally, the Lenders may also be loss payees under a project's insurance policies and listed as additional insureds thereunder.

The particular insurance program that is utilized in a project will be dictated by the type of project, the hazards involved, and the risk sensitivity of project parties and Lenders. Generally, however, consistent with the overarching theme of assignment and mitigation of risk, all project finance transactions will require certain types of insurance by creditworthy third parties to cover risks that cannot otherwise be adequately prevented or managed by the parties to the transaction.

CHAPTER 12

Tax Planning and International Project Finance

Tax planning is an essential element of project development and finance. Taxes will directly affect a Sponsor's net cash rate of return on investment, and hence influence significantly the Sponsor's analysis of reward and risk in any given project investment.

These considerations are present even when a project is built in a country solely by a local developer with no foreign content. When the project is a cross-border transaction, however, the process is more complex. For example, operating results may be affected by the interplay of the tax laws of two or more taxing jurisdictions.

In addition, international projects are often pursued as a joint venture among two or more Sponsors, who may themselves be resident in different taxing jurisdictions. The resulting variances in tax treatment and interests may need to be harmonized to produce a viable result for each Sponsor.

This chapter will briefly consider some of the ways in which tax planning is relevant to an international project, and how it can affect the economic results to the parties. For the purposes of this chapter, we will assume that the project is an independent electric power generation facility to be built in Country X. The nature of the tax issues, however, will likely be fairly similar in any other type of income-producing project. We will also assume that the

development is a 50/50 joint venture between Company A, a resident of the United States, and Company B, a resident of Country Y.

12.1 The Project Entity

Local law or political considerations will often dictate that the project be owned by a legal entity formed in Country X. An initial task, therefore, is to explore with able counsel in Country X what forms of legal entity are permissible. For example, the law of certain countries may permit the project to be owned by a corporation, a partnership, a limited liability company, or analogous forms under local law, such as a sociedad anonima or limitada.

The next step will be to consult with a licensed tax advisor in Country X to determine whether such forms of entity are taxed differently on their income, and if so, to identify the differences. For example, different entities may be taxed at different rates. Or, in some instances, special tax benefits under local law may only be available to certain types of entities. In other cases, the entity may not be subject to tax, but its members may be directly taxed on their shares of the entity's income.

In addition, the tax rules in the home jurisdiction of the project Sponsors must likewise be considered in determining the form of the project entity. Under U.S. federal income tax law, for example, certain foreign entities will automatically be treated as corporations for U.S. tax purposes, under the so-called "check-the-box" classification rules. Other entities may be treated either as corporations, or as partnerships or "disregarded entities" (in effect, mere branches) for U.S. tax purposes, as the parties may elect.

These particular tax differences may be critically relevant to Company A, and completely irrelevant to Company B. However, any choice of entity resulting from this analysis may have tax importance to Company B for other reasons (for example, in its home jurisdiction). This is an example of the kinds of "harmonizing" choices required to fashion a plan workable for all parties.

12.2 Contract Structuring Issues

In some instances, it may be possible to reduce the local taxes applicable to project construction by modifying the form of the construction contract arrangements. For example, withholding or value-added tax associated with that portion of the EPC Contract that is to be performed in Country X may, if the contract is structured without regard to the impact of such taxes, actually be applied to the entire contract price (if the contract is "unitary"), resulting in a higher level of overall tax.

On the other hand, such taxes might not apply to the supply of necessary project equipment shipped from sources outside Country X, if the procurement of such equipment were structured as a separate agreement. As previously discussed, such tax considerations form the basis for splitting EPC contracts into separate "offshore" and "onshore" components, a practice now typical for jurisdictions all over the world. The efficacy of such an approach will depend on the facts, applicable law, thoughtful analysis and creative structuring of the EPC Contract arrangements. Given that the cost of major equipment comprises a significant portion of the overall construction cost, the possible tax savings at stake may be considerable. Splitting or structuring contracts in such a manner may not be necessary if the equipment or services in question are exempted from value-added tax as part of a policy to promote and support investment in a specific sector that may, from time to time, be identified by the government of Country X.

To cite another example, if one of the Sponsors (say, Company B) is required to guarantee payment of the project company's debt during the construction of the project, any fees paid by the project company to Company B for the guarantee are taxable under the laws of Country X and subject to Country X withholding tax. If Company B cannot take advantage of any credit for such taxes in its home country (Country Y), it may have to pay a double tax on its fees, substantially impairing the economic benefit of the fees.

While not certain, it may be possible in limited circumstances and with careful structuring to arrive at an approach offshore where such withholding tax may not apply. In some jurisdictions, it is possible to structure the undertaking of Company B as a "standby purchase agreement" to purchase the debt of the project company from the Lenders in the event of a default – in effect, a contract to be performed in Country Y. Income from the fees for such an agreement might therefore be treated as income from the performance of services in Country Y (that is, the standby purchase of the debt), and thus not subject to any withholding tax in the jurisdiction of the project country. That might significantly reduce the taxes of Company B on its fee income from the undertaking.

12.3 Effects of Ownership Structure

Some of the most dramatic effects of tax planning for an international development project relate to the nature and location of the equity ownership structure. For example, Company A or Company B (or both) may wish to create a mezzanine holding company outside their home jurisdiction, through which their investment into the project company may be channeled.

In this case, let us assume that they will jointly create such a company ("MezzCo") in Country Z. Usually, the primary tax reason for such a strategy is that dividends from the project company to MezzCo will be taxed at a lower rate than if the same dividends were received by Company A or Company B – and in some cases, they may not be taxed at all. The latter result may apply if Company Z is a "tax haven" country that imposes no tax, or if its tax law exempts dividends from qualified subsidiary investments (such as under the "participation exemption" provided by the Netherlands and other EU countries).

As a result, dividends to MezzCo could be reinvested in other projects in countries outside the United States and Country Y, without being reduced by any current tax in the home countries of Company A and Company B. In that

way, their investment can effectively compound on a "pretax" basis, until the earnings are ultimately repatriated home. This strategy may be particularly impactful where other significant tax inducements (such as an income tax holiday for some initial period of years) are also in effect to offset the political risk of the investment. If, on the contrary, all dividends were remitted directly to Companies A and B, and were fully subject to current tax in their hands, the economic incentive of the tax holiday would be defeated.

Of course, for this strategy to work, the parties must successfully avoid any tax regime in Country Y or the United States that would tax the parties immediately on their share of the income of MezzCo, even if the income were not distributed to them. Many jurisdictions have regimes (like the rules concerning "controlled foreign corporations" in the United States) which seek to tax investors immediately on their shares of the passive income of offshore subsidiaries. In the United States, this result may be avoided if the project company can be treated as a partnership (or a "disregarded entity") for U.S. federal income, tax purposes. In that case, MezzCo's income would be treated not as passive dividend income, but as income from the active conduct of the project company's business, and would not immediately be accrued to Company A.

In some cases, a further benefit of the MezzCo strategy may be a favorable tax treaty between Country X and Country Z. For example, such a treaty might provide for a reduced rate of withholding tax on dividends from the project company to a resident of Country Z. Ordinarily, the fact that MezzCo is formed under the laws of Country Z would make it a "resident" of that Country.

In certain cases, it may also be necessary that MezzCo have sufficient personnel, activities, office space and other indicia of real "presence" to be classified as a bona fide "resident" of Country Z, entitled to the protection of the treaty.

In addition, even if such "presence" is established, the favorable result may still not be assured. For some time now, the United States has been engaged in a program to renegotiate and update its existing tax treaties with foreign countries to include a "limitation of benefits" provision. Under such a provision, the eligibility of a company formed in Country Z to be treated as a resident of Country Z and entitled to the benefit and protection of its tax treaties, may be blocked when a majority of the company's Owners are located outside Country Z. Other countries have been moving similarly to restrict the benefit of their tax treaties.

When parties from different taxing jurisdictions engage in the development of an international project outside their home countries, the complexity of the needed tax planning is significant. As the foregoing discussion makes apparent, careful and imaginative tax planning may significantly enhance the net value of the investment to the parties.

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CHAPTER 13

Unique Risks in Projects Requiring Foreign Investment

This chapter addresses two types of risks – currency risk and political risk – that are unique to international projects, and discusses techniques that have been developed to mitigate these risks, or shift them to parties better suited to manage them. This chapter also includes a case example in connection with the discussion of change in law risk, examining the experience of four multinational consortia that project financed several multi-billion-dollar heavy oil projects in Venezuela in the late 1990s, and certain subsequent shifting Venezuelan fiscal laws that have affected these projects.

13.1 Currency Risk

Currency risk can be broadly divided into three different categories:

- Inconvertibility risk
- Transfer risk
- Devaluation risk

A. Currency Inconvertibility and Transfer Risk

For purposes of this section, references to "local currency" means the currency of the host country in which an international project is located. "Foreign currency" means the currency of the home country of the Sponsor (for example, U.S. dollars for U.S. Sponsors).

Currency inconvertibility risk is the risk that a project entity will not be able to convert its profits or other cash from local currency into foreign currency. This risk is applicable to projects that earn income in a local currency but must service debt or repatriate profits in another currency. International projects that export goods paid for or priced in the foreign currency (for example, oil) are not susceptible to currency inconvertibility risk. They could, however, be susceptible to currency transfer risk. Currency transfer risk is the risk that local currency, once converted into foreign currency, will be restricted from being transferred outside of the host country.

Both inconvertibility risk and transfer risk arise if a host country is experiencing foreign exchange shortages, or if its central bank fails to act on an application for foreign currency. The failure by a host country's central bank to either convert local currency into foreign currency, or to permit transfers of foreign currency offshore, is often a precursor to the rescheduling by a sovereign of its foreign currency obligations. Currency inconvertibility risk could also materialize through the imposition of restrictive foreign currency controls and regulations.

In addition, even in the absence of a currency crisis, local legal regulations (which will vary from country-to-country) may restrict the ability to convert local currency into foreign currency and to service all aspects of foreign loans (for example, principal, interest, fees, expenses, and other indemnity payments). This can have a significant effect on the way that financing agreements are structured, and is another area to which Sponsors and Lenders pay close attention as the terms of project loan agreements are negotiated.

There are a variety of ways to mitigate or shift currency inconvertibility and transfer risk. In order to gauge the magnitude of this risk at the outset of planning a new project, Sponsors and Lenders should endeavor to become familiar with the status or condition of the host country's foreign currency reserves. One way to structure around currency inconvertibility and transfer

risk is to maintain bank accounts in foreign currency outside of the host country. However, offshore bank accounts may not be, in and of themselves, a complete solution for the following reasons. First, in the case of projects whose income streams are already denominated in foreign currency, some countries will require the return of all revenues earned in foreign currency to the host currency for conversion into the local currency. Second, in the case of projects that generate revenues in local currencies, many countries limit the amount of foreign exchange that can be maintained offshore. For these reasons, Sponsors often seek special agreements with host governments that address offshore bank accounts, currency convertibility, and transfer issues.

A well-structured host government (concession, implementation or stabilization) agreement that does not require the project company to access the local currency market in order to obtain foreign currency, and does not require local government approval to transfer hard currencies abroad, will reduce the currency inconvertibility and transfer risk to which the project is exposed. In this case, the risk becomes limited to the risk that a host government will breach the contractual obligations set forth in the agreement with the project company. This is a "political risk" that is addressed in the next section.

Currency inconvertibility and transfer risk can also be shifted to insurers. There are a variety of public and private sources that underwrite policies to insure against these risks. The public sources include multilateral and bilateral institutions, such as the Multilateral Investment Guarantee Agency, International Finance Corporation, Inter-American Development Bank, European Bank for Reconstruction and Development, U.S. International Development Finance Compensation (formerly Overseas Private Investment Corporation) and the Asian Development Bank. Each insurer has different pricing structures and limits on the amount of risk that it will underwrite. In addition, the policies will distinguish between coverage for the project's debt

and the equity investment of the Sponsors. Events that are generally excluded from coverage under inconvertibility and transfer risk insurance policies include:

- Preexisting foreign exchange controls.
- Losses that are avoidable, such as when a project company voluntarily brings in foreign exchange and is subsequently unable to reconvert to foreign currency.
- Losses resulting from currency devaluation.

B. Currency Devaluation Risk

Currency devaluation risk is present whenever a project's debt is denominated in foreign currency and the project earns its revenues in local currency. If the local currency depreciates in value, the project may be unable to generate enough local currency to convert into the foreign exchange that is required to service the project's debt. Most political risk insurers will not insure against currency devaluation risk. The large size and long tenor of most project loans can also make currency hedging or derivative arrangements rather expensive (depending on the local currency in question, the market may not even have sufficient liquidity to support long-term hedging arrangements). As a result, the project and its Lenders are sometimes left to bear devaluation risk, unless the Lenders are successful in shifting this risk to the Sponsors or the project company's Offtaker. Shifting this risk to either party, however, can be difficult. Asking the Sponsor to assume this currency risk of the project would defeat a key element of the nonrecourse project structure that is attractive to the Sponsor in the first place. As to the Offtaker, it will likely prove even to be more problematic to get an Offtaker to agree to index its purchase price to changes in the exchange rate because the Offtaker's business will not likely be generating sufficient income to cover sharp devaluations in the local currency during a monetary crisis. In many cases, the Offtaker will pass along increased costs under its offtake agreement with the project company to the Offtaker's customers. In the example of a power project, this would mean that the

Offtaker (often a state owned or controlled utility) would have to pass these additional costs to its rate-paying customers. In many emerging economies, the political will to burden the local population with this cost is not usually present. Currency devaluation, and the inability to shift this risk on to any party other than the Lenders, accounted for many of the failed power projects in Indonesia in the late 1990s, when the Indonesian rupiah plummeted in value.

The solution to any currency devaluation crisis will ultimately lie in actions taken by the host country. In this regard, all currency risks are essentially political risks. Currency risks are heightened in an international project financing because so many international projects are located in emerging and often unstable economies, where government participation in infrastructure development is commonplace, and where the infrastructure may be essential to the country's development and security.

13.2 Political Risk

This section discusses three types of political risk:

- Political violence risk
- Expropriation risk
- Change in law risk

A. Political Violence

Politically motivated violence in the host county can have obvious adverse effects on a project. Unless a country suffers a prolonged period of civil insurrection, the temporary nature of much political violence usually allows a project to weather the storm – provided the project has adequate cash reserves. In light of the unforeseeable, country-specific nature of political violence and the inability to mitigate this risk, however, risk insurance that covers political violence may be highly desirable. As with any political risk policy, it is essential to obtain a thorough understanding of the legal definitions that delineate what will constitute an insured political violence event. While

political risk insurance is covered later, Table 1 below illustrates a typical formulation of, and common exclusions from, the definition of political violence negotiated as part of a political risk insurance policy covering political violence.

Table 1

Definition of Political Violence

Common Formulation	May Include (Negotiable)	May Exclude (Negotiable)
A violent act undertaken with the primary intent of achieving a political objective, such as declared or undeclared war, hostile action by national or international armed forces, civil war, revolution, insurrection, or sabotage.	• Civil disturbance or strife • Terrorism	• Student violence • Labor violence • Environmentally motivated violence

In addition, coverage for political violence typically pertains to a loss of assets or income directly related to the political violence. Since political violence can often take place at a national level but reverberate through an economy, the nature of what constitutes a direct loss can often be subject to dispute. For this reason, to craft proper political risk insurance coverage, one must tailor the covered events as closely as possible to the likely forms of political risk that can foreseeably affect a project.

B. Expropriation Risk

There is a direct relationship between the role of a project to a country's economy and national security and the risk that a host government may nationalize the project. Nationalization constitutes a clear form of "outright" expropriation. Other forms of "indirect" or "creeping" expropriation by a host government exist that do not involve the transfer of legal title to the

government, but can still have an adverse effect on a project. Examples of creeping expropriation can include:

- Conditioning the grant or renewal of a key permit or government consent on concessions by the project that will degrade its financial returns.
- Imposing confiscatory taxes or royalties on the project.
- Other government acts that have the effect of depriving the Sponsors of ownership, control or substantial benefits or profits from the project.

Under accepted rules of customary international law, it is unlawful to expropriate property (on either outright or indirectly) without just compensation. State regulatory actions applied on a nondiscriminatory basis, however, are not considered forms of expropriation, even if those actions (or inactions) have an adverse economic impact on a project. Legal definitions of what constitutes creeping expropriation have been imprecise and generally do not address what distinguishes it from other non-compensable types of government regulation. This legal uncertainty makes it more difficult to challenge successfully creeping expropriation by host governments under multilateral and bilateral investment treaties or before arbitral tribunals. In part, this legal uncertainty may be due to the country-specific nature of government interference in the private sector and the intentional deference afforded by the drafters of some sources of international law to arbitral tribunals to address this issue on a case-by-case basis. Arbitral decisions interpreting various free trade agreements and bilateral investment treaties have led to the emergence of several broad criteria that provide a framework for determining what constitutes creeping expropriation as opposed to non-compensable government regulation. These criteria include:

- The extent to which the host government has hindered a property right.
- The nature of the host government's interference with that property right (taking into account its purpose and context).

- Comparing the government's interference with reasonable and investment-backed expectations.[5]

Free trade agreements that the United States has completed with countries such as Colombia (2011) and South Korea (2011) reflect these criteria, as does the 2012 Model BIT (Bilateral Investment Treaty).[6] Although these recent agreements attempt to differentiate between non-compensable government regulation and creeping expropriation, they also acknowledge that a determination of indirect expropriation will ultimately be a case-by-base, fact-based inquiry. Hence, the determination of what constitutes indirect expropriation can be expected to change over the life a project depending on the country in which the project is located and the particular political necessities that give rise to a host government's actions. As a result, bilateral investment treaties and free trade agreements often serve as just a tool for mitigating, rather than a blanket assurance against, expropriation risks.

C. Change in Law Risk

As noted in the preceding discussion, host governments may take legal actions that have adverse effects on projects but do not rise to a level of indirect expropriation. Common examples of adverse changes in law include the imposition of:

- Import and export restrictions.
- Price controls.
- New environmental, health, or safety standards or other changes in law that could require changes to the design of a project's key equipment or processes.

For this reason, many Sponsors and Lenders try to enter into agreements with host governments that seek to stabilize the legal regime to which the

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[5] "Indirect Expropriation" and the "Right to Regulate" in International Investment Law," Organization for Economic Co-operation and Development, Working Papers on International Investment Number 2004/4.

[6] The text of the 2012 Model BIT is available at www.state.gov/e/eb/ifd/bit/index.htm.

project will be subject. The benefits and limitations of these agreements are discussed next.

13.3 Host Government Agreements and the Limits of Contractual Risk Allocation

Host government agreements (Implementation, Concession, or Stabilization Agreements) entered into between the project company or Lenders with host governments are a form of political risk mitigation. In addition, where a project is of particular strategic value to a host country, and the host country cannot proceed without the support of the Sponsors, some countries have passed special laws to accommodate the project's ownership structure, tax rate, or use of offshore accounts. These agreements can address many of the key political risks described above, as well as provide for the following types of undertakings by the host government:

- No materially adverse changes in law that will affect the project.
- Availability of foreign exchange and non-imposition of foreign exchange moratoria.
- No expropriation without full compensation.
- Levels of taxation applicable to the project.
- Grant of permits to the project (so long as the company fulfills its obligations to obtain the permit).

Although topics such as expropriation are covered in bilateral investment treaties, host government agreements offer a means to tailor to specific projects and to create direct contractual privity between a project or its Lenders and the host government. If a host government breaches its obligations under a stabilization agreement, the beneficiaries would have a contractual claim directly against the host government. While this can be difficult to enforce, many host governments, depending on the importance of the project's development to the country, will waive their rights of sovereign immunity in order to permit the beneficiaries to enforce the stabilization agreement against the government, either locally, or abroad. Unless a host

government has significant assets abroad, the most valuable judgment will be one enforceable locally. Therefore, whether the host country has a truly independent judiciary will have a strong bearing on the ability to prosecute successfully a claim for the breach of a stabilization agreement.

Finding measures beyond third-party insurance for political risk events to insulating against risks such as expropriation or change in law poses a considerable challenge for international projects. Although stabilization agreements can help establish expectations based on adherence to contractual obligations, as previously discussed, those agreements can be breached. Accordingly, Sponsors often explore other ways to mitigate political risk. Incentivizing a host government by aligning its interests with the project's success often offers the best path. For instance, if a state-owned entity is also a project participant such as an Offtaker and the prices in the Offtake Agreement appear too high, the contract – or the project – is likely to come under scrutiny by the host government or a successor regime. A good example of this can be found in the famously plagued Dabhol project in Maharashtra, India, where the widespread perception that the price agreed by the prior (ousted) local government for power was simply too high led to project cancellation and litigation.

Other ways to incentivize host governments include equitable forms of profit sharing, either in the form of taxes, equity in the project, or, in the case of extractive industries, royalties or other fees associated with production. In addition, the fact that so many international project financings are structured as joint ventures with many different types of Lenders and multiple suppliers and Offtakers would serve as a form of political risk mitigation as well. It may become more difficult for a government to take an adverse action against a project if many different types of parties would be affected by the government's action. For similar reasons, including multilateral and bilateral

lending institutions as financing parties is often considered a means to minimize political risk.

13.4 Case Example: Venezuelan Heavy Oil Projects

Given that projects have long lives, even those projects whose terms and conditions seem equitable at the outset can come under review as political and economic circumstances change. In the late 1990s, the Venezuelan congress approved four separate strategic associations with different international oil consortia to develop heavy oil fields in Venezuela's Orinoco Delta region (the Orinoco Projects).[7] Each of these multi-billion-dollar projects was project-financed. At the time each of the Orinoco Projects reached its respective financial closing, the government's take, over the life of each of the projects, was estimated to be in the range of several billion dollars. Several years later, the Venezuelan congress voted to increase royalties on all new oil projects to 16.6%. The Orinoco Projects were entitled to be grandfathered from this increase, however, because the Venezuelan congress had approved an initial nine-year royalty of 1% as an incentive for the Orinoco consortia to invest in their respective projects, given the extraordinarily high capital costs entailed.

Nonetheless, by 2004, with oil prices significantly above the low-mid US$20 per barrel range forecast when the projects closed, the Chavez government announced that it would unilaterally apply the 16.6% royalty rate on the four Orinoco Projects as well because rising oil prices had ostensibly offset the high capital costs attributable to the projects. In addition, the Orinoco Projects had been initially granted a preferential tax rate of 34%, but the Venezuelan government subsequently raised the preferential tax rate. In 2007, the government went one step further, enacting the Hydrocarbons Organic Law, which significantly reversed the special policies put in place in the

[7] The four Orinoco Projects and their Sponsors are as follows: **Petrozuata** (ConocoPhillips (50.1%), PDVSA (49.9%)); **Hamaca** (ConocoPhillips (40%), Chevron (30%), PDVSA (30%)); **Sincor** (Total (47%), PDVSA (38%), Statoil (15%)); **Cerro Negro** (ExxonMobil (42%), PDVSA (42%), Veba Oel (16%)).

1990s and required all Orinoco Projects to become joint ventures with the Venezuelan national oil company, Petróleos de Venezuela S.A. (PDVSA). Any Orinoco Projects that refused to enter into these joint venture arrangements were expropriated. ConocoPhillips and ExxonMobil ultimately refused the joint venture arrangements and lost their rights. ConocoPhillips sued Venezuela in arbitration at the International Centre for Settlement of Investment Disputes and, after six years of protracted arbitration, won its dispute in 2013.

When these projects were initially analyzed by U.S. credit rating agencies, the prevailing view was that the Orinoco Projects were strategic for Venezuela and that the government would be deterred from interfering with them because doing so would impair Venezuela's future ability to access international capital markets and attract foreign investment into its oil sector. Nevertheless, the dramatic shift in the oil market over the decade since the projects' inception created perverse incentives for Venezuela. The Venezuelan government believed that high oil prices gave it the ability to gain economic leverage to the detriment of the Sponsors, without attracting a full-blown legal battle. This strategy was partially successful with certain Sponsors but unsuccessful with others. Venezuela's reputation has seriously eroded since 2007 as a result of its actions, and may be partially responsible for foreign direct investment into Venezuela being in the range of only $3.2 billion in 2012. These grave consequences for Venezuela are small consolation, however, to the investors and lenders into the projects detrimentally impacted by the government's actions.

13.5 Political Risk Insurance

In addition to expropriation claims that can be brought under international law, a variety of insurance products exist to cover not only expropriation events, but currency risk and political violence as well. Political risk insurance, like most forms of insurance, is expensive and subject to many exclusions. In seeking political risk insurance, one must take care to tailor the

policy as closely to the anticipated risk as possible. In many cases, the pressure to obtain political risk insurance for a project arises less due to the concerns of the Sponsor (who is willing to limit its losses to its nonrecourse equity investment in the project), and more due to financing considerations. Often the financing parties insist on covering their loans with political risk insurance over the cost objections of Sponsors. In the case of a typical project financing that is highly leveraged, one can readily see why: Lenders, and not Sponsors, bear most of the political risk during the initial years of the project, once the project has been completed.

Political risk insurance used to be dominated by multilateral and bilateral institutions. In recent years, however, political risk policies have increasingly been offered by private insurers as well. In addition, bilateral agencies have begun to offer more complex political risk insurance products in order to keep pace with the changing profile of financing sources, such as capital markets investors that provide financing to projects. Until several years ago, political risk insurance was only available to protect equity investors and commercial bank Lenders. However, with the growing use of project bonds, many insurers developed policies to enhance bonds issued by emerging market issuers, such as project companies, to U.S. investors. A good example of this is the capital markets political risk insurance policy offered by the former U.S. Overseas Private Investment Corporation (OPIC), now known as U.S. International Development Corporation (DFC).

The OPIC capital markets policy covered currency inconvertibility and transfer risk. The limit of OPIC coverage was US$200 million; however, OPIC generally limited its exposure in any one country under each form of coverage to up to 15% of its aggregate exposure. One of the benefits of the policy was that OPIC was willing to provide coverage for up to twenty years. Unlike many other forms of political risk insurance, such a long time period pairs well with the long-term amortization of many project bonds. Like most policies, there

are waiting periods that must elapse before claims can be made: sixty successive days in the case of a currency inconvertibility or transfer event, and 180 successive days in the case of an expropriation event. Making a claim under a political risk policy requires the careful application of legal analysis and observance of procedural rules. The timeline in Figure 3 reflects the typical claims process under a political risk.

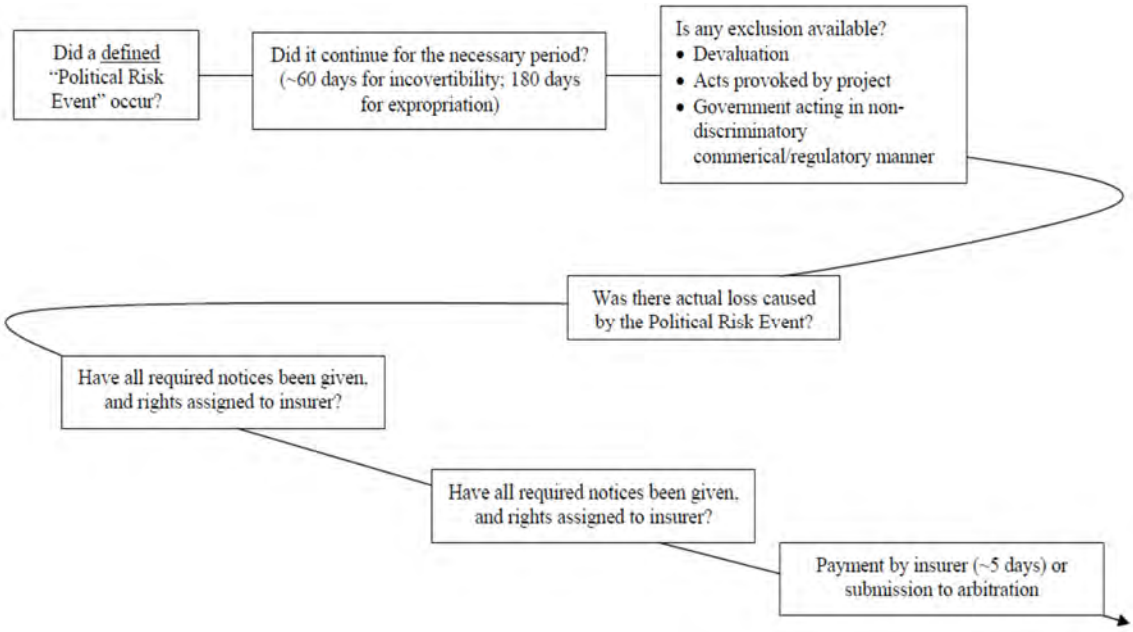

Figure 3

Political Risk Insurance Claim Process and Timeline

insurance policy (not just the OPIC capital markets policy). Collecting on an insured political claim through the process illustrated can take more than one year.

13.6 Limitations

Many legal innovations developed in the field of international project finance rest on the assumption that project parties can allocate risks through contract. The unique risks in international projects, however, are often inherently political in nature. Although political risks can be allocated or mitigated in a project, the ultimate solution will likely come through an accommodation with the host government. While international finance communities can often exercise influence over host governments, the ability to contractually allocate or shift political risk is limited. The best form of political risk mitigation for Sponsors is a well-structured nonrecourse project that enables a Sponsor to limit its liability and investment to its equity in the project, while creating fundamental incentives for the host government to fulfill its contractual obligations even as political and economic conditions dramatically change over time.

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CHAPTER 14

Export Credit Agencies; Bilateral and Multilateral Institutions

This chapter discusses the role that bilateral and multilateral finance institutions may play in a project financing. It discusses the differences between the different types of organizations and the pros and cons of including these institutions in a financing plan. It concludes with case examples of the role that public financing agencies played in two recent landmark cross-border pipeline project financings.

14.1 Rationale to Include ECAs and MLAs

If a project is being developed or financed in an environment that presents political risk, public sources of finance may often be desirable, or in some cases, the only sources willing to bridge a financing gap that cannot be overcome by private sources such as commercial banks or capital markets investors. Where there are looming political risks in a project, private financing sources may view multilateral lending agencies (MLAs) and export credit agencies (ECAs) as stabilizing factors, and will not lend for the tenors required for project financings without the participation of one or more of these agencies. In this way, MLA and ECA participation effectively increases the amount that private sources are willing to lend to projects. Additionally, ECA loans typically have a greater amortization period than commercial bank loans and this can help increase a project's leverage.

The participation of multilateral lending agencies, bilateral lending agencies and export credit agencies is considered to minimize, if not eliminate, the likelihood of potential adverse acts by a host government. This is because a host government is viewed as being unlikely to interfere with a project or to repudiate an agreement when the World Bank, for example, has an interest in the agreement being repudiated. The conventional wisdom is that the participation of an MLA is a sufficient deterrent because the consequences of acting against a project could mean that the host country may have greater difficulty accessing the international financial markets in the future. This theory is explored in greater detail below in the context of the discussion of recent developments in the Chad-Cameroon pipeline project.

A. Differences Between MLAs and ECAs

A major difference between bilateral lending agencies (which include ECAs) and MLAs is their mission: bilateral agencies primarily exist to promote the export of goods or services that are obtained from the agency's country of origin, whereas an MLA's mission is broader in scope and is focused on promoting development and economic growth. MLAs are organized and funded by a group of countries and may have a global or regional focus. Bilateral lending agencies are organized by individual nations and are funded by their organizing governments and the revenues generated from their operations. In addition, because of each ECA's mandate to promote its host country's goods or services, there are many technical requirements for projects that obtain export credits. For instance, ECA involvement will mean that there will be heightened verification procedures for obtaining accurate information on the country of origin of goods and services used in the project. When determining the "origin of goods and services," this usually means not only the country where the invoice is issued or the nationality of the subcontractor, but where the goods are produced or manufactured as well.

A list of bilateral and multilateral agencies and their common acronyms is found in Appendix A. Each of these sources provides an array of financing products commonly seen in project financings, such as loans, loan guarantees, interest rate support, and political and commercial risk insurance.

14.2 World Bank Group and OECD Guidelines for ECAs

Describing all of the financial products offered by the myriad of public project finance sources is beyond the scope of this section. Because the World Bank Group is the largest MLA and a frequent participant in international projects, however, the various World Bank Group agencies and their missions are described below. In addition, the OECD consensus guidelines that many ECAs abide by in the projects to which they lend are also described.

A. World Bank Group

The World Bank Group consists of five closely associated institutions:

- *International Bank for Reconstruction and Development (IBRD)*: Focuses on middle income and creditworthy poor countries.
- *International Development Association (IDA):* Focuses on the poorest countries in the world. The IDA and the IBRD are owned by 184 member countries.
- *International Financial Corporation (IFC):* Focuses on private sector investment in developing countries. The IFC is the largest multilateral source of loan and equity financing for private sector projects in the developing world and is owned by 178 member countries. The IFC normally arranges two types of loans that are frequently seen in project financings: "IFC-A" and "IFC-B" loans. In both cases, the IFC is the Lender of record, however, IFC-B loans are syndicated to participating financial institutions.
- *Multilateral Investment Guarantee Agency (MIGA):* Promotes foreign direct investment in developing countries by providing investment guarantees to the private sector that insure against political risks.
- *International Center for Settlement of Investment Disputes (ICSID):* Does not provide finance. It provides facilities for the settlement, by conciliation, arbitration, or both, of investment disputes between member countries and foreign investors. All of ICSID's

member countries are members of the World Bank. Most dispute resolution procedures in bilateral investment treaties and free trade agreements are submitted to ICSID.

B. OECD Consensus Guidelines

Although each country with an ECA supports and Sponsors that particular agency, most ECAs abide by the OECD's "Arrangement on Guidelines for Officially Supported Export Credits" (Consensus Guidelines). The Consensus Guidelines were originally adopted in 1978.[8] Their purpose is the operation of an orderly credit market and to prevent countries from competing to offer the more favorable financing terms than competitor ECAs. Generally, the Consensus Guidelines limit the terms and conditions of ECA lending (for example, minimum interest rates, risk fees and maximum repayment terms) and include procedures for prior notification, consultation, information exchange, and review of ECA lending when a proposed financing deviates from the Consensus Guidelines. Since 1978, the Consensus Guidelines have been periodically updated, most recently in January 2014. The revised text contains new provisions applicable to project financings, summarized in Table 2 below.

The terms and conditions summarized above do not purport to be a comprehensive summary of ECA terms and conditions applicable to all project financings. In addition to the terms and conditions summarized above, the Consensus Guidelines contain other terms and provisions that are applicable to all ECA credits, including project financings. In addition, it is possible for ECAs to deviate from the Consensus Guidelines on any given project, so long as the ECA wishing to deviate from the Consensus Guidelines complies with the detailed notice requirements set forth in the Consensus Guidelines.

[8] Countries with ECAs that have adopted the Consensus Rules are: Australia, Canada, the European Community, Japan, Korea, New Zealand, Norway, Switzerland and the United States.

Table 2

OECD Terms and Conditions Applicable to Project Finance Transactions

Term	Condition
Tenor	• 14 years, maximum (generally)
Principal Amortization: Size of Installments	• Not to exceed 25% of original principal amount within a 6-month period
Principal Amortization: Frequency	• First repayment no later than 24 months after starting point of credit • No less than 2% of original principal amount to be repaid 24 months after starting point of credit
Principal Amortization: Weighted Average Life	• Not to exceed 7.25 years (generally)
Interest Payments: Frequency	• No less frequently than every 12 months • First payment date no later than 6 months after starting point of credit
Interest Rate: Fixed Rate Loans less than 12 years	• Base rate is an applicable government bond yield most closely matching the maturity of the fixed rate loan • Margin is Base Rate + 100 basis points (the "Commercial Interest Reference Rate" or "CIRR")
Interest Rate: Fixed Rate Loans greater than 12 years	• CIRR + 20 basis points

14.3 Case Example: West African and Caspian Cross-Border Pipeline Projects

Two landmark cross-border pipeline project financings illustrate the role that ECAs and MLAs may play in a politically risky project financing. These are the US$2 billion Chad-Cameroon pipeline (closed in 2001) and the US$3.6 billion Baku-Tbilisi-Ceyhan (BTC) pipeline (closed in 2004).

A. Chad-Cameroon Pipeline

The Chad-Cameroon pipeline offers an interesting case example because its principal purpose was to include MLA and ECA participation in the financing for the protection it enabled, and not to bridge a financing gap. In addition to IBRD and European Investment Bank (EIB) loans to the Chad and Cameroon

governments to support their equity contributions to the project, the debt financing was limited to US$600 million: two loans of US$100 million each from the IFC (A and B loans) and two ECA tranches of US$200 million each. The overall debt portion of the financing represented only 30% of the total project costs. In addition, the Sponsors obtained political risk cover during both the pre-completion and post-completion stages.

The necessity of attracting capital and rents from the pipeline to the Chad government, then rated as one of the world's most corrupt, gave the World Bank the leverage to demand greater transparency of oil revenues and to use such revenues for social purposes as a condition to World Bank participation: as originally structured, 10% of the revenues would be held in trust for future generations and 80% of the remaining revenues would be devoted to education, health and social services. However, in December 2005, Chad's parliament approved a law with the strong backing of its president to repudiate its agreement with the World Bank over the management of oil revenues, including abolishing the fund for future generations. The World Bank's response was to halt all new loans to Chad and suspend US$124 million already approved for lending to Chad. In addition, the World Bank ordered the London-based escrow accounts into which royalties attributable to project profits are to be paid to be frozen. Chad responded by threatening foreign oil and gas producers operating in Chad with increased fees and royalties. After a flurry of diplomacy, the World Bank and Chad finally settled the dispute by renegotiating the percentage of revenues to which the government had access.

As previously discussed, one of the key reasons that the Sponsors sought World Bank participation on the project was to obtain the protection such participation could bring to the project. Although the government of Chad did not threaten to expropriate the project or to alter the financial terms by which the Sponsors earn a return on their investment, World Bank officials were publicly quoted as saying that Chad's modification of the World Bank oil

revenue management law constituted a "material breach" of its loan agreement. The actions by the Chad government triggered a strong response from the World Bank – halting future loans and potentially depriving Chad of royalties from the project. Despite the Bank's robust response this situation presents a challenge to conventional wisdom: the mere presence of the World Bank as a project participant was not sufficient to deter the Chadian government from taking a materially adverse position to the World Bank with respect to the project.

B. Baku-Tbilisi-Ceyhan (BTC) Pipeline

In contrast to the Chad-Cameroon financing, in the BTC financing, MLA and ECA participation enabled the Sponsors to borrow substantial amounts that would not likely have otherwise been available. With the exception of US$923 million of Sponsor senior loans to the project company, approximately 65%, or US$1.7 billion out of BTC's US$2.6 billion of project debt was either tied to or covered by MLA and ECA funding.[9] Put another way, the principal reason for involving the MLAs and ECAs in the BTC financing was to increase the amount of debt financing.

Although the BTC pipeline reached financial close successfully, such concentrated ECA involvement was not without tremendous logistic challenges for the Sponsors. For instance, as previously noted, ECA credits must be tied to eligible goods and services. A key principal in multisource project financings is that commercial Lenders desire for the ratio of their credit extensions to remain balanced with credit extensions by ECAs, and among the ECAs, no one ECA should advance more than its pro rata share of credit. Coordinating the

[9] Stewart Robertson & Craig Jones, *How Sponsors Financed the First Caspian Pipeline to the Mediterranean*, INT'L FIN. L. REV., Mar. 2004. BTC's total project costs were US$3.65 billion. The debt, consisting of US$2.589 billion, included the following tranches: **IFC/EBRD/A/B loans** (US$500 million); **ECA loans** (JBIC, NEXI, US Exim, ECGD, Hermes, Coface and SACE) (US$766 million); **Japan Bank for International Cooperation** (JBIC) overseas investment loan (US$300 million); **Overseas Private Investment Corporation (OPIC)** covered loans (US$100 million); **Sponsor senior loans** (US$923 million).

drawdowns under BTC's multiple tranches of ECA and commercial (covered) bank debt required care in taking all this into account, while at the same time ensuring that project costs being reimbursed by drawdowns under ECA facilities matched the timing of production, shipment and delivery of eligible goods and services.[10]

C. Delay

Structuring a project to include MLA and ECA participation can take years. Chad-Cameroon was four years in the making (1997–2001). Planning for BTC began in 2001; it closed in 2004. Lending programs Sponsored by MLAs can involve detailed political and social reforms that are difficult to implement. Despite the recent dispute with the World Bank, Chad's oil revenue management trust accounts were originally touted as a model for future project financings. It took time for these arrangements to be worked out, however. As discussed previously, environmental due diligence and the development of social and environmental assessments can also delay a project. The World Bank began public consultations on the Chad-Cameroon project in 1993. Its environmental assessment and nineteen-volume environmental management plan were not completed until 1997 and 1999, respectively, with numerous changes during the draft stages of the documentation to meet the World Bank's requirements. On the BTC project, the IFC began its due diligence in 2001 and together with the EBRD held meetings with communities and governmental agencies in the host countries, in addition to meetings with many non-governmental organizations.

Finally, notwithstanding the Consensus Guidelines, the lending policies among the myriad of ECAs active in the project finance market still lack harmonization. Different ECAs may require the inclusion of specific clauses in supply contracts, and because ECAs only support eligible goods and services, there can be delays in finalizing a project's equipment procurement plan.

[10] John Watkins, *BTC-Reaching First Drawdown*, PROJECT FIN. INT'L, Sept. 29, 2004, at 48.

Several ways to limit delay when dealing with an ECA include liming the number of EPC Contractors and subcontractors involved, and where possible, limiting the number of ECAs involved in a given project.

14.4 Conclusion

MLAs and ECAs, with their unique ability to absorb political risk, are often the only sources able to fill financing gaps in project financings in countries that present political risk and have low sovereign credit ratings. The need for ECAs and MLAs to bear a portion of this risk is not just driven by risk adversity on the part of commercial sources. Bank regulatory considerations such as capital adequacy requirements also limit the exposure that different commercial financial institutions can afford in non-OECD countries. As a result, Sponsors will likely need the participation of MLAs, ECAs, or both, when they seek project finance in countries or regions that pose political risk concerns.

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Appendix A

MULTILATERAL AND BILATERAL AGENCIES

Multilateral Sources

Multilateral Lending Agency	Acronym
The World Bank	IBRD
International Finance Corporation	IFC
Multilateral Investment Guarantee Agency	MIGA
African Development Bank	AfDB
African Development Fund	ADF
Arab Fund for Economic and Social Development	AFESD
Asian Development Bank	ADB
Arab Bank for Economic Development in Africa	BADEA
European Bank for Reconstruction and Development	EBRD
European Investment Bank	EIB
Inter-American Development Bank	IADB
Nigeria Trust Fund	NTF
Nordic Development Fund	NDF
Nordic Investment Bank	NIB
OPEC Fund for International Development	OFID

Bilateral Sources

Country of Origin	Bilateral Lending Agency or ECA	Acronym
Australia	Australian Agency for International Development	AusAID
Australia	Export Finance and Insurance Corporation	EFIC
Austria	Directorate General for Development Cooperation	DGDC
Austria	Austrian Export Credit Agency	OEKB
Belgium	Belgian Administration for Development Cooperation	BADC
Belgium	Office National du Ducroire	OND
Canada	Canadian International Development Agency	CIDA
Canada	Export Development Corporation	EDC
Denmark	Danish International Development Assistance	DANIDA
Denmark	Export Credit Council	EKR
Finland	Department of International Development Cooperation	DIDC
Finland	FINFUND	-
Finland	Finnish Export Credit Ltd.	FEC
Finland	Finnish Guarantee Board	VTL
France	Compagnie Française d'Assurance pour le Commerce Extérieur	COFACE
France	Caisse Française de Développement	CFD
France	Fonds d'Aide et de Coopération	FAC
Germany	Bundesministerium für Wirtschalftliche Zusammenarbeit und Entwicklung	BMZ
Germany	Deutsche Finanzierungsgesellschaft für Beteiligungen in Entwicklungsländern GmbH	DEG

Country of Origin	Bilateral Lending Agency or ECA	Acronym
Germany	Deutsche Gesellschaft für Technische Zusammenarbeit	GTZ
Germany	Kreditanstalt für Wiederaufbau	KfW
Germany	Hermes Kreditversicherungs AG	Hermes
Italy	Istituto Centrale per il Credito a Medio Termine	Medio Credito Centrale
Italy	Ministero delgi Affari Esteri - Direzione Generale per la Cooperazione allo Sviluppo	DGCS
Italy	Sezione Speciale per l'Assicurazione del Credito all'Esportazione	SACE
Japan	Japan Bank of International Cooperation	JBIC
Japan	Japan International Cooperation Agency	JICA
Japan	Overseas Economic Cooperation Fund	OECF
Korea	Export-Import Bank of Korea	KExim
Kuwait	Kuwait Fund for Arab Economic Development	-
The Netherlands	Nederlandsche Credietverzekering Maatschappij N.V.	NCM
Norway	Eksportfinans ASA	-
Norway	Guarantee Institute for Export Credits	GIEK
Norway	Norwegian Agency for Development Cooperation	NORAD
Portugal	Fund for Economic Cooperation	FCE
Portugal	Institute for Portuguese Cooperation	INCOOP
Saudi Arabia	Saudi Fund for Development	SFD
Spain	Agency for International Cooperation	ACI
Spain	Export Credit Insurance Company	CESCE
Spain	Institute for External Trade	ICEX

Country of Origin	Bilateral Lending Agency or ECA	Acronym
Sweden	Swedish Export Credits Guarantee Board	EKN
Sweden	Swedish International Development Authority	SIDA
Switzerland	Directorate for Development Cooperation and Humanitarian Aid	DEH
United Arab Emirates	United Arab Emirates Abu Dhabi Fund for Arab Economic Development	ADFD
United Kingdom	Crown Agents	CA
United Kingdom	Commonwealth Development Corporation	CDC
United Kingdom	Department of Trade and Industry Projects and Export Policy Division	DTI
United Kingdom	Export Credit Guarantee Department	ECGD
United Kingdom	Overseas Development Administration	ODA
United States	U.S. Agency for International Development	USAID
United States	United States Export-Import Bank	USExim
United States	U.S. International Development Finance Corporation (formerly, Overseas Private Investment Corporation)	DFC (OPIC)
United States	U.S. Trade and Development Agency	USTDA