A Practical Guide to Transactional Project Finance: Basic Concepts, Risk Identification, and Contractual Considerations

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The ability of one lender, or a group of lenders acting as a syndicate, to make a single loan to finance the entire development, site acquisition, construction, and initial operation of a project offers a unique marketing advantage in the competitive financial services industry. In many cases, the large amount of capital needed to finance a project strains the ability of many corporations to borrow money and fund the equity contributions needed, just as it strains the lending levels for many banks. The need for enormous debt and capital, coupled with the risks involved in large project development, often make a project financing1 one of the few available financing alternatives in the energy, resource recovery, mining, transportation, resort, and retirement care industries.

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Editor's note: Baird C. Brown of the Pennsylvania bar served as reviewer for this article.

1. The term "project finance," or "segregated finance" as it is sometimes called, is generally used to refer to the arrangement of debt, equity, and credit enhancement for the construction or refinancing of a particular facility in a capital-intensive industry, in which lenders base credit appraisals on the projected revenues from the operation of the facility, rather than on the general assets or the corporate credit of the promoter of the facility, and in which they rely on the assets of the facility, including the revenue-producing contracts and cash flow, as collateral for the debt.

The term is sometimes applied to any financing of a particular project, whether recourse or nonrecourse, although the definition given is becoming the more accepted meaning of the term in the American legal and financial communities. It is in contrast to term lending, in which lenders analyze the loan based on historical earnings of the borrower and are satisfied with recourse to the collateral value of the borrower's assets securing the loan to ensure debt repayment. Other distinguishing factors of project finance from term lending include the high leverage of project finance debt, reliance on commitments by third parties for debt repayment in specified contingencies, and nonrecourse treatment of the project finance debt.

An example of a project financing will assist the beginning project financier in understanding the basic concepts discussed in this article.

Developer 1 owns the United States technology rights to a system that processes waste tires into chips that can be burned. The heat produced from the combustion of the tires can be used to produce steam and electricity. 1 locates a source to supply waste tires and also locates a stockpile of tires that 1 estimates will permit the facility to operate at 100% capacity for four years. 1 also locates a power company willing to execute a contract with 1 to purchase all of the power produced by 1 at attractive rates. Construction contracts, operation and maintenance contracts, a site, and all other
Project financing involves more than financing a project; “project finance” has developed as a complex financial and legal specialty, providing business with an attractive alternative to other types of financing. The flexibility of project financing ranges from small hydroelectric power projects, to shipping loans, to the construction of the English Channel tunnel (the largest project financing of this century). It is a financing option not limited to new facility construction; project financing can also be used to refinance existing facilities.

In simplest terms, project finance is nonrecourse financing predicated on the merits of a project rather than the credit of the project sponsor. The credit appraisal of the project finance lender is therefore based on the underlying cash flow from the revenue-producing contracts of the project, independent of the agreements necessary for the construction and operation of the facility are also negotiated and executed.

Banker B examines the contracts, the projections for the facility, and the regulatory environment and decides that the facility will produce sufficiently dependable revenues to service debt needed to construct the facility, while providing sufficient funds for operation and maintenance and an attractive equity return that helps ensure that the project sponsor will remain committed to project success. B enters into a project finance loan agreement with A, taking a security interest in the facility and a collateral assignment of the contracts executed for the project. The loan is nonrecourse to Developer A since Banker B is content to look only to revenues that will be paid to A by the power company for the repayment of the debt.


4. A project financing is in contrast to internal or equity financing. With internal financing, the corporate sponsor uses retained earnings or short-term debt to finance the development and construction of the facility until the project requires permanent financing, which may be financed with long-term debt, equity sales, or other corporate finance techniques. The decision to use equity financing is determined chiefly by corporate philosophy. The relevant criteria a project must satisfy to qualify for equity financing includes whether the corporation has access to the needed capital at a reasonable cost, whether the project feasibility study projects a return on investment acceptable to the project sponsor’s internal investment criteria, whether the project risks are satisfactory, and whether other types of financing provide greater advantages to the project sponsor.
project sponsor. Since the debt is nonrecourse, the project sponsor has no direct legal obligation to repay the project debt or make interest payments if the cash flows prove inadequate to service debt.

Because the ability of the project sponsor to produce revenue from project operation is the foundation of a project financing, the contracts constitute the framework for project viability and control the allocation of risks. Contracts that represent the obligation to make a payment to the project owner on the delivery of some product or service are of particular importance since these contracts govern cash flow. Each of the contracts necessary to construct and operate a project, such as the sales contract, site lease, and construction contract, must not interfere unduly with the expectation for debt repayment from project revenues. If risks are allocated in an unacceptable way from the lender's perspective, credit enhancement from a creditworthy third party is needed, such as letters of credit, capital contribution commitments, guarantees, and insurance. Also, the project finance contracts must be enforceable and have value to the lender as collateral security.

A project financing is also based on predictable regulatory and political environments and stable markets, which combine to produce dependable cash flow. To the extent this predictability is unavailable or the risks of dependability are allocated unacceptably, credit enhancement is necessary to protect the lender from external uncertainties, such as fuel supply, product market instability, and changes in law. In many instances, however, the project exists in an uncertain environment which subjects the project lender to some unallocated risks.


Confusion often exists with the meaning of the terms "take-or-pay contract" and "take-and-pay contract." A take-or-pay contract creates an unconditional obligation on the buyer to pay even if no good or service is provided by the seller. A take-and-pay contract requires the buyer to take and pay for the good or service only if delivered.

A through-put contract is a service contract that requires the purchaser to pay whether or not the service is provided. Through-put contracts are sometimes referred to as minimum "put-or-pay" or "deliver or pay" agreements. This agreement is typically used in project financings of solid waste resource recovery projects. In brief, this agreement requires a municipality to make payments for the disposal of garbage regardless of whether the municipality delivers the agreed quantities of waste.

6. The project finance documents typically anticipate regulatory problems unique to the project and the environment in which the project will exist. For example, under the Public Utility Regulatory Policies Act of 1978, Pub. L. No. 95-617, 92 Stat. 3117 (codified in scattered sections of 16 U.S.C.) ("PURPA"), certain "qualifying facilities" are exempt in whole or in part from provisions of the Federal Power Act, 16 U.S.C. §§ 791a–825r (1982), the Public Utility Holding Company Act, 15 U.S.C. §§ 79–79z-6 (1982), and state utility regulation of rates, finances, and organization, 16 U.S.C. § 824a-3(e) (1982). If a facility that is exempt from regulation pursuant to PURPA temporarily loses a steam purchaser that the facility is required to have to satisfy regulatory requirements, such a loss could cause the facility to violate the regulatory requirement that at least 5% of a qualifying cogeneration facility's total energy output be useful thermal output in any calendar year. 18 C.F.R. § 292.205(a)(1) (1988). The Federal Energy Regulatory Commission has never determined whether or not it would revoke qualifying facility status if a steam
The topic of this article is the practical considerations for project finance counsel, lenders, loan participants, project sponsors, equity investors, and other project finance participants when structuring a project financing and drafting, negotiating, or reviewing documents for use in the financing. This article is organized into five parts: (i) an introduction to project finance, including risk identification, risk allocation considerations, and credit enhancement; (ii) an explanation of the value of project finance contracts as a credit support; (iii) the impact of governmental regulation and other governmental actions on project finance contracts; (iv) bankruptcy in a project financing; and (v) general considerations relating to drafting and reviewing project finance documentation.

**PROJECT FINANCING AS A FINANCING METHOD**

All project financings have nearly identical fundamental elements. Debt, in the form of traditional term notes, bonds, or subordinated notes from the project sponsor or other project participants is, of course, the most common element. Collateral security is similarly present in the form of assignments of the project revenues to support the underlying debt obligations. Also, various types of credit enhancement from the project sponsor or third parties are included to support the risk allocation. The precise structure selected is dependent upon a range of variables, influenced in large part by project viability and the goals of the project sponsor.

**ADVANTAGES OF PROJECT FINANCE**

Project financing is used by companies that desire any or all of several objectives. Established, well-capitalized corporations often select a project finance structure to assist in undertaking large debt commitments with a minimum of risk. Entrepreneurial developers rely on project financing to permit development of several projects in different geographic areas, each based on the merits of the project, independent of the financial obligations of the other projects, and with minimal equity requirements. These objectives, which are discussed in detail in the following sections, include (i) elimination of, or limitation on, the recourse nature of the financing of a project, (ii) off-balance-sheet treatment of debt financing, (iii) leverage of debt to avoid dilution of existing equity, (iv) avoidance of restrictive covenants in other debt or equity arrangements that would otherwise preclude project development, and (v) arrangement of attractive debt financing and credit enhancement, available to the project itself, but which is unavailable to the project sponsor as a direct customer is lost. The Commission has stated, however, that the status will not be revoked without a hearing. 45 Fed. Reg. 17,971 (1980). The risk in a project financing of a cogeneration project is that if a steam customer for the project is lost, the regulatory exemption of the facility from utility regulation could be in jeopardy, and the regulatory framework on which the financing is based could be undermined, subjecting the project to uncertain risks.

7. P. Nevitt, supra note 2, at 4–6.
8. Id. at 6.
The advantages that result from a project financing differ according to the unique nature of each project, its characteristic risks, capital needs, capital access, and motives.

**Nonrecourse Debt Financing**

Classic nonrecourse project financing provides a structure that does not impose upon the project sponsor any obligation to guarantee the repayment of the project debt if the project revenues are insufficient to cover principal and interest payments. The nonrecourse nature of a project financing provides financial independence to each project owned and protection of the sponsor's general assets from most difficulties in any particular project. A typical nonrecourse project finance loan provision provides that no recourse is available against the sponsor or any affiliate for liability to the lender in connection with any breach or default, except to reach project collateral. Thus, the lender relies solely on the project collateral in enforcing rights and obligations in connection with the project finance loan.

The nonrecourse nature of the debt in a project financing need not extend throughout the term of the financing. For example, a project financing may be structured to provide recourse liability to the project sponsor during a limited

9. See generally id. at 4–34.

10. The terms “nonrecourse” and “limited recourse” are sometimes used interchangeably. Regardless of nomenclature, a project financing is recourse to the project sponsor only to the limited extent of liability for fraudulent representations made in connection with the financing. See generally 12 S. Williston, A Treatise on the Law of Contracts §§ 1486–1509 (3d ed. 1970 & Supp. 1988).

An example of a nonrecourse loan provision for use in a loan agreement signed by the project sponsor and the actual project owner is reproduced below:

The [Project Sponsor] shall not be personally liable for payment of the amounts evidenced by the Note executed by the Borrower. Nothing contained herein, however, shall (i) preclude the Lender or any holder of the Notes from exercising any right or enforcing any remedy under this Agreement, or the Note, whether upon an Event of Default or otherwise, under this Agreement, the Note, or any other collateral hereunder or furnished as security for any of the indebtedness evidenced by the Note, or (ii) limit the [Project Sponsor's] liability hereunder in respect of any damages suffered by the Lender as a result of any inaccuracy of any representation in this Agreement or as a result of any fraudulent conduct on the part of the [Project Sponsor].

The nonrecourse provision is also a part of project finance documents other than loan documents. An example follows:

Any claim against the Owner [actual project owner] that may arise under this Agreement shall be made only against, and shall be limited to the assets of, the Owner, and no judgment, order or execution entered in any suit, action or proceeding thereon shall be obtained or enforced against any partner of the Owner or the assets of such partner or any incorporator, shareholder, officer or director of the Owner or such partner or against any direct or indirect parent corporation or affiliate or any incorporator, shareholder, officer or director of any thereof for any purpose of obtaining satisfaction of any payment of any amount arising or owing under this Agreement.
period of the project development. Under that structure, if a new technology is used in a project, the project sponsor’s full recourse liability for the debt could be limited to the construction period. Thereafter, if the technology satisfies minimum performance tests, the lender could release the project sponsor from recourse liability and shift the risk from the assets of the project sponsor to the project assets.\textsuperscript{11}

\textbf{Off-Balance-Sheet Debt Treatment}

A second objective of some project financings is the potential for using off-balance-sheet accounting techniques for project commitments.\textsuperscript{12} From the perspective of the project sponsor, accounting rules generally require the consolidation of financial statements of a company and certain of its subsidiaries and other entities over which it can exercise control. A subsidiary that is controlled more than fifty percent by the parent company is consolidated on a line by line basis with the parent. Otherwise, the equity method of accounting is used, whereby the investment in the subsidiary is shown as a one-line entry. Debt in such circumstances is not reported on the parent company’s financial statements.\textsuperscript{13}

\textsuperscript{11}A conceptual difficulty sometimes arises in project financings when the project sponsor agrees to act as the operator of the project financed. In that circumstance, although the underlying project finance loan is typically nonrecourse to the project sponsor in concept, liability may nonetheless arise from operating guarantees undertaken in the operating agreement.


In 1987, the Financial Accounting Standards Board (“FASB”) issued Statement No. 94, Consolidation of All Majority-Owned Subsidiaries, which is effective for financial statements for fiscal years ending after December 15, 1988. The statement requires a company to consolidate financial information on all majority-owned subsidiaries in its own financial statements, even if those subsidiaries have operations that are different (“nonhomogenous”) from the parent, have a large minority ownership interest, or are subject to substantial foreign restrictions. The statement requires consolidation of financial statements unless control of the subsidiary is temporary or the majority owner does not have control of the subsidiary (i.e., where the subsidiary is in legal reorganization or bankruptcy). Also, the statement requires that summarized information about the assets, liabilities, and results of operations (or separate statements) of previously unconsolidated majority-owned subsidiaries continue to be provided after those subsidiaries are consolidated. Consolidation of All Majority-Owned Subsidiaries, Statement of Financial Accounting Standards, No. 94, Fin. Accounting Standards Bd. (1987).
Highly Leveraged Debt

A third objective of project finance sponsors is the ability to finance a project using highly leveraged debt without a dilution of existing equity. The amount of leverage acceptable to a lender varies from project to project. Often the leverage percentage is between seventy-five and eighty percent, but transactions are sometimes structured with ratios between ninety and one hundred percent. The amount of the equity contribution required of the project sponsor is influenced by many factors, including the project economics and whether any other project participants, such as the contractor or equipment supplier, invest equity in the project.

Avoidance of Restrictive Covenants in Other Transactions

A fourth reason for selecting a project financing is that the structure permits a project sponsor to avoid restrictive covenants, such as debt coverage ratios, in existing loan agreements and indentures. Since the project financed is separate and distinct from other operations and projects of the sponsor, existing restrictive covenants do not typically reach to the project financing. Similarly, the distinct nature of the project financed permits the sponsor to leverage debt to an extent that may be prohibited under existing agreements.

Favorable Financing Terms

A project financing is selected in many circumstances because more attractive interest rates and credit enhancement are available to the project than are otherwise available to the project sponsor. A credit appraisal of an individual project is sometimes more favorable than a credit appraisal of the project sponsor. Thus, a more attractive risk profile can result in more favorable interest rates and lower credit enhancement costs.

Internal Capital Commitment Policies

The rate of return goals of the project sponsor for new capital investments can also make project financing attractive. Companies that typically establish goals for rates of return generated from a proposed capital investment often determine that the return on a project investment is improved with a project.
financing, which permits highly leveraged debt financing with a minimum of equity commitment.

**DISADVANTAGES TO A PROJECT FINANCING**

Project financings are complex transactions involving many participants with diverse interests. Risk allocation tensions exist between the lender and sponsor regarding the degree of recourse for the loan, between the contractor and sponsor concerning the nature of guarantees, and so on, resulting in protracted negotiations and increased costs to compensate third parties for accepting risks.

In addition to third party project participants, the degree of risk for the lender in a project financing is not insignificant. Although by definition and law a bank is not an equity risk-taker, many project financing risks cannot be effectively allocated, nor can the resultant credit risk be enhanced. This high risk scenario results in higher fees charged by lenders for the transaction than are charged in other types of transactions;\(^{15}\) it also results in an expensive process of due diligence that is conducted by the lender’s counsel.

Similarly, interest rates charged in project financings are typically higher than on direct loans made to the project sponsor.\(^ {16}\) Also, although some economies are achieved because only one lender, acting as the agent bank, and one lender’s counsel are involved, the documentation is complex and lengthy. The complexity results in higher transaction costs than is typical of traditional asset-based lending.\(^ {17}\)

Another disadvantage of a project financing is the degree of supervision that a lender will impose on the management and operation of the project.\(^ {18}\) This obligation is incorporated into the project loan agreements, which require the sponsor to satisfy certain tests, such as debt service and operating budget, and comply with various covenants, such as restrictions on transfer of ownership and management continuity.

**SELECTING A PROJECT FINANCE BORROWER**

The type of borrowing entity for a project financing has an impact on the drafting and negotiation of the documentation and the regulatory permitting process. For example, permits granted to the project sponsor and later transferred to a partnership organized as a means for equity infusion to the project may no longer be valid in some jurisdictions since the ownership of the project has changed. Also by example, a contract that prohibits assignment may preclude a later transfer to a limited partnership that is organized as a vehicle

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18. The lender will nonetheless avoid any control of the borrower that would transfer the position of the lender from that of a creditor to one of equity investor. See generally Lundgren, *Liability of a Creditor In a Control Relationship With Its Debtor*, 67 Marq. L. Rev. 523 (1984) (instrumentality theory); Restatement (Second) of Agency § 14 (1957) (agency theory).
for transfer of tax benefits. The significant factors that are considered in determining the ownership structure for a project financing include whether there is a need for a relatively high proportion of equity to debt, the grade of investment, the tax appetite of the participants, the concern with management of the project, accounting rules, credit impact, and the transferability of equity interests in the project.

The single purpose corporate subsidiary is perhaps the most common project financing structure. In this structure, the sponsor incorporates an entity, typically wholly-owned, solely to develop, construct, own, operate, and maintain a particular project at a specific site.\(^{19}\)

19. Project finance sponsors that select the special purpose corporate subsidiary structure for a project financing must be cognizant of the impact that selection has on the corporate identity of the subsidiary. The nonrecourse nature of the financing does not necessarily extend to other areas beyond the scope of the financing documents. This may arise where an injured party seeks to disregard the corporate identity of the special purpose subsidiary and sue the parent directly for damages in personal injury or breach of contract actions. "Piercing the corporate veil," a state law equitable remedy, is applied by courts to rectify injustice caused by a perceived abuse of the corporate form. To determine whether the doctrine applies, courts consider whether the parent and subsidiary are viewed and treated internally by officers and directors, and externally by the public or parties dealing with these entities, as separate.

Generally, a corporate entity will be recognized as such unless the interests of justice require otherwise. *E.g.*, United States v. Milwaukee Refrigerator Transit Co., 142 F. 247, 255 (E.D. Wis. 1905). The seminal three-prong test of Lowendahl v. Baltimore & O.R.R., 247 A.D. 144, 287 N.Y.S. 62 (App. Div.), aff'd, 272 N.Y. 360, 6 N.E.2d 56 (1936), requires proof of the following to pierce the corporate veil: control, not mere majority or complete stock control, but complete domination, not only of finances, but of policy and business practice in respect to the transaction attacked so that the corporate entity as to this transaction had at the time no separate mind, will, or existence of its own; such control must have been used by the defendant to commit fraud or wrong, to perpetrate the violation of a statutory or other positive legal duty, or a dishonest and unjust act in contravention of plaintiff's legal rights; and the control and breach of duty must proximately cause the injury or unjust loss complained of. *Id.* at 157, 287 N.Y.S. at 76. Some courts have condensed the Lowendahl formula into a two-prong test. In Automotriz del Golfo de California S.A. v. Resnick, 47 Cal. 2d 792, 796, 306 P.2d 1, 3 (1957), the court required: "(1) that there be such unity of interest and ownership that the separate personalities of the corporation and the individual no longer exist and (2) that, if the acts are treated as those of the [subsidiary] alone, an inequitable result will follow."

The first requirement, the control or instrumentality test, is addressed by determining whether the corporate subsidiary is merely an instrumentality of the dominant corporation. Factors for determining if one corporation is the instrumentality of another include whether the parent corporation owns all or most of the capital stock of the subsidiary; the parent and subsidiary corporations have common directors or officers; the parent corporation finances the subsidiary; the parent corporation subscribed to all the capital stock of the subsidiary or otherwise causes its incorporation; the subsidiary has grossly inadequate capital; the parent corporation pays the salaries and other expenses or losses of the subsidiary; the subsidiary has substantially no business except with the parent corporation or no assets except those conveyed to it by the parent corporation; in the papers of the parent corporation or in the statements of its officers, the subsidiary is described as a department or division of the parent corporation, or its business or financial responsibility is referred to as the parent corporation's own; the parent corporation uses the property of the subsidiary as its own; the directors or executives of the subsidiary do not act independently in the interest of the subsidiary but take their orders from the parent corporation in the latter's interest; and the formal legal requirements of the subsidiary are observed.
A general partnership structure for a project financing is selected less often since all partners must be willing to assume the associated joint and several liability resulting from any negligent operation of the project financed. When the partnership form is selected, the motivation is typically that the project sponsor has inadequate equity, all partners have similar tax positions, or all partners desire participation in project management and control.

Generally, ownership of all of the stock of the subsidiary by the parent and existence of common directors or officers is insufficient to find that the subsidiary is in control of the parent. E.g., Luckett v. Bethlehem Steel Corp., 618 F.2d 1373 (10th Cir. 1980). Similarly, mere supervision by one corporation over another has not been sufficient to justify disregarding the corporate entity. E.g., American Trading and Prod. Corp. v. Fischbach & Moore, Inc., 311 F. Supp. 412, 415 (N.D. Ill. 1970) (review of loan documents and guarantee of financial arrangements insufficient to pierce corporate veil).

Before the corporate veil is disregarded, courts require some showing of injustice in addition to finding that a corporation is a mere instrumentality of another. E.g., Fidelity & Deposit Co. of Md. v. USAFORM Hail Pool, Inc., 523 F.2d 744, 758 (5th Cir. 1975), cert. denied, 425 U.S. 950 (1976). Fraud need not be shown, however. E.g., DeWitt Truck Brokers v. W. Ray Fleming Fruit Co., 540 F.2d 681 (4th Cir. 1976).

"Improper conduct" can also satisfy the injustice prong of the test. Conduct held to be improper includes: inadequate capitalization; payment of excessive dividends, sale of products to the shareholder at a reduced price, or exacting unreasonable management charges; misrepresentation, commingling, and not holding out to the public that the enterprises are separate; and evading federal or state regulations through the use of wholly-owned subsidiaries. Amfac Foods, Inc. v. International Sys. & Controls Corp., 294 Or. 94, 654 P.2d 1092 (1982); but see Consumer's Co-op of Walworth County v. Olsen, 142 Wis. 2d 465, 419 N.W.2d 211 (1988) (under-capitalization insufficient by itself to justify piercing).

Some courts require satisfaction of the third prong, or proximate cause requirement, of the test. This requires a showing that an act by the parent, through its subsidiary, served to directly wrong the plaintiff. In most cases, this is subsumed in the second prong of the test.

In contract cases, the injustice test is difficult for a plaintiff to satisfy, especially in a project financing where a plaintiff voluntarily entered into a contract with a subsidiary while fully aware of the subsidiary's financial and corporate status. See sample loan provisions, supra note 10. Under these circumstances, mere under-capitalization is not enough to pierce the corporate veil. Instead, courts examine whether the corporation is adequately financed as a separate unit to meet its normal, foreseeable obligations. E.g., Labadie Coal Co. v. Black, 672 F.2d 92 (D.C. Cir. 1982) (whether capitalization is adequate is a function of the type of business in which the corporation engages); Chengelis v. Cenco Instruments Corp., 386 F. Supp. 862 (W.D. Pa. 1975), aff'd mem., 523 F.2d 1050 (3d Cir. 1975) (parent corporation held not liable under a contract the plaintiff entered with wholly-owned subsidiary since the plaintiff had negotiated with the defendant's subsidiary with full knowledge of the relationship between the two corporations and knew that the subsidiary was a wholly-owned subsidiary of the defendant; none of the contracts in question provided that the parent guaranteed or bound itself under the obligations of its subsidiary, or represented that it would support the obligations of the subsidiary).

Thus, to avoid the piercing doctrine in a project financing, business of the subsidiary should be conducted by officers or representatives of the corporation in their name or capacity as such, rather than as officers or representatives of the parent. Also, the subsidiary should be clearly identified as the contracting party and the nature of the relationship between the parent and subsidiary should be disclosed. See sample loan provisions, supra note 10. If the subsidiary, and not the parent, is the entity to perform, no representation should be made, direct or implied, that the subsidiary's performance is supported by the parent or the parent's assets, unless by guarantee.
The project finance limited partnership is a useful structure for the contribution of equity by passive project investors. For example, the structure is sometimes used as a mechanism for participants such as contractors and equipment suppliers to contribute needed equity to a project. These participants are motivated to make the capital contribution as a result of their desire to ensure that the project is financed so that construction and equipment profits are realized. Under a limited partnership structure, each limited partner shares in the project profits while enjoying the associated limitation of liability of a limited partner. Once the project is operational and attractive returns are certain, the limited partnership interests can be transferred or offered to the project sponsor for purchase.

Another established structure is the project finance joint venture, typically in the form of a partnership. A joint venture is formed for a project financing by a sponsor that has neither the financial nor management capability to participate in the project alone, but that desires to join with other entities to combine financial, technological, and management resources and to share risks. For example, a fuel supplier and a contractor might combine equity with a poorly capitalized entrepreneurial developer to develop, construct, own, and operate a project promoted by the developer through the vehicle of a joint venture. Other factors that weigh heavily in favor of a joint venture structure include spreading risks, efficient allocation of tax benefits, and avoidance of restrictive covenants in loan or other agreements. Thus, the venturers are companies with different components to contribute to a project financing.

**SOURCES OF FINANCING**

Funds necessary for a project financing are available from various sources and in most project financings are provided by a combination of debt and equity. The final structure and terms of the financing are dependent upon such factors as the amount of financing needed, the degree of risk involved, and the costs associated with allocating risks to creditworthy third parties. Among the


21. Conflicts of interest are inherent in the project finance joint venture. The confidentiality of information is an important consideration. Each venturer should carefully consider the type of information available to the joint venture and the extent to which the other venturers must be contractually required to maintain information confidential. The venturers also must consider whether or not a provision should be added to the joint venture agreement relating to competition by any other venturer with the venture. See generally M. Epstein, Modern Intellectual Property 14.3–15, 33–36 (1984 & Supp. 1986).


23. See generally P. Nevitt, supra note 2, at 35–39; Wynant, supra note 2, at 168–69.

24. Although project financings have in common highly leveraged debt financing, the types and amounts of debt and equity vary from transaction to transaction among debt, subordinated debt, and
potential financing sources are a commercial bank or consortium of commercial banks, leasing companies, insurance companies, pension funds, governmental equity. One general goal of lenders and equity participants is to ensure that the total senior debt, subordinated debt, and equity arranged for a financing is sufficient to finance the entire cost of the project without need for later new lenders or equity participants with new lending or participation requirements. See generally P. Nevitt, supra note 2, at 29; Barrett, supra note 14, at 119; Wynant, supra note 2, at 166.

Equity contributions for a project take various forms including stock purchases and general and limited partnership capital contributions. These form the basis for project economics since the amount of equity determines, in part, the amount of debt the project can service, and the amount of funds available for contingencies and unexpected expenses. Additional equity contributions can eliminate some of the strain on project cash flow. Similarly, the risk that sufficient funds are unavailable to construct the project is often ameliorated by contingent equity contribution commitments that infuse equity into the transaction if construction costs increase.

Also, the amount of the equity contribution is sometimes indicative of the value placed on the project by the project sponsor or other equity investors. In theory, if the project sponsor and the equity investors have an economic incentive to deter a complete abandonment of a project, the lender will be more assured that the project will be a success. Thus, project lenders have two important objectives fulfilled when equity is committed or contributed: equity decreases the burden placed on the project to service debt, thereby reducing the risk of repayment, and it gives the sponsor and investors an incentive to make the project work by placing equity at risk.

Not every contribution of equity in a project financing is necessarily contributed at the initial funding of the senior debt financing. The equity contribution of the project sponsor may take the form of a requirement that the project sponsor invest development fees that would otherwise be paid from the initial construction loan proceeds. Third party equity investors may make equity contributions in staged advances over time by committing in a capital contribution or funding agreement to make future advances.

When project economics are sufficient to permit the payment of debt service on senior debt and all operating costs, project sponsors sometimes arrange subordinated debt financing for the project as a surrogate to equity. By definition, principal and interest on subordinated debt is paid before equity distributions are made, but is second in priority to payment of senior debt and to the rights of the senior lenders in the project collateral. Potential subordinated lenders include any project participant, such as fuel suppliers and contractors. For example, a project contractor could agree to advance funds to a project on a subordinated debt basis to provide additional financing if construction cost overruns are experienced, or agree to accept deferred payment of a portion of the construction contract price on a subordinated basis.

The use of subordinated debt is attractive to the subordinated lender since the principal will be repaid on a somewhat predictable basis, prior to equity distributions. Also the subordinated lender is not an owner for tax or regulatory purposes. See I.R.C. § 385 (West 1988). Benefits of equity ownership can be negotiated through use of stock warrants. In addition, the tax treatment of a loan in comparison to an equity investment may prove beneficial.

Subordinated debt is often beneficial to the project sponsor as well. For example, the project sponsor may be subject to restrictions on payment of dividends. Through the use of subordinated debt, the project sponsor can pay a return on funds needed for the project. In addition, where tax benefits are important, interest on the subordinated debt is deductible from project income, provided the subordination is not so deep that the Internal Revenue Service considers the subordinated debt as equity. Id.

The most typical component of a project financing is, of course, the senior debt, the largest funding source for a project financing. By definition, senior debt is debt that is not subordinate to other loans or equity, in either repayment or security. Senior debt in a project financing is secured by a first priority security interest in the project assets: real property, personal property, project contracts, and the revenue flow under the project contracts, technology rights, and licenses and permits.
bond authorities, captive finance companies, export credits, international financing agencies, and customers of the project sponsor.

Other potential sources of project financing debt include the project finance participants: contractors, equipment vendors, raw material and fuel suppliers, and output and service purchasers. The motivation for each participant to provide financing to the project varies. The contractor, equipment vendors, and raw material and fuel suppliers may be motivated by a declining market for their respective goods and services. By contributing to the financing of a project, however, the project participants can assist in the creation of a new market for their goods or services. Similarly, the entity that will use the product produced or service offered by the project can ensure that a scarce product or needed service is available.

PROJECT FINANCE PARTICIPANTS AND PERSPECTIVES

Because a project financing is nonrecourse to the project sponsor, financial responsibility for the various risks in a project financing must be allocated to parties that will assume recourse liability and that possess adequate credit to accept the risk allocated. The allocation of risks varies from transaction to transaction, and is largely dependent on the bargaining position of the participants and the ability of the project to cover risk contingencies with the underlying cash flow and reserve accounts. There are three general categories of risk in the typical project financing: design engineering and construction risks, start-up risks, and operating risks.

Regardless of the financing structure used, if the senior lender does not have the ability to assume each of the elements of the project necessary to operate the project after a default, then each project lender must enter into an intercreditor agreement. As with any financing involving multiple lenders, the purpose of the intercreditor agreement is to ensure that conflicts between the lenders are resolved in advance, and that a logical enforcement of security interests takes place. The agreement typically contains provisions appointing an agent lender to control actions and a mechanism for votes required to take action. An intercreditor agreement is especially significant in a project financing since without the agreement in place, one lender could trigger a chain reaction of cross-defaults in the various project documents, a result that may not be advantageous to the other lenders or the project itself. In a project financing it is typically most important to debt repayment that the project continue in operation.

25. Wynant, supra note 2, at 168. Export credit programs are established in most industrialized nations. The U.S. Export-Import Bank, for example, provides financial assistance for the purpose of trade stimulation.

26. Id. at 169. The World Bank is an example of an international financing agency.

27. Id. In situations where the output market is large and the supply small, customer credits can be used as a loan mechanism.

28. An alternative and additional source of financing is a customer credit agreement. Under a customer credit financing structure, the purchaser of project output agrees to fund construction and start-up of a project. In return, the customer is assured of a source of supply. The purchase price for supply delivered is then applied to the balance of funds advanced to the project sponsor. See generally P. Nevitt, supra note 2, at 39; Wynant, supra note 2, at 169.

29. See generally P. Nevitt, supra note 2, at 9-20.
Design engineering and construction risks are risks that are inherent during project design and construction phases. As construction proceeds, new risks arise and others subside. Each project participant is concerned with whether the project will be constructed on time for the price upon which project financial projections are based. The classic construction risk is the necessity of a change in the work contemplated in the construction price, such as a change necessitated by technical design refinements. Other project construction risks include price changes caused by currency fluctuation or inflation, construction delays, material shortages, design changes required by law, and strikes.

Start-up of a project is the most important risk-shifting phase of a project financing since achievement of the performance guarantees through performance tests signals the end of the contractor risk period and the beginning of the risk period for the operator and the project owner. At start-up, permanent lenders and equity investors, including the sponsor, require the contractor to provide evidence that the project is capable of operating at a level of performance necessary to service debt and pay operating costs.

Operating risks are those risks that arise after the project is accepted or is in preliminary operation. Operating risks are exemplified by a decrease in the availability of raw materials or fuel, or by a decrease in demand for the output of the project. Other operating risks include inflation, fluctuation in currency, strikes and other production risks, supply risks, regulatory changes, political changes, uninsured losses, and management inefficiencies. Each operating risk helps determine whether the project will perform at projected levels, thereby producing sufficient funds to cover debt service, operating costs, and to provide a return on equity invested.

An analysis of a project financing by each participant, and the negotiation approach for the project documents, begins typically with a compilation of risks and a determination of the party best capable of bearing each identified risk through various methods of credit support. The allocation of risks is generally determined on the basis of control over the risk, reward associated with that control, role, and creditworthiness. As a gross oversimplification, it is generally true that the participant that can best exercise control over a risk or that will realize the greatest reward if the risk does not materialize, considering the role of the participant in the project, typically is allocated the risk.

For example, a risk identified in a project may be that a key contract will terminate if a change in law occurs. While no party can control the occurrence of that risk, all parties in the project will benefit if the project is completed. The participant ultimately selected to bear the change of law risk, however, may be the project sponsor since the change of law risk is a risk sometimes allocated to equity. If the project sponsor lacks the financial resources to address this risk, other participants must examine the risk, determine the likelihood of the risk and the value of participation in the project, and establish the terms upon which allocation of the risk is acceptable. The allocation accepted often results in the transfer of some project reward to the participant accepting the risk through a
higher contract price or an addition of a role, such as from contractor to contractor and equity participant.30

30. Each project finance participant has a different perspective on risk allocation.

Sponsor. The sponsor in a project financing is essentially interested in two immediate goals: (i) recovery of development stage expenses allocated to project development, and (ii) earning construction management or similar fees. In the long term, of course, the sponsor is interested in receiving a cash return on operation of the project. Simultaneously, the project sponsor seeks low cost debt financing, minimum third party equity participation, efficient use of tax benefits, and flexibility in both future financings of other projects and in the permanent financing and refinancing of the specific project.

Construction Lender. The construction lender in a project financing is concerned with the design engineering and construction risks, since the completion of the project is a condition precedent to the payment of the construction loan with the proceeds of the permanent financing, or if the construction and permanent loans are a part of one debt facility, to the repayment of the debt from operating revenues. Thus, it is concerned primarily with the construction contract, including provisions relating to timely completion and performance at expected levels. If the project is not completed on time, at the agreed upon price and performance levels, then credit enhancement devices must be in place that will repay the construction loan. These are often in the form of guarantees and performance and payment bonds.

Of primary importance to the construction lender is to ensure that the contractor’s obligations are of a “turnkey” nature, since sufficient funds must be available to complete construction of the project on time and at agreed upon performance levels. This obligation has various components, each of which relate to the cost of construction and the ability of the project to produce cash flows at a predictable rate. These components include a firm price, a firm time of completion, performance standards relating to the output of the project, and the compliance of the project with applicable laws.

In addition, the construction lender is concerned with the ramifications of late completion of project construction on other agreements, especially where the late completion excuses the obligations of the permanent lender to finance the project. Other potential concerns include contractual obligations of the sponsor to deliver products or take deliveries of supplies on a date certain. The failure to make or take deliveries by the date specified may require the project owner to pay damages or allow the other contracting party to terminate the contract. Thus, any adverse changes in the condition of the project during construction, including adverse changes in financial condition of any of the participants, changes in law, and changes in the technical feasibility of the project, may affect the construction lender’s ability to have the construction debt paid, whether from the permanent lender or from operating revenues.

Permanent Lender. The permanent lender has several requirements in a project financing. These include the arrangement of sufficient debt to finance the total construction cost of the project, the absence of any other lender in a more senior collateral or control position, and satisfactory intercreditor agreements if more than one lender is involved in the financing.

As discussed earlier, the permanent lender also desires a project that is risk-free when the permanent loan is made available. Project finance permanent lenders, however, recognize the imperfect world of project finance and are willing to make long-term loans even where the project is not yet operating in a risk-free environment. For example, the permanent lender may commit to the project even if the guaranteed level of performance is not achieved, provided that the requisite performance is attainable in a reasonable time at a reasonable price, nothing financially adverse has occurred to the contractor, and the project can pay debt service and expenses at the level of performance already achieved. Similarly, the permanent lender will accept a materially adverse change to the economic condition of one of the project participants provided the change is temporary or the operation of the project will substantially improve or correct the economic condition.

For the permanent lender, project finance risk allocation issues center on the project contracts which are the credit support for the financing. The permanent lender is generally concerned with the economic value of the contracts, the legal adequacy of the contracts, and the viability of the
**RISK IDENTIFICATION**

The identification of risks is essential in an analysis of a project financing because of the nonrecourse nature of the project debt and contractual undertakings of the project owner. An exhaustive list of potential risks would result in contracts in a workout environment. Also, similar to the desire of the construction lender that the construction contract have a firm price, a firm time for performance, and certain performance standards, the permanent lender desires similar commitments from the operator, the suppliers, and the output purchasers.

**Contractor.** The tension between the sponsor and contractor in a project financing is based on the turnkey nature of the construction contract: the contractor must deliver the project at a fixed or predictable price, on a date certain, warranted to perform at agreed levels. The contractor is, of course, concerned with the difficulty of predicting events that could result in delivery of a project that is delayed, that has an increased price, and that does not perform as expected. Thus, unless the contract price is extremely attractive, the main objective of the contractor in a project financing is to limit risks of any change in the cost of the project, to provide excuses for late delivery, and to provide sufficient time to satisfy performance guarantees.

A customary reward for the contractor in return for assuming the risk of completion on a date certain for a fixed price is through a bonus payment, which is paid by the project sponsor to the contractor if the project is completed in advance of the scheduled completion date. In a project financing, the bonus concept must relate to the other project contracts so that if the facility is completed earlier than the scheduled date, the other contracts permit an earlier commencement of operation.

The contractor is also concerned with the underlying financing documents, including whether the sponsor has arranged financing sufficient to pay the contractor for the work performed. In addition, the contractor is interested in provisions assuring that the financing documents require the lender to make payments directly to the contractor, limit the conditions to advancing funds under the financing documents to a default by the sponsor (except for disputes under the construction contract), and require notification of the contractor by the lender if an event of default exists under the loan documents so that the contractor has an opportunity to cure.

**Operator.** The tension between the project sponsor and operator is analogous to the tension that exists between the project sponsor and contractor: the need for predictability of price and performance of the project. While the other project participants will want to ensure that the operating costs are sufficiently fixed or predictable so that feasibility can be analyzed, the operator, in contrast, desires to limit price risk.

**Technology Owner.** The technology owner is typically not a direct participant in the project financing. Rather, the project sponsor or contractor has an exclusive license agreement with the technology owner for use of the technology. In some cases, the technology owner provides performance guarantees with respect to the technology provided. These guarantees are similar to performance guarantees provided by the contractor, and allocate technology risk to a third party.

The technology owner may be required to enter into agreements with the project sponsor that ensure the continued availability of the technology to the project if the licensed contractor is terminated by the project sponsor, or if the licensed contractor defaults under the license agreement or otherwise loses the right to the technology during the expected life of the project. These agreements, referred to as technology supply agreements, often provide that the technology owner is not obligated to disclose any confidential information to a competitor that agrees to complete construction or operate the project. Also, the technology owner will limit the approved use of the technology and confidential information to the limited extent required for project operation.

**Supplier.** The fuel or raw material supplier to the project is concerned with the objective of delivery to the project of necessary fuel or raw material in exchange for the market price, with acceptable excuses for nondelivery. The project participants, however, seek firm price, quality, and delivery commitments, with a minimum of uncertainty in the price, terms, and obligations for supply.
many pages of print, and would doubtless miss many risks that are unique to particular industries. A fully developed business acumen is unnecessary to understand that identification of many risks is dependent upon an understanding of the specific project.31 A listing is helpful, however, to sensitize project finance participants to the allocation of risks.32 The following discussion should assist both the novice and experienced project financier with more than a serendipitous approach to risk identification.

The potential for a risk actually occurring is not small. A recent study that shows that eighty-two percent of projects financed encountered some form of trouble is perhaps the best advocate for a risk identification approach to project financing coupled with a complete due diligence process.33

There are nine categories of reasons attributable to failed projects. Three causes for project failure exist during the design engineering and construction phases of the project: a delay in the projected completion of the project and the resultant delay in the commencement of cash flow, an increase in capital needed to complete construction, and the insolvency or lack of experience of the contractor or a major supplier. The other six basic risks generally exist in the

Output Purchaser. In many respects, the output purchaser is in the same position as the project owner when the project owner purchases fuel or raw materials. The output purchaser desires firm price and quality, with a minimum of uncertainty. The project owner, in contrast, desires to increase prices as the market will permit, and to be excused from performance without penalty for limited periods of time.

31. In many project financings, project development has progressed beyond the feasibility study, which details whether the project is financially viable, when counsel is instructed to prepare necessary documentation. In some projects, however, counsel participates in or critiques the feasibility study. Typically, these internal studies consider the availability and cost of basic project requirements, such as the market for the product produced, raw material supply, site acquisition cost and suitability of the site, construction costs, operating costs, and financing costs, all for the purpose of determining whether projected cash flow from the operation of the project is sufficient to pay debt, operating expenses, and an attractive investment return. Lenders prepare independent feasibility studies to augment the study prepared by the project sponsor.

The feasibility study is a useful mechanism for setting forth a description of the project, the goals of the project sponsor, sensitivities of the project to various construction, start-up and operating risks, an analysis of financing alternatives, and credit enhancement. It will include estimated capital needs, debt service capabilities, revenue projections from output sales, operating costs, and market projections. Typically, variables such as fuel cost fluctuation, interest rates, currency exchange rates, and others are examined in alternative scenarios. The study enables the sponsor and lenders to analyze the potential of the project before any party unnecessarily commits resources when the project is not economically feasible. The resultant study must, of course, conclude that the project will have sufficient viability to pay debt service, operations and maintenance costs, provide a return on equity, and, if necessary, provide for contingencies.

See generally P. Nevitt, supra note 2, at 21–27.

32. See id. at 9–20, 262–69; Wynant, supra note 2, at 167–68; Castle, supra note 2, at 16–17.

33. Castle, supra note 2, at 16. The study revealed the following problems and frequency of occurrence: construction cost overruns (71%), completion delays (59%), inaccurate cash flow projections (35%), market problems (1 project), political risks (1 project), and project inefficiencies (1 project). Nine of the 17 projects (53%) in the study were described by the researcher as in “severe trouble,” with two projects ending in bankruptcy and six incapable of generating sufficient cash to cover principal payments.
start-up and operating stages of a project: technology failure or obsolescence, changes in law, uninsured losses, shifts in availability or price of raw materials, shifts in demand or price of output, and negligence in project operation. The mere presence of these risks, however, does not prohibit the financing of the project on a nonrecourse basis. As is discussed later in this article, proper selection of credit enhancement and monitoring methods can combine to ameliorate these risks.

**Increase in Construction Costs**

The risk that construction of the project will cost more than the amount of funds available from the construction loan, other debt sources, and equity is perhaps the most important risk for the participants in a project financing. Construction costs exceed estimates for various reasons, including inaccurate engineering and plans, inflation, and problems with project start-up. This cost over-run risk may result in increased debt service costs during construction, unavailability of sufficient funds to complete construction, and, even if funded, in the inability of the project owner to pay increased interest and principal that result from the additional debt required to complete construction.

Amelioration of the cost over-run risk is possible even where the contractor has not assumed that risk in a fixed-price turnkey contract. For example, in the event of a cost over-run, contractual undertakings can provide the infusion of additional equity by the project sponsor, other equity participants, or standby equity participants. Similarly, standby funding agreements for additional financing, either from the construction lender or subordinated debt loaned by project participants or third parties, can be used. Another alternative is the establishment of an escrow fund or contingency account under which the project sponsor establishes a fund that is available to complete the project in the event of a cost over-run.

**Delay in Completion**

Likewise, a delay in project completion may result in an increase in project construction costs and a concomitant increase in debt service costs. The delay may also affect the scheduled flow of project revenues necessary to cover debt service and operations and maintenance expenses. In addition, a delay in project completion may result in damage payments payable under, or termination of, project contracts, such as fuel supply and output contracts. Probably no better

34. Wynant, supra note 2, at 167. In a project financing of a copper mining development, site modification requirements caused construction costs to increase from the initial budget of $120 million to actual expenditures of $200 million. Id. For a general discussion of new trends in risks allocated to contractors in international project finance, see Barrett, *Project Finance Develops New Risks*, Euromoney, Oct. 1986, at 73.

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example of the potential impact of a delay in construction on project revenues and expenses is the nuclear power plant experience.35

**Experience and Resources of Contractor**

The experience and reputation of the contractor, subcontractors, and suppliers for a project should ensure the timely completion of the project at the stated price. Similarly, the contractor, subcontractors, and suppliers must possess the financial resources necessary to support contractual provisions relating to liquidated damage payments, workmanship guarantees, indemnities, and self-insurance obligations. Beyond financial resources, the contractor must possess sufficient human and technical resources necessary to satisfy contractual requirements. The potential risk is that the contractor or a major subcontractor or equipment supplier will be unable to perform a contractual obligation because of a low commitment to the industry, insufficient resources, or lack of knowledge or experience.

**Building Materials**

A project finance risk often overlooked in industrialized countries is the risk of unavailability of building materials necessary for project construction. Although theoretically any material is available at the right price, the price and time necessary to manufacture or transport the material can affect project economics in a manner similar to cost over-runs and delays. Of particular concern is the impact of import and export laws when the project is either located abroad or where imported materials are contemplated for construction. State law should not be overlooked regarding the availability of construction materials. For example, the Pennsylvania Steel Products Procurement Act mandates the use of certain types of domestically produced steel in certain instances.36

**Facility Site**

Pre-existing conditions on the project site can affect both construction and long-term operations, especially if the site has hazardous waste problems. Examples of site condition problems that can affect the project price, construction schedule, and operations include geological formations, ongoing mining, and other underground site conditions that affect the cost or schedule for construction.

**Technology**

Project finance participants cannot ignore new technologies since new technologies can result in profitable project financings. Nevertheless, without credit

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enhancement to cover the risk that the new technology will not perform as expected, project financings do not often involve new technologies since unproven technologies are not sufficiently predictable and therefore form an unstable basis for a project financing. An example of this risk is exemplified by the early technological difficulties in resource recovery projects. New technology, however, can be used in a project financing provided the obligation to repay project debt is supported by a guarantee of technological performance from the participant that owns or licenses the technology, such as the equipment supplier or contractor.

**Raw Material Supply and Utilities**

Similar to the role of building material supply dependability in production of revenue, the project must be assured of a supply of raw materials and utilities at a cost within the acceptable ranges of financial projections. The formality of the commitments for the supply depends on the availability of the materials in the project area. For example, a supply of wood chips necessary for a waste wood burning energy project in the Pacific Northwest may be sufficiently assured so that no need exists to contract for a one hundred percent supply. Yet, under various scenarios, such as the limitation of forest processing because of economic conditions in the lumber industry, alternate sources may be needed. In addition, costs of import or export fees, transportation charges, storage costs, stability of product, monopolies, and finance costs are all potential risks in determining whether an adequate supply exists.

In many projects, long-term requirements contracts are developed to provide the necessary raw material supply at a predictable price to reduce this risk. Less frequent are supply-or-pay contracts, in which a supplier is dependent on some aspect of the project and agrees either to provide the needed raw material or to pay a fee to the project. With both contracts, however, the credit of the supplier must be sufficient to ensure performance of the contract.

**Market for Product or Service**

Once produced, of course, the project needs to generate revenue from sales of the product or service. Many project financings are based on long-term, take-and-pay contracts, in which one or more purchasers agree to accept the production of the project at a firm or predictable price. Thus, provided the credit of the purchaser is adequate, a market exists for the product and the cash flow to the project is assured if the project operates. Yet, product risk does not disappear simply because a long term take-and-pay contract is executed. Market competition with other producers, new technologies, changing demand, increased operating costs, increased production costs, changes in the needs of the

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37. Early mass-burn, solid waste resource recovery projects experienced technological difficulties that resulted in project delays and increased costs.
purchaser, and other events can combine to render the take-and-pay contract less valuable to the project.

In some projects, such as solid waste resource recovery projects, long-term take-or-pay through-put agreements are used to ensure that cash flow to the project is sufficient to service debt. The contracts, also referred to as service agreements, provide for the processing of waste through a project for an agreed upon price. The entity receiving the service agrees to pay for the service whether or not the service is used.

**Operator Experience**

The operation of the facility in an efficient, reliable manner is essential to the long-term success of the project. The entity operating the project, typically pursuant to a long-term operating agreement, must possess sufficient experience and reputation to operate the project at the levels necessary to generate cash flow at projected levels. Similarly, the operator must possess the financial ability to support operating guarantees and other obligations under the operating agreement.

**General Operating Expenses**

Operating expenses in excess of estimates is another risk to the project. These inaccuracies arise from errors in design engineering, excessive equipment replacement and unscheduled maintenance, poor productivity of labor, incorrect assumptions concerning the labor force required to operate, and other operating problems.

**Management Experience**

Similarly, the project sponsor must have the requisite experience to manage the project in areas other than actual project operation. Day-to-day decisions about the project are essential to the success or failure of the project, including the repayment of project debt. Thus, the personnel, resources, reputation, and experience of management must be sufficient to address those tasks.

**Permits and Licenses**

The risk that a project does not have, or might not obtain, permits necessary for the construction or operation of the project is, of course, a significant concern to all project participants. Generally, permits for the project must be obtainable without unreasonable delay or expense. At the time of construction funding for a project financing, permits are classifiable in three categories: (i) permits already obtained and in full force and effect, which are not subject to appeal, further proceedings, or to any unsatisfied condition that may result in a material modification or revocation; (ii) permits that are routinely granted on application

and that would not normally be obtained before construction; and (iii) permits other than those in full force and effect and those routinely granted on application. The last category of permits is, of course, the relevant concern for project participants. The application and approval process for the last category must be carefully examined to determine the likelihood of issuance, the cost associated with possible conditions attached to permit approval, and similar issues.

Necessary permits vary depending on the state, site, technology, process, and a host of other variables. In any particular financing, the various governmental agencies with jurisdiction can range from the local fire department to the Army Corps of Engineers. The process of determining which permits are required is typically a role of the project sponsor working in conjunction with the contractor and operator.

**Change of Law**

The change of law risk is the risk that a governmental agency will repeal, amend, enact, or promulgate a new law or regulation, or that a governmental authority will issue a new interpretation of the law or regulation, that affects the project. The change of law risk can also be based on court decisions unfavorable to the project.

**Political Environment**

If the project is located abroad, the political climate of the host country must be analyzed carefully to ascertain the sentiments to host country investments. The risk of, and the consequences resultant from, a change in the political environment where a project is located is best exemplified by the experience of project finance lenders in Iran. The risk of expropriation by developing countries is obvious. Less obvious is the negative effect of indirect governmental action in the form of tax increases or demands for equity participation on project economics.39

**Interest Rate**

Where interest rates vary over the term of the financing, the risk of unrealistic interest rate projections can affect the ability of the project revenues to service debt. The interest rate projections are typically a component of the feasibility study.

**Force Majeure**

"Force majeure” is the term used generally to refer to an event beyond the control of a party claiming that the event has occurred, including acts of God, fire, flood, earthquakes, war, and strikes. The party who will bear the risk is

39. Id. at 22-23. The Overseas Private Investment Corporation provides insurance to promoters for relief in the event of expropriation or other governmental risks to project development in approximately 90 developing nations. See generally P. Nevitt, supra note 2, at 16–17.
always a subject of negotiation, and often is determined to be the party best able to control each particular force majeure risk.

**Foreign Currency**

In some financings, amounts payable under contracts or the interest rates charged in debt arrangements are based on foreign currency exchange rates, such as the London InterBank Obligation Rate (LIBOR), which results in sensitivity to currency fluctuations. A turnkey construction contract with a foreign equipment supplier, for example, may provide for an automatic price adjustment upon the occurrence of a currency rate fluctuation.40

**Economic Projection and Feasibility Report Inaccuracy**

The risk that economic projections and feasibility reports are inaccurate relates to each of the risks discussed in this section. An inaccuracy in the appraisal of equipment, for example, relates to the amount of insurance coverage necessary, which in turn relates to ability to operate the project and achieve projected cash flows.

**LENDER RISKS IN A PROJECT FINANCING**

It is often said that lenders are not equity risk-takers. Creditor rights attorneys, however, know this maxim is inaccurate. Lenders sometimes accept exposure analogous to equity risk in project financings. The acceptance of these risks is partially attributable to increasing competition among project finance lenders. The marketplace notwithstanding, it is important to understand the role of the project finance lender and the risks it is institutionally capable of accepting. Risks sometimes unallocated, and thereby made risks to the lender, include risks of changes in certain laws, accuracy in appraisals and reports, operating risks, enforceability of project contracts, payment of the construction loan with permanent financing, force majeure events not allocated to other participants, political risks, foreign exchange risks, and project completion.

As project guarantees and other credit enhancement devices expire, of course, unallocated risks rest with the lender. A performance guarantee, for example, is released on achievement of specified performance levels. Similarly, to the extent a product purchaser is unavailable to purchase the product and produce revenue at necessary levels, the market risk is also on the lender.

Another example of the type of risk lenders encounter that may not be allocated otherwise is the environmental liability risk, which lenders face under the Comprehensive Environmental Response, Compensation, and Liability Act.

40. Wynant, supra note 2, at 168. As an example, a joint mining venture in Australia eventually collapsed because of effects of output contracts based on U.S. dollars in a revaluation of the Australian dollar and increased oil costs.
of 1980 ("Superfund") and similar state environmental statutes. Environmental liability may be imposed on lenders that loan money on a secured basis to an owner or operator of a project. Liability is based on an exercise by the lender over the borrower of so much control that the lender acts as the owner or operator of the project. Expressly excepted from the statutory definition of "owner or operator" are "person[s], who, without participating in the management of a . . . [project], holds indicia of ownership primarily to protect his security interest in the . . . [project]." The extent to which the lender can participate in the project management is uncertain and is the subject of several recent decisions. The most troublesome decision is the court's admonition in United States v. Maryland Bank & Trust Co. that, since a lender has the ability to protect itself from Superfund liability by conducting environmental audits prior to loaning money, a heavy burden will be imposed.

Finally, and sometimes unwittingly, lenders ignore the risk that one of the important project documents may have serious contractual enforceability flaws. This risk is discussed at length later in this article.

**CREDIT ENHANCEMENT IN PROJECT FINANCINGS**

In theory, a project financing can be structured in which there are no risks and the lenders are content to rely solely upon the revenue-producing project contracts to service debt. In reality, of course, the foregoing illustrative list of potential project finance risks gives evidence that mere reliance on those contracts is insufficient to protect the lender from equity risk. Credit support (or enhancement of credit, as it is sometimes referred to) from a creditworthy source is necessary.

The purpose of credit enhancement is to improve the most severe equity and lender risks within a spectrum of identified project financing risks. Depending on myriad factors, the requisite support can take the form of direct guarantees by the project sponsor or the project participants, guarantees by third parties not directly participating in the project, and, in some cases, contingent guarantees and so-called "moral obligations" of the project participants.


45. *Id.* at 580.

46. See generally P. Nevitt, *supra* note 2, at 163–95.
The most obvious type of commercial risk in a project financing is the risk of non-repayment of a loan. Commercial risks must generally be covered by credit support of the project sponsor or a responsible third party. While the project sponsor is conceptually the fundamental risk-taker, the nonrecourse nature of a project financing limits the ability to allocate risks to the sponsor. While a sponsor may be asked to accept directly some risks, it most likely will also be asked to provide additional equity contributions upon certain specified events and to provide credit enhancement in the form of insurance, third party guarantees, or letters of credit in others.

In evaluating the use of a particular form of credit enhancement, the utility of each type of credit enhancement device must be considered in relation to several factors, including the term of the device selected, the cost, and the difficulty of and time necessary for enforcement. For example, in determining whether to use insurance or a third party guarantee to enhance the risk of a force majeure to the project, the premium price, short term, and length of time necessary for enforcement of insurance claims must be compared to the cost, term, and enforcement issues of a guarantee.

Thus, the objective of risk allocation in a project financing is to combine credit enhancement mechanisms in order to distribute the risks among the participants. This combination must produce a bankable project without burdening any single participant to the point that the project financing is converted into a recourse financing. Credit enhancement is not limited to the realm of third party guarantees, although such guarantees are an important component of many financings. Other credit enhancement mechanisms include limited, indirect, implied, and deficiency guarantees, comfort undertakings, insurance, letters of credit, surety obligations, liquidated damages, take-or-pay, throughput, and put-or-pay contracts, indemnification obligations, and additional equity commitments.

Guarantees

Like other credit enhancement devices, a guarantee shifts risks to entities that prefer little direct involvement in the operation of a project. A guarantee is also a mechanism that permits entities to invest capital without becoming directly involved in the operation of a project. By assuming the construction and operating risks of a project financing through a guarantee, as opposed to a loan or equity contribution, a third party guarantor can avoid financial reporting of the liability guaranteed as a direct liability, although it may be footnoted.47

The value of a guarantee to the project is dependent upon the creditworthiness of the guarantor. It is also influenced by the guarantee language. Unless the guarantee provides a waiver of defenses and an absolute and

unconditional obligation, the guarantee may not provide the credit enhancement necessary to comfort a lender that a creditworthy support is in place.48

There are essentially two types of guarantors in a project financing: sponsor guarantors and third party guarantors. The most common guarantor in a project financing is the sponsor itself. Typically, the sponsor establishes a special purpose subsidiary to construct, own, and operate the project. The subsidiary, however, lacks sufficient capital or credit rating to support risks associated with the underlying loan obligation. To effect a loan, the sponsor must arrange some form of credit enhancement to cover the identified risks. Often the requisite credit enhancement is provided in the form of a guarantee by the project sponsor of the obligations of the project owner.

The sponsor guarantee can be structured in various forms to satisfy the objectives of the sponsor and the enhancement needs of the project. For example, a completion agreement is sometimes used in which the project sponsor is required to complete construction of the project.49 Once the project is completed at agreed upon performance levels, the agreement terminates. On termination, the liability is also terminated and the project sponsor is able to guarantee other projects in a similar fashion.

If the sponsor guarantee is insufficient to support the risks identified, however, credit enhancement by a third party is needed. Each project finance participant is a potential third party guarantor, since each participant has an economic stake in the success of the project's development. The various project participants that may provide project finance guarantees include suppliers that have an interest in the fulfillment of purchase orders contingent on financing, or that recognize that a sponsor cannot compete in the marketplace without financial assistance. Other potential providers are output purchasers where supply of the output is of particular importance, and contractors that are interested in constructing the project and realizing construction profit.

Third party guarantors are often reluctant to sign a direct, unconditional guarantee in a project financing. In some financings, a lender may be persuaded to accept a different type of guarantee in which the obligations of the guarantor are more limited. These include limited and indirect guarantees.

**Limited Guarantees**

Traditional guarantees represent direct, unconditional commitments by a guarantor to perform all the obligations of a third party. Guarantees limited in amount or time can be used to provide minimum enhancement necessary to finance the project. This approach provides the necessary credit support to a project without considerable impact on the guarantor's credit standing and financial statements. Examples of limited guarantees include guarantees that

are effective only during the construction phase of a project or that are limited in amount, whether calculable in advance or not. An example of the latter type of guarantee is a cost overrun guarantee in which the guarantor agrees to finance construction of a project to the extent design changes or changes in law require additional funds for project completion.50

Indirect "Guarantees"

In contrast to these direct, but scope-limited, guarantees are indirect "guarantees," which are "guarantees" based on the underlying credit of one of the project participants. Indirect "guarantees" are not subject to defenses available to a guarantor under a guarantee agreement. The most common "indirect" guarantee in a project financing is one of the revenue producing contracts. This obligation is typically in the form of a take-or-pay contract, in the case of goods, or a through-put contract, in the case of services, or a take-and-pay contract.

A take-or-pay contract is generally used to refer to a contractual obligation between a buyer and seller in which the buyer agrees to make payments on certain dates to the seller in return for deliveries of goods. The payment obligation of the buyer is unconditional.51 Thus, even if no goods or services are delivered, the payment obligation exists. In a project financing, the payments required under the contract must be sufficient to enable the project sponsor to pay debt service payments and operation expenses.

A take-and-pay contract is similar to the take-or-pay contract except that the buyer is only obligated to pay if the product or service is actually delivered.52 Thus, a take-and-pay contract does not contain an unconditional obligation. For example, in a project financing of a small power production facility, a typical power purchase agreement with a utility provides a guaranteed stream of revenue to the project. If power is delivered to the utility, the utility is obligated to pay certain definite amounts to the project sponsor. Thus, the contract acts as an indirect guarantee, guaranteeing a stream of revenue to a project.

Other examples of indirect guarantees include agreements to provide additional funds, note purchase agreements that require the purchase of a lender’s notes on certain specified events, and agreements to purchase project assets. Each have in common the purpose of paying or reducing the project indebtedness if the project is not completed as required or some other problem arises that affects the ability of the project to produce sufficient revenues to satisfy the obligations incurred.

Implied Guarantees and Undertakings

An implied guarantee in a project financing is a means of providing assurances to the lender that the "guarantor" will provide necessary support to the project, presumably out of its underlying credit. Implied guarantees are often

50. Castle, supra note 2, at 25–27.
51. See generally P. Nevitt, supra note 2, at 183–95.
52. See generally id. at 184.
not legally binding and do not require financial statement reporting. An example of an implied guarantee is a side letter, or comfort letter, in which the "guarantor" addresses a risk concern of the lender. These include covenants of a parent corporation with an excellent credit rating to continue to own all of the stock of the borrowing entity, an agreement to use a part of the parent's name in the name of the subsidiary, a covenant not to change that name while the loan is outstanding, and a covenant in which a parent undertakes to supervise the management of the project. Similarly, lenders are sometimes comforted that the sponsoring company will continue to support the project on the basis of the size of the equity investment made in the project by the parent corporation, and by the size of the economic benefit that will be realized from project success. The comfort that a lender will take in any of these scenarios is a subjective matter.53

**Letters of Credit**

Another type of credit enhancement device is a letter of credit, which is an agreement that substitutes the payment obligation and creditworthiness of a more solvent party, usually a bank, for the payment obligation and creditworthiness of a less solvent party, such as an insufficiently capitalized project owner. In a project financing, the standby or guarantee letter of credit is used to protect against the project owner's failure to perform some obligation, such as a payment or performance obligation. For example, in a project financing, a creditor, such as a turnkey contractor of a small power production project, may require the sponsor to procure a standby letter of credit from a bank to assure payment of the construction progress payments. The letter of credit, in effect, "stands by" awaiting a default by the owner under the construction contract or some other specific default with reference to which the letter of credit is directed.54

**Surety Obligations**

The commercial risk of project completion to the point that permits operation at a level consistent with expected revenue is typically covered by a completion guarantee that the project will be completed and will operate at a specified level of production and efficiency. This guarantee is typically provided by the contractor, but the risk is often passed along by the contractor to a surety that issues performance and payment bonds.55

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53. See generally id. at 173.
54. See generally B. McCullough, Letters of Credit §§ 1.01–06 (1988).
Insurance

There are several types of insurance policies available to cover risks in project financings. Fluctuations in the insurance industry make it very difficult to predict what coverages may be available at the time a project is actually in operation. For example, currently available coverages for change in law and force majeure risks are limited. The only viable market is now in London and the cost does not generally justify the limited coverage provided.

Liquidated Damages

If construction of a project is not complete to the point necessary to begin commercial operation, or the project does not operate after completion at guaranteed levels, the project sponsor will nonetheless need to pay debt service and other contractual obligations. One solution to this risk is a liquidated damages payment. A liquidated damages payment constitutes an estimate by the contractor and project sponsor of the ramifications of late or deficient perfor-

56. During the construction phase, project finance contractors are typically required to obtain property damage insurance such as "all risk" builder's risk insurance to pay for direct damage losses occurring to the work during construction, which generally terminates on acceptance of the project. The builder's risk policy applies to all perils which are not specifically excluded, but does not extend to coverage of losses that result from contractual indemnity or liquidated damage payments for late delivery or completion.

With respect to delays in project completion, very limited coverage such as force majeure insurance is available. In addition, systems performance insurance is available to cover the risk that the technology and equipment will not perform at the level contemplated. Other construction period insurance typically required of the contractor include worker's compensation and employer's liability insurance, comprehensive general liability insurance, and excess liability insurance.

During the operation of the project, typical insurance policies available to provide credit enhancement to the project include systems performance to enhance the risk of project nonperformance, property insurance for both real and personal property (including equipment, such as boiler and machinery, to enhance the risk of unanticipated shutdown), and resource guarantee, to enhance the risk of a shortfall in needed resources. Typical third party liability insurance that is generally required for a project includes comprehensive general liability, which insures against all sums which the insured may be obligated to pay because of bodily injury or property damage, comprehensive automobile liability, and excess liability.

There are several specific exclusions from the coverage of the standard comprehensive general liability policy. These exclusions include: contractual liability, which covers liabilities that arise under many types of contracts; employer's liability, which includes liability under worker's compensation, unemployment compensation, and disability benefits; automobile liability; pollution, which includes bodily injury or property damage resulting from pollutants which are regularly discharged in the normal course of the insured's business; war; loss of use; property damage to the named insured's products arising out of such products; explosion, collapse, and underground hazard.

Liabilities for catastrophic occurrences are covered by umbrella and excess liability insurance policies. An umbrella policy generally provides coverage protection in excess of coverages provided by primary policies. Excess liability policies provide increased monetary limits. See generally 3 Construction Law, supra note 55, ¶¶ 13.01–.16.
mance by the contractor on the project. The enforceability of a liquidated damage clause, however, must be carefully considered.

**Indemnification Obligations**

Another form of credit enhancement in a project financing is a contractual indemnification obligation, which allocates liability among those who may be liable for a loss, as contrasted to placing this responsibility with a trier of fact. Since an indemnification provision results in a shifting of risk, the impact of the assumption of this risk on the credit analysis of a project financing is not insignificant. The enforceability of an indemnification provision depends upon state law, since courts have subjected enforceability of indemnification provisions to considerations of public policy. Recently, many states have adopted


The nature of a liquidated damage clause is to avoid calculation of damages following a dispute. These clauses are particularly useful in a project financing because of the need for predictable results after a failure to perform. An often overlooked risk in a project financing is that liquidated damages clauses are not favored by courts. E.g., Note, Liquidated Damages Recovery Under the Restatement (Second) of Contracts, 67 Cornell L. Rev. 862 (1982); but see Pembroke v. Gulf Oil Corp., 454 F.2d 606 (5th Cir. 1971) (Louisiana not adverse). The seminal common law test for approval of a liquidated damages clause is that (i) the clause must have been intended as a calculation of damages, not as a penalty, (ii) the contract must have as its subject a situation in which it will be difficult to calculate damages or in which a preestimation of damages was not possible, and (iii) the damages must be reasonable when compared to a calculation at common law. J. Calamari & J. Perillo, Contracts § 14-31, at 565 (2d ed. 1977). The U.C.C. liquidated damages provision is similar to the common law, although the U.C.C. does not require consideration of the intent of the parties. U.C.C. § 2-718 (1987). Rather, an objective test is applied to determine the reasonableness of the damages. The real distinction between the common law and the U.C.C. approaches is the time at which the reasonableness is determined: the common law determines reasonableness based on the contract date; the U.C.C. looks at the situation on the contract date and at the time of the breach.

The primary question for project finance participants is whether there is a reasonable relationship between the damages payable under the liquidated damage clause and under the law when no liquidated damages clause is provided. This is typically a factual question.

If the contracting parties guess wrong, the question arises whether the liquidated damage clause is the exclusive remedy. Courts have generally held that a liquidated damage clause is optional, and not an exclusive remedy. E.g., Ralston Purina Co. v. Hartford Accident & Indem. Co., 540 F.2d 915, 919 (8th Cir. 1976).

58. 3 Construction Law, supra note 55, ¶ 13.17.

Indemnification provisions may require the indemnitor to hold the indemnitee harmless for damages or liabilities caused by (i) the indemnitor's sole negligence, (ii) the joint or concurrent negligence of the indemnitee, or (iii) the sole negligence of the indemnitee. These provisions are generally enforceable, unless the indemnification is contrary to public policy or statute.

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statutes relating to the enforceability of indemnification provisions in construction contracts.59

The absence of an indemnification provision in a project finance contract does not necessarily relieve a party of indemnification liabilities. In some states indemnification liabilities are implied.60 The concept of implied indemnity has been abolished in some states, however,61 and is of limited importance in states that have adopted comparative negligence.62 The concept of implied indemnity nevertheless exists in some jurisdictions to allow a sharing of losses among entities of differing responsibility for a loss.

VALUE OF CONTRACTS TO THE PROJECT SPONSOR AND AS A CREDIT SUPPORT—THE CONTRACTUAL RISK ISSUE IN PROJECT FINANCE

Two legal considerations contribute to the value of a project finance contract to the project sponsor and to the lender as the basic credit support for a transaction. Since the usefulness of the contract to both the project sponsor and the lender depends upon enforceability at law, the fundamentals of contract law must be applied. Moreover, the viability of the contract as collateral if the transaction results in economic difficulties must be considered.

From the project sponsor’s perspective, the project contracts are the basis for project earnings and expenses. Similarly, from the lender’s perspective, the salient collateral in a project financing is the collection of contracts entered into by the project sponsor for the development, construction, and operation of the project, which are each crucial to the credit assessment of the lender.

Generally, each project finance contract is an executory contract: one of the project participants has yet to perform or finish performing for entitlement to the full benefits of the contract, and the other party has yet to pay in full for the goods or services.63 Executory contracts present unique risks to the project which affect their value as collateral. The risk to the project finance lender is based on this executory nature. Neither the project sponsor nor the other contracting party (the “obligor”) will have performed any significant contractual obligation at the time of the closing of the project finance loan. Moreover, ongoing performance obligations will exist throughout the life of the project since project finance contracts typically have terms of fifteen, twenty, and as long as thirty years. A legion of excuses will exist to give the obligor defenses to the requirement to perform the contract, including payment of any revenue due the project.

For example, the obligor may have a defense to performance or payment that arises under the terms of the contract, or the obligor may have a right of setoff arising independently of the project financing. Since each project contract

60. 3 Construction Law, supra note 55, ¶ 13.17[1][a], at 13-114.
61. Id. at 13-130 n. 102.
operates in a changing, not static, environment, the contract is subject to modification by formal amendment or waiver of rights or remedies. A project financing is therefore distinguishable from accounts receivable financing: the collateral is subject to many problems that arise from the executory nature and that interfere with the ultimate collateral value.

SECURITY INTERESTS IN PROJECT CONTRACTS

Each type of loan structure, including a project financing, requires some form of predictability in the effect of external events on cash flow and collateral. In a project financing, however, the recourse limitations of the loan necessitate the combination of contractual, regulatory, and other external elements that together form a transaction that will produce sufficient cash flow to service debt. The importance of project finance contracts to the transaction persuades the project finance lender to require a security interest in, or conditional assignment of, each significant contract in the financing. In some cases, this security is crucial since a contract may form the basis of a regulatory benefit.64

Contract Assignment and Anti-Assignment Clauses

The collateral assignment of project finance contracts is sometimes resisted by the project participants. In some cases, project participants are reluctant to agree that the lender, or the lender’s transferee, is entitled to perform the contract after a default by the project borrower under the financing documents. For example, if project financial difficulties result in the lender’s enforcement of the project finance collateral and transfer of project finance contracts to the purchaser of the project at a foreclosure sale, the obligor may have important interests involved, such as the financial posture of the transferee or the acceptability of the transferee from a business relationship viewpoint.65

The concerns of the obligor are sometimes manifest in a contract clause prohibiting assignment of the contract.66 A typical clause requires the lender to consider the impact of the clause on the ability of the project sponsor to grant a security interest in that contract.67 Even if a security interest can be granted, the

64. For example, in a project financing of a cogeneration facility, the Federal Energy Regulatory Commission requires that the facility have a “useful thermal output” in order to qualify as a “qualifying facility” entitled to the regulatory benefits of required purchases by a utility of the electrical output from the facility. 18 C.F.R. § 292.205(a)(1) (1988); Electrodyne Research Corp., 32 F.E.R.C. ¶ 61,102 (1985) (general criteria for demonstrating a useful thermal output). In a cogeneration project financing, the thermal purchaser is typically obligated in a contract to purchase the steam since the regulatory benefits could be jeopardized without an acceptable steam use.


67. The modern view is that assignments can be freely made. The Restatement (Second) of Contracts § 317(2) (1981) states that:
lender must consider whether the security interest can be enforced by assigning the contract in a foreclosure sale without violating the anti-assignment clause. If prohibited, the project sponsor may not have sufficient rights in the collateral to create a valid and enforceable security interest.\footnote{Contracts executed for use in a project financing can be structured to anticipate the concerns of the lender by use of a project finance assignment clause. A sample clause is reproduced below:}

A contractual right can be assigned unless

(a) the substitution of a right of the assignee for the right of the assignor would materially change the duty of the obligor, or materially increase the burden or risk imposed on him by his contract, or materially impair his chance of obtaining return performance, or materially reduce its value to him, or

(b) the assignment is forbidden by statute or is otherwise inoperative on grounds of public policy, or

(c) assignment is validly precluded by contract.

Anti-assignment clauses are typically narrowly construed. In general, these clauses are construed as imposing a duty on the assignor not to assign, but the assignment is not itself held invalid. \textit{E.g.,} General Elec. Credit Corp. v. Xerox Corp., 112 A.D.2d 30, 490 N.Y.S.2d 407 (1985) (mem.). The U.C.C. position is that an anti-assignment clause only bars delegation of duties of performance and not assignment of rights. U.C.C. § 2-210(3) (1987).

With respect to anti-assignment clauses, the second Restatement provides:

(1) Unless the circumstances indicate the contrary, a contract term prohibiting assignment of "the contract" bars only the delegation to an assignee of the performance by the assignor of a duty or condition.

(2) A contract term prohibiting assignment of rights under the contract, unless a different intention is manifested,

(a) does not forbid assignment of a right to damages for breach of the whole contract or a right arising out of the assignor's due performance of his entire obligation;

(b) gives the obligor a right to damages for breach of the terms forbidding assignment but does not render the assignment ineffective;

(c) is for the benefit of the obligor, and does not prevent the assignee from acquiring rights against the assignor or the obligor from discharging his duty as if there were no such prohibition.

Restatement (Second) of Contracts § 322 (1981).


\footnotetext{Contracts executed for use in a project financing can be structured to anticipate the concerns of the lender by use of a project finance assignment clause. A sample clause is reproduced below:}

\textit{Project Finance Assignment.} This Agreement shall be binding upon and inure to the benefit of the respective successors, transferees, and assigns of the Parties. No assignment of this Agreement by either Party may be made without the prior written consent of the other Party and unless the assignee assumes the full obligations of the assignor; provided, however, that this Agreement may be assigned without the consent of Supplier to meet any requirements imposed in any development or construction financing documents, any long-term financing or substitutions thereof, or any exercise of rights by any Lender in this Agreement pursuant to any collateral assignment or other security agreement; provided further that if any Lender requests Supplier to consent in writing to such an assignment for financing purposes even though such consent is not required hereunder, Supplier shall do so promptly. In the case of an assignment that does not require Supplier's consent, Developer's sole obligation under this Section is to provide Supplier with notice of such assignment. Whenever a consent to an assignment or a transfer of a Party's interest in this Agreement is required, the assigning or transferring Party's assignee or transferee shall expressly assume, in
The Uniform Commercial Code ("U.C.C.") provides for the free alienability of contractual rights to payments due or payable under the contract. Section 9-318(4) provides that a debtor can grant a security interest in the payments due under a contract, which can be enforced by the secured party even if the terms of the contract prohibit the assignment.69

Notwithstanding the free alienability of contract rights that relate to payments due or payable under a contract, the U.C.C. does not extend this right to enforcing a security interest in the remaining contract rights, such as the right to perform the contract, or the right to assign the contract to the purchaser of project assets in a foreclosure action.70

**Consents to Assignment: Approving Assignments and Enhancing the Contract's Value as Collateral**

Secured parties overcome the problems associated with the creation and enforcement of security interests in project contracts by requiring the obligor to consent to the collateral assignment by the project sponsor to the lender.71 Additionally, the consent serves to provide the other party with notice of the writing, the duties and obligations under this Agreement of the assigning or transferring Party, and the assigning or transferring Party shall, prior to any such consent, deliver to the other Party a true and correct copy of such assignment or transfer and assumption of duties and obligations. This paragraph shall not be applicable to any Lender.

If either Party reasonably determines or is reasonably advised that any further instruments are necessary or desirable to carry out the intent of this Section, the other Party will execute and deliver all such instruments and take any action reasonable to effectuate the intent of this Section. The parties recognize that this Agreement is subject to review by financial institutions for purposes of the project financing of the facility. At the request of Developer, Supplier shall provide to any Lender, at the expense of the Developer, an opinion of counsel addressed to any such Lender concerning such matters as such Lender requests, including that (i) the execution, delivery and performance of this Agreement is within Supplier's power, has been duly authorized, and is not in conflict with any agreement to which Supplier is a party or by which it is bound or affected, (ii) there is no law, rule or regulation, nor is there any judgment, decree or order of any court or governmental entity binding on Supplier which would be contravened by the execution, delivery, performance or enforcement of the Agreement, and (iii) the Agreement is a legal, valid and binding obligation of Supplier enforceable against it in accordance with its terms.


70. U.C.C. § 9-318 (1987). Few secured parties will be content to rely on the theory that anti-assignment clauses merely impose a duty on the assignor not to assign the contract, and do not render the assignment invalid. Restatement (Second) of Contracts § 322(2)(b) (1981). Similarly, few will desire to rely on the theory that a court will require the obligor to act reasonably in consenting to an assignment. E.g., Larese v. Creamland Dairies, Inc., 767 F.2d 716 (10th Cir. 1985).

71. The general rule of assignments is that an assignee assumes the assignor's performance obligations. Restatement (Second) of Contracts § 328 (1981); U.C.C. § 2-210(4) (1987). But see Langel v. Betz, 250 N.Y. 159, 164 N.E. 890 (1928) (presumption that assignee does not assume performance obligations in a contract for the transfer of an interest in land). An exception applies to the assignment of a security interest in a contract. In such a case, the collateral assignment does not necessarily transfer the performance obligations (neither contract nor tort) to the secured party. Restatement (Second) Contracts § 328 comment b (1981); U.C.C. §§ 2-210(4), 9-317.
assignment, and thereby to ensure that the contract assigned is enforceable and transferable directly by the lender. Also, the consent improves the usefulness of the contract as collateral by anticipating the problems associated with project contracts inherent in their executory nature, including periods to cure defaults by the project sponsor.72

In addition to problems associated with anti-assignment provisions in project finance contracts, the executory nature of the contracts impairs their value as collateral. For example, the collateral value of project contracts to the lender is dependent upon the terms of the contract and the defenses to payment and performance that arise under the contract. Thus, the lender must undertake due diligence to understand the contract terms and carefully monitor contract performance.

The typical consent contains provisions relating to the modification or amendment of the contract. Since the secured party in a project financing is not a party to the underlying contract, the obligor and the project sponsor are free to amend and modify the contract. Thus, the secured party typically requires advance approval of all amendments to the contract and waivers.73 Moreover, the secured party typically requires an agreement by the obligor not to amend or otherwise modify the contract without obtaining the advance approval of the secured party, and an agreement that no amendment or modification will be valid without the secured party's consent.

Similarly, the typical consent contains a requirement that the obligor provide notice to the secured party if an event of default occurs under the contract. Since the obligor's performance requirements are subject to the adherence by the project sponsor to the contract terms, the secured party must monitor the events that excuse the obligor from performance.74 Also, the secured party typically requires the obligor to agree that no default will be declared until the secured party is notified and has been given a period of time to cure the event of default.

73. See U.C.C. § 9-318(2) (1987), which gives effect to any modification or substitution made in good faith in accordance with reasonable commercial standards. The section also provides that the assignee-lender takes rights under the new or substituted contract pursuant to a modification between the obligor and the assignor-project sponsor. Good faith means honesty in fact. Good faith means honesty in fact. U.C.C. § 9-318(2) provides the secured party with "corresponding rights under the modified or substituted contract." Note that comment 2 to U.C.C. § 9-318(2) suggests that a modification of the contract also includes a termination.
Note that U.C.C. § 9-318(1) refers only to sales contracts. One commentator has suggested that the reference to sales contracts is a drafting error and "courts should by analogy extend the rationale to any agreement that may be the subject of an Article 9 assignment." B. Clark, supra note 67, ¶ 11.04, at 11-21, n. 65.
The secured party typically desires other goals in obtaining the consent to enhance the value of the contract as collateral. These include an allocation of responsibility for prior defaults by the project sponsor, and a series of representations related to the execution, delivery, validity, legality, binding effect, and default status of the contract at the time of the closing of the loan transaction. Also included are representations related to the terms and status of the contract, such as that all conditions precedent to contract performance are fulfilled, and that no prior assignments or collateral assignments have been made.

The Project Finance Lender's Rights Under U.C.C. Section 9-318

In addition to a security interest in the project contracts, some project financings are structured to provide the lender with an immediate assignment of revenues due under the revenue-producing contracts as permitted by U.C.C. section 9-318.75 Pursuant to that section, the secured party is typically required to notify the obligor to make all payments due the project sponsor to a project operating account held by the lender for the project sponsor. The lender is directed to pay funds from the operating account to pay debt service and operating expenses. Excess funds are distributed to the project owners.

Section 9-318 is also significant to the project finance lender in the situation where the lender desires to protect collateral at some date after the closing. The situation may develop where the lender anticipates financial difficulties for the project and desires direct possession of the funds.

Although a complete discussion of financing executory contracts is beyond the scope of this article,76 the major issues are briefly summarized. The U.C.C. generally provides that the other contracting party (the "account debtor") must pay the secured party amounts otherwise due the project sponsor if the account debtor receives notice.77 The consent of the account debtor is not required.78 Perfection, of course, is secured by filing, typically with the secretary of state.79

The concerns of the project finance lender with direct receipt of funds due under a project contract are similar to the concerns discussed earlier in the

75. U.C.C. § 9-318(3) (1987). If the account debtor fails to direct payments to the secured party, it has a risk of double liability, in which payments made incorrectly must be made again to the secured party. E.g., Bank of Commerce v. Intermountain Gas Co., 96 Idaho 29, 523 P.2d 1375 (1974). There is no authority which clearly permits the secured party to sue the account debtor directly for funds due the assignee and not paid to either the assignee or the assignor. This issue is usually addressed in the security agreement and is included as a default in the loan agreement.

76. See generally B. Clark, supra note 67, ¶¶ 11.01–09.

77. U.C.C. § 9-318(4) (1987). After notice is received, the account debtor must make payments only to the assignee. Thus, the account debtor has a risk of double liability if the incorrect party is paid. § 9-318(3) (1987) sets forth the requirements of the notice.


context of taking a security interest in the contract itself. That is, the other party to the contract may have excuses to performance that arise from the conduct of the borrower or otherwise from the contract terms, including modification or amendment of the contract made in good faith and in accordance with reasonable commercial standards. Further, the lender is subject to any "defense or claim" that arises independent of the contract and accrues to the obligor before it receives notice of the assignment. Diligence and security agreement protections are therefore required to protect the lender from these risks.

With respect to subjecting the project finance lender to the terms of the contract, a prudent lender will apply a thorough knowledge of contract law, coupled with the business risks of the industry involved in the contract, to analyze the risk. For example, a long-term open price contract for the production of the project, while enforceable under the U.C.C., may present an unacceptable business risk to the lender if price stability is not sufficiently predictable. Additional contract term risks are discussed in the next section.

The risk of contract modification or amendment is not limited to formal written documents. Since the U.C.C. contemplates modifications without consideration, the parties can change basic contract terms, such as the quality of the goods delivered, and thereby increase the lender’s risks. While events of default can be drafted to guard against this risk, the practical protection is dubious. Similarly, the ability to persuade the account debtor to agree not to modify or amend the contract without the secured party’s consent is not always present.

Perhaps the most significant risk concerns the defenses or claims that arise from the contract. For example, the secured party bears the risk that the project sponsor delivers nonconforming goods or services. Unless the account debtor has agreed not to assert any defenses, the revenue stream will be affected by a contract breach, either by nonpayment, asserting defenses to complete payment, or setoff against payments still due.

**The Project Finance Lender’s Liability for Obligations Arising Under Assigned Contracts**

U.C.C. section 9-317 provides that the secured party is not subject to affirmative liability arising from the performance of the contract by the project sponsor merely because of the security interest. Thus, the secured party is not responsible for damages owed to the account debtor, such as consequential

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80. Id. § 9-318(1)(a).
81. Id. § 9-318(2).
84. Id. §§ 9-206, 9-318(1). For a discussion of the effect of a "cutoff" clause in which all defenses are waived by the other contract party, see In re O.P.M. Leasing Servs., 21 Bankr. 993 (Bankr. S.D.N.Y. 1982).
damages arising from defective goods delivered by the assignor to the account debtor.

There are a few decisions in which affirmative liability is imposed on the secured party for contract breach by the assignor. In each decision, however, the secured party was actively involved in the contract administration and thereby had knowledge of the potential liability.

RISKS IN CONTRACT TERMS AND DEFENSES

The rights of the project sponsor in a contract are, of course, subject to the contract terms and a number of defenses, claims, and other offsets. These defenses and claims subject the project finance lender to a variety of risks resulting from the project sponsor's contract performance, misconduct, and the enforceability of the contract.

One solution available to the secured party is to obtain in the consent a "cutoff" pursuant to U.C.C. sections 9-206 and 9-318(1)(a) that the other contracting party will not assert claims, defenses, or offsets against the secured party. Such an agreement is unenforceable, however, where the secured party knew of the defense or did not act in good faith. Further, the contracting party would not be considered to have waived the contractual defenses that relate to capacity, such as fraud and lack of authority.

If a cutoff agreement cannot be obtained or a consent otherwise negotiated, the secured party can still benefit by giving the other contracting party notice of the assignment. U.C.C. section 9-318(1)(b) provides the secured party with the ability to stop the other contracting party from raising defenses or claims against the secured party that accrue after notice is given and that are related to other transactions between the project sponsor and the other contracting party.

In addition, or as an alternative to an agreement with or notice to the obligor, the lender can examine the contracts for validity and enforceability. This due diligence investigation typically takes the form of opinions and review by counsel.


87. See Michelin Tires (Canada) Ltd. v. First Nat'l Bank of Boston, 666 F.2d 673 (1st Cir. 1981).

88. See generally H. Hunter, supra note 57, ¶¶ 12.01–06.

89. U.C.C. §§ 9-206, 9-318(1)(a) (1987); see generally B. Clark, supra note 67, ¶ 11.04[4].

90. U.C.C. § 9-206 (1987). For applicability of this clause to assignable agreements other than sales contracts, see B. Clark, supra note 67, ¶ 11.04[4].


92. Id.
Commercial Impracticability

The common law doctrine of frustration of purpose relieves an obligor of its duty to perform where a failure of a basic assumption results in extreme difficulty or expense. Changed circumstances that frustrate or render impracticable a purchaser's performance obligations under a project output sales agreement could therefore result in the avoidance of the agreement by the purchaser. The general test is "whether the cost of performance has in fact become so excessive and unreasonable that the failure to excuse performance would result in grave injustice." Alternatively, a project participant may avoid performance of contractual obligations through the doctrine of commercial impracticability. The doctrine, embodied in U.C.C. section 2-615, provides that performance under a contract will be excused if the party has not assumed the risk of some unknown contingency, the nonoccurrence of the contingency had been a basic assumption underlying the contract, and the occurrence of the contingency has made performance commercially impracticable.

Section 2-615 is generally applied when an unforeseeable contingency has altered the essential nature of the performance. U.C.C. comment 4 states that "a severe shortage of raw materials or of supplies due to a contingency such as war, embargo, local crop failure, unforeseen shutdown of major sources of supply or the like" may entitle a party to relief under section 2-615. The section does not excuse a party from its contract obligations merely due to a rise or collapse in the market, however, because that is "the type of business risk which business contracts made at fixed prices are intended to cover." Thus, courts have declined to excuse the buyer from performance merely because resale market prices fall severely after contract execution.

Frustration of purpose and commercial impracticability are generally not major risks for the project participants. The nonrecourse limitation on debt repayment requires that project contracts contain detailed force majeure provi-

95. U.C.C. § 2-615 (1987). Although section 2-615 expressly refers only to a seller, comment 9 to that section provides that, in certain circumstances, a buyer may be entitled to relief. See J. White & R. Summers, Uniform Commercial Code § 3-9, at 128 (2d ed. 1980).
97. Id.
sions to allocate risks associated with contract performance. Thus, the project sponsor can limit a project participant’s recourse to the doctrine of commercial impracticability by enumerating in the contract the sole contingencies that will excuse performance. Comment 8 to section 2-615 provides that the applicability of that section is “subject to assumption of greater liability by agreement.”

**General Contract Theories**

Other legal theories which can be invoked to abrogate project contracts include mutual mistake as to the basic assumptions of the transaction and “unconscionability” arising out of one-sidedness. In addition, each project contract is subject to the terms of performance set forth in the contract, including such provisions as warranties and conditions to performance. Thus, a court may provide relief from unanticipated commercial risks, notwithstanding the collateral impact on financing.

**An Example of Project Contract Risks: Output and Requirements Contracts**

Although a complete analysis of contract laws is well beyond the scope of this article, an example of the potential issues that could materialize to frustrate the
expectations of the project participants will suffice. In analyzing a project financing, the structure of the contractual obligations in supply and sales agreements, such as whether a supply of goods contract is either an output contract or a requirements contract, is important to the credit analysis by the lender. Excuses to performance under these contracts that are permitted by the U.C.C. can affect the operation of the project and the predictability of cash flow.

A requirements contract is an agreement in which the project sponsor promises to sell and deliver all the buyer’s requirements of specified goods, and the buyer promises to refrain from buying comparable goods from any other supplier. In an output contract, the project sponsor promises not to sell specified goods to any other customer, and the buyer promises to accept and pay for all of the goods that the project produces for sale.104

Generally, the buyer in a requirements contract has no duty to have any requirements, and the seller in an output contract has no duty to have any output. A good faith standard applies to both, however.105 The U.C.C. defines good faith as “honesty in fact and the observance of reasonable commercial standards of fair dealing in the trade.”106

The U.C.C. also provides that no quantities unreasonably disproportionate to any stated estimate, or in the absence of a stated estimate to any normal or otherwise comparable prior output or requirements, may be tendered or demanded.107 This proviso applies only to increases in requirements or output, not reductions.108 Thus, a drastic reduction, even to the point of termination, is not precluded if made in good faith.

From the project sponsor’s perspective, the good faith termination standard allows the buyer to escape from contractual obligations. A buyer, for example, may end its requirements by a good faith decision to use a substitute good for that supplied under the contract, such as the substitution of natural gas for coal in the buyer’s production process.109 Also, a buyer’s discovery of a less expensive substitute may constitute a good faith excuse for terminating all of its requirements.110 Similarly, where the buyer can demonstrate that continued operation would cause severe economic loss, courts will permit termination of a product

104. See generally 3 Corbin, Contracts § 569 (1960); J. White & R. Summers, supra note 95, § 3-8.
105. E.g., Fort Wayne Corrugated Paper Co. v. Anchor Hocking Glass Corp., 130 F.2d 471, 473 (3d Cir. 1942); see also U.C.C. § 2-306(1) (1987).
107. Id. § 2-306(1).
110. Id.
line or production segment. Thus, even if the buyer's needs decrease, the project may lose sufficient revenue to amortize the loan.

Contractual provisions can be included to render the termination issue more predictable. For example, the buyer can agree to have future requirements through a minimum quantity term in the contract, thus obligating the buyer to purchase the minimum quantity of goods, even if the buyer decides to terminate operations. An additional protection is to require an assignment of the requirements contract to the successor-in-interest upon the consolidation, merger, or sale of the requirements business.

An output contract will shift the risks of business termination and quantity variations to the buyer of the project output. Since in an output contract, the buyer agrees to accept and pay for all of the goods that the project produces for sale, the buyer, not the project, bears the risk of uncertainty.

**SANCTITY OF CONTRACTS—THE IMPACT OF GOVERNMENTAL REGULATION AND OTHER GOVERNMENTAL ACTIONS ON PROJECT FINANCE CONTRACTS**

In contrast to project financings based on reasonably predictable cash flows, many project financings are based on firm cash flows created by governmental action or backed by governmental support. For example, the Public Utility Regulatory Policy Act of 1978 ("PURPA") requires utilities to purchase electric power at state-established rates. The statute provides a project promoter a firm cash flow on which to structure a borrowing since, in general terms, once the project promoter produces electricity to sell to a utility, the utility is required to PURPA to buy it.

Even with this greater level of predictability, project participants generally require the PURPA purchase obligation memorialized in a contract. Specific price, delivery, warranty, and default provisions are each significant to a financing based solely upon project revenues.

Despite the contractual form, the governmental support that produces this firm cash flow is nonetheless potentially subject to public policy considerations. The risk is that legislatures or regulatory agencies will be pressured to amelio-

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111. Fort Wayne Corrugated Paper Co. v. Anchor Hocking Glass Corp., 130 F.2d 471 (3d Cir. 1942); HML Corp. v. General Foods Corp., 365 F.2d 77, 81 (3d Cir. 1966). Conversely, if the contract is fixed-price, and the market price for the good or service increases, the project loses the ability to recover the increase in value. See U.C.C. § 2-306 comment 2 (1987).

112. See, e.g., Monolith Portland Cement Co. v. Douglas Oil Co. of Cal., 303 F.2d 176 (9th Cir. 1962); see also In re United Cigar Stores of Am., 8 F. Supp. 243 (S.D.N.Y.), aff'd, 72 F.2d 673 (2d Cir.), cert. denied, 293 U.S. 617 (1934).


114. See Finch, supra note 108, at 360; cf. Texas Indus., Inc. v. Brown, 218 F.2d 510, 513 (5th Cir. 1955) (similar contract provision construed to reinforce court's conclusion that leasing of plants to another party did not release requirements buyer from contract obligations).

rate unfavorable effects of the contract which, when negotiated and approved under then applicable economic circumstances, were reasonable to the contracting parties and the legislature or governmental agency. If the contract is altered, the impact on the sufficiency of project revenues to support debt service may have a negative or fatal effect on project viability.  

**THE IMPAIRMENT OF CONTRACT RIGHTS UNDER THE CONTRACT CLAUSE**

The ability of a state to interfere with an existing project finance contract is governed by the constitutional prohibition of enacting any law that will substantially impair the obligation of contracts in the contract clause. The Supreme Court has generally analyzed contract clause cases by balancing the rights of contracting parties against the needs of the state; all impairment is not prohibited.

The contract clause does not obliterate state police power, however. Utilities and other industries dedicated to a public purpose are subject to state police

116. An example of the impact of public policy on governmentally supported contractual undertakings are provisions in some power purchase agreements that seem to require a renegotiation of the contract upon a change in economic conditions. Several states have addressed this issue as well. In Pennsylvania, for example, the Pennsylvania Public Utility Commission has stated that it will not change a power contract once approved. In re Pennsylvania Elec. Co., 89 Pub. Util. Rep. 4th (PUR) 402 (1988). In the proceeding, a utility and cogeneration company entered into a power contract that contained a so-called “regulatory out” clause, a contract provision that allows for contract modification in the event of a change in law. Noting that the Pennsylvania Commission has statutory authority to reconsider prior orders or revise contracts, the Pennsylvania Commission stated that such a possibility is “nonexistent” since federal law would prohibit a reconsideration of a prior rate recovery approval based on projections that were reasonable when made, and the Commission’s policy is to approve rates in advance to encourage development of cogeneration. Nonetheless, the Pennsylvania Commission did not strike the clause from the contract, citing a desire for consistency with prior orders.


While the Framers intended the clause to restrict the ability of the states to enact debtor relief laws, it has been expanded by the courts. See generally L. Levy, Original Intent and the Framers' Constitution 124–36 (1988); B. Wright, The Contract Clause of the Constitution (1938); F. Frankfurter, The Commerce Clause Under Marshall, Taney and Waite (1937). The clause does not apply to the federal government.

118. The ability of a state to interfere with an existing contract may also be limited by congressional preemption which renders federal jurisdiction exclusive in that area. See, e.g., Natural Gas Pipeline Co. v. Railroad Comm’n of Tex., 679 F.2d 51 (5th Cir. 1982).
power legislation. A contract with a utility is therefore not immune from a state order changing or superceding existing rates.

In *Energy Reserves Group, Inc. v. Kansas Power & Light Co.*, the Supreme Court applied a two-prong test to determine whether a particular state action is permissible under the contract clause. The Court required a state to have (i) a significant and legitimate public purpose behind the regulations, and (ii) adjusted the rights and responsibilities of contracting parties based upon reasonable conditions and a character appropriate to the public purpose justifying the state action.

Kansas Power & Light Co. and its gas supplier, Energy Reserves Group, Inc., had entered into two intrastate natural gas supply contracts, which included two types of indefinite price escalator clauses. One provision provided the supplier the option for redetermining the sale price no more than once every two years. The other clause provided for increases in the sale price based on increases in governmental gas price ceilings. After the contract was executed, Congress deregulated gas sales and authorized the states to regulate intrastate gas prices. In response, Kansas enacted price controls. The utility refused to adjust the contract price as a result of a provision in the Kansas statute that prohibited the enforcement of the price redetermination clause. Noting that the statute did not discriminate against this particular gas supplier, but instead applied to all gas suppliers, the Court opined that the law was narrowly crafted to promote an important state interest in protecting utility ratepayers from market price fluctuations caused by federal deregulation of gas.

Significant to the Court was the foreseeable impact of the governmental regulation on the gas contracts. Kansas had regulated natural gas sales for many years. Moreover, the natural gas contracts were explicitly subject to state regulation.


122. Id. at 411–13.

123. Id. at 403–405.

124. Id. at 405–407.

125. Id. at 407–408.

126. Id. at 408.

127. Id. at 421.

128. Id. at 414 n. 18; compare *Allied Structural Steel Co. v. Spannaus*, 438 U.S. 234 (1978) (law under contract clause scrutiny affected an area not typically regulated by the state).

129. 459 U.S. 400, 416 (1983); see, e.g., *Hudson County Water Co. v. McCarter*, 209 U.S. 349, 357 (1908) ("One whose rights, such as they are, are subject to state restriction, cannot remove them from the power of the State by making a contract about them.")
Most recently, in *Keystone Bituminous Coal Association v. DeBenedictis*, the Court ruled that the contract clause is not violated by a Pennsylvania statute that restricts mining operations to prevent subsidence damage. The statute requires coal mine companies to leave in place sufficient coal for support of publicly-used buildings, cemeteries, and perennial streams, and regulations require the companies to pay repair costs if any damage is caused, even though surface owners previously waived any claims to damages. Stating that the Court will not second-guess the state legislature’s conclusion on how to resolve the problem, the Court ruled that no violation of the contract clause was found since the state has a strong public interest to prevent subsidence damage.

The *Energy Reserves* and *Keystone* decisions suggest that project financings based on predictability in contract terms are not necessarily predictable. Areas that are highly regulated by government are subject to continuing regulation, and possibly contractual abrogation, without a violation of the contract clause.

**RETROACTIVITY AND SETTLED EXPECTATIONS—DUE PROCESS UNDER THE FIFTH AND FOURTEENTH AMENDMENTS**

The question of the retroactive effect of governmental actions on existing project finance contracts and transactions is of concern to project lenders and other participants, especially when legislatures and executive agencies question the appropriateness of existing laws and regulations in light of changing economic conditions. The question arises in both contract clause cases, which are discussed above, and in the context of a taking of property without due process under the fifth and fourteenth amendments.

In general, the courts are opposed to retroactive legislation, traditionally basing this opposition on a need for stability and on a reluctance to permit the legislatures to affect selective classes of citizens. Where the retroactive legislation involves an emergency, the Supreme Court has traditionally tolerated the

131. *Id.* at 476.
132. *Id.* at 477.
133. *Id.* at 506.
retroactive impact.\textsuperscript{139} Similarly, the Court tolerates the retroactive effect of legislation that ratifies prior governmental conduct or adjusts an administrative action.\textsuperscript{140}

In other types of retroactive legislation, however, the Court closely examines the impact to determine whether the legislature has overcome the general judicial distaste for retroactive laws. If the law affects a remedy and not a property right, or if the law bears a rational relationship to a governmental purpose, the retroactive impact is generally upheld.

For example, in \textit{Chase Securities Corp. v. Donaldson},\textsuperscript{141} the plaintiff was barred from bringing a Blue Sky Law action because of a lapse of the statute of limitations. During a retrial and appeal, the Minnesota legislature removed the statute of limitations from certain categories of Blue Sky Law violations, including the type of violation about which the plaintiff complained.\textsuperscript{142} The plaintiff reasserted its claim, and the defendant contended that the retroactive law violated the due process protections of the fourteenth amendment.\textsuperscript{143} The Court rejected the defendant's contention, basing its decision on the distinction between the plaintiff's right to seek recovery, which was not affected by the law, and its remedy for doing so, which was the focal point of the law.\textsuperscript{144}

Where property rights are involved, the Court applies a type of rationality test to determine the constitutionality of the retroactive effect. In \textit{Railroad Retirement Board v. Alton Railroad Co.},\textsuperscript{145} a substantive due process decision, the Court voided legislation that required railroad companies to establish pension funds for workers no longer employed by the companies. The Court presumably concluded that the right of a company to terminate employment relationships and the associated liability outweighed the governmental interest involved.

The precedential value of \textit{Alton Railroad} is limited, however, because of the decline of substantive due process, evidenced recently in the Court's decision in \textit{Usery v. Turner Elkhorn Mining Co.}\textsuperscript{146} In \textit{Usery}, the Court considered the constitutionality of the black lung benefits legislation. The legislation required mine operators to pay benefits to miners who were no longer employed before the effective date of the law.\textsuperscript{147} The Court upheld the legislation under a due

\textsuperscript{139} E.g., Lichter v. United States, 334 U.S. 742 (1948) (fifth amendment challenge to Renegotiation Act of 1942, which permitted the federal government to renegotiate existing contracts with private citizens to avoid profiteering from wartime conditions); but see Louisville Joint Stock Land Bank v. Radford, 295 U.S. 555 (1935) (emergency depression measure held invalid).


\textsuperscript{141} 325 U.S. 304 (1945).

\textsuperscript{142} Id. at 307.

\textsuperscript{143} Id. at 308.

\textsuperscript{144} Id. at 311.

\textsuperscript{145} 295 U.S. 330 (1935).

\textsuperscript{146} 428 U.S. 1 (1976).

\textsuperscript{147} Id. at 8–9.
process challenge, noting that retroactive legislation is not unconstitutional simply "because it upsets otherwise settled expectations." Applying a rational relationship test, the Court concluded that the law justifiably allocated mine work health costs to mine operators.

Similarly, there are no substantive due process restraints on the power of Congress to legislate under the commerce clause, absent an express constitutional limit on that power, such as a reservation to the states of the power to regulate. The power of Congress to legislate under the commerce clause extends to the power to abrogate existing contracts.

The ability of legislatures to impact contractual arrangements, as evidenced by *Usery*, is somewhat unsettling in the project finance context since a project financing is based on "settled expectations." The traditional judicial bias toward retroactive legislation can be overcome and upset the reliability of assumptions upon which the financing is based. Even though property rights are affected, if legislation bears a rational relationship to a governmental purpose, the Court will presumably uphold the retroactive effect of the legislation.

**BANKRUPTCY AND PROJECT FINANCE**

Financial difficulties for a project, whether they are those of the project sponsor or of the other project participants, present an important consideration for the project finance lender that arises from the nature of the security: the underlying contracts provide the credit support. Contractual representations, warranties, covenants, and consents are of little curative or preventative value with regard to the bankruptcy of the project owner or one of the other project participants. Rejection of an "executory" contract by the trustee in bankruptcy of the project owner or other participant is a contract risk over which the parties have little practical control.

From the project lender's perspective, the intervening bankruptcy of either party to an assigned contract subjects the lender's security to rejection of the contract. The project finance lender is thus faced with the dilemma that the financing is based on the acceptability and credit-worthiness of the very contracts subject to rejection.

148. Id. at 16.
149. Id. at 19.
152. Abrogation of such a contract is not an unconstitutional "taking" under the takings clause. U.S. Const. amend. V. Although economic regulation may destroy value, if there is no physical invasion of property, and the regulation is in the public good, there is no "taking." Nor is the abrogation a violation of the equal protection guarantees of the fifth amendment. U.S. Const. amend. V. See, e.g., Hodel v. Indiana, 452 U.S. 314, 331 (1981) (economic regulations will not be invalidated if rationally related to a legitimate governmental purpose unless a fundamental right is abridged or a suspect class created).
153. See generally B. Clark, supra note 67, ¶¶ 11.01–.05.
Reliance on an executory contract as collateral requires an understanding of the treatment of contracts in bankruptcy. Although the term "executory contract" is not defined in the Bankruptcy Reform Act of 1978, the accepted definition of "executory contract" in case law is

a contract under which the obligation of both the bankrupt and the other party to the contract are so far unperformed that the failure of either to complete performance would constitute a material breach excusing the performance of the other.

This definition includes most of the contracts in a project financing, such as a long-term fuel supply contract.

**IMPACT ON THE PROJECT OF THE BANKRUPTCY OF A MAJOR PROJECT PARTICIPANT**

Financial difficulties for one of the project participants in a project financing directly affect various aspects of the project. For example, the bankruptcy of the purchaser of the entire output of the facility may affect cash flow dramatically. In addition, the bankruptcy of the purchaser under the Bankruptcy Reform Act places the status of the contract in a state of uncertainty.

During the period before the contract is affirmed or rejected by the purchaser's trustee (including a debtor-in-possession in a rehabilitation proceeding), the project sponsor may decide to perform its obligations even though the purchaser need not perform. Thereafter, the project sponsor can seek to recover for that performance and, if the contract is not rejected, can insist on the cure of defaults and adequate assurance that the purchaser can continue to perform before the project sponsor is required to continue performance. If the contract is rejected, the project sponsor would be entitled to the reasonable value of its performance, not necessarily the amount set forth in the contract.

The purchaser's trustee may have a substantial amount of time in the bankruptcy proceeding to decide whether to affirm or reject the contract, which

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155. Id. at 460.

156. Section 365(a) of the Bankruptcy Reform Act of 1978, 11 U.S.C. §§ 101-151,326 (1982), provides that, except in certain specified cases, "the trustee, subject to the court's approval, may assume or reject any executory contract or unexpired lease of the debtor." Section 1107(a) further provides that, subject to certain limitations, "a debtor in possession shall have all the rights . . . and powers . . . of a trustee." 11 U.S.C. § 1107(a). Because section 365(a) provides only for rejection or assumption of executory contracts and not for their modification in part, the debtor in possession is probably not entitled to modify the price term of the contract downward. The debtor's option is limited to assumption or rejection of the entire contract.

157. The rejection must generally satisfy a stricter standard than the traditional "business judgment" rule. NLRB v. Bildisco & Bildisco, 465 U.S. 513, 523 (1984). The rejection generally constitutes a breach of the contract as of the date immediately preceding the petition date. If rejected, the project sponsor would be left with a prepetition claim for damages calculated in accordance with state law. Effectively, the project sponsor is in the position of an unsecured creditor of the utility.
is subject to court approval. Under the Bankruptcy Reform Act, in a rehabilita-
tion proceeding, the purchaser's trustee may assume or reject the contract any-
time before confirmation of the plan.\footnote{158} Only a party to a contract with the
bankrupt purchaser may bring a motion to force the purchaser to decide
whether to assume or reject the contract.\footnote{159} Until then, the purchaser is not
obligated to make a decision\footnote{160} unless the proceeding is a liquidation proceed-
ing, in which an executory contract is deemed rejected if not assumed within sixty
days after the order for relief.\footnote{161}

Since the purchaser is not required to perform under the contract in bank-
ruptcy, the revenue to the project may be curtailed. It is unclear if a project
sponsor can force the purchaser to perform under the contract before the
purchaser decides, or is required by the bankruptcy court to decide, whether to
affirm or reject the contract. As a practical matter, however, the bankrupt
purchaser may have no choice other than to continue performance under the
contract if the product produced by the project is integral to the purchaser's
system.\footnote{162} Also, the purchaser, or other parties in interest such as creditors or
governmental agencies, may be able, as part of the bankruptcy proceeding, to
force renegotiation of the contract that may significantly alter the contract.\footnote{163}

In addition to bankruptcy risks during project operation, the impact of a
bankruptcy by the purchaser during construction is not insignificant. As dis-
ussed earlier, performance by the bankrupt purchaser cannot be forced by the
project sponsor until a decision is made whether to affirm or reject the contract.
During that delay, there can be adverse consequences to other project contracts.
For example, if the purchaser becomes bankrupt, the bankruptcy may result in
termination of the performance requirements of other project participants.

Thus, if the purchaser declared bankruptcy, it would be entitled to continue
to perform under a contract but would not immediately be required to cure pre-
bankruptcy defaults. If market conditions have altered the economics underlying
the purchase contract, a purchaser might elect to reject the contract, or, by using
the threat of possible rejection, force renegotiation on less favorable terms that
could decrease the ability of the project to service debt. In a project financing,
the secured party faces the paradoxical result that, notwithstanding the quality
of the security, it is vulnerable to the need to perform the underlying contracts:

\footnote{159} Id.
\footnote{160} Id.
\footnote{162} The act of filing a bankruptcy cannot be used, in itself, to terminate a contract. So-called
"ipso facto bankruptcy clauses" are unenforceable under the Bankruptcy Reform Act. 11 U.S.C.
§ 365(e) (1982).
\footnote{163} Section 1129(a)(6) of the Bankruptcy Code, 11 U.S.C. § 1129(a)(6) (1982), provides that a
plan may be confirmed only if "[a]ny regulatory commission with jurisdiction, after confirmation of
the plan, over the rates of the debtor has approved any rate change provided for in the plan, or such
rate change is expressly conditioned on such approval."
it is vulnerable to delay, to transaction reconfiguration, and to ultimate rejec-
tion.164

**IMPACT OF THE BANKRUPTCY OF THE PROJECT**

Financial difficulties for the project sponsor present the most interesting
dilemma for the project finance lender, since the underlying equipment is not as
important to loan repayment as is the performance of the project contracts.
Repayment of the defaulted loan is only possible through the cash flow gener-
ated by project operation, since the project finance loan is nonrecourse to the
project sponsor.

As discussed in the previous section, prior to affirming or rejecting the
contract, the contracting parties may decide to perform their contractual obliga-
tions even though the project need not perform. The various project participants
can seek to recover for that performance and, if the contract is not rejected, can
insist on the cure of defaults and on adequate assurance of the ability of the
project to perform in the future before they are required to continue perfor-
ance.165

As is the case with the purchaser’s trustee, the project’s trustee may have a
substantial amount of time during the bankruptcy proceeding in which to decide
whether to affirm or reject the project contracts, all of which are subject to court
approval. As is stated earlier, in a rehabilitation proceeding, the trustee may
assume or reject the contract anytime before confirmation of the plan.166 Only a
party to a contract with the bankrupt project may bring a motion to force the
project sponsor to decide whether to assume or reject the contract.167 Until then,
the project is not obligated to make a decision168 unless the proceeding is a
liquidation proceeding, in which an executory contract is deemed rejected if not
assumed within sixty days after the order for relief.169

164. The January 28, 1988 filing of a voluntary petition in bankruptcy by Public Service
Company of New Hampshire is a useful example of the broad implications for project owners and
project finance lenders. As a result of the filing, contracts between the utility and third parties for
the sale to the utility of electricity produced by the third parties to the utility were jeopardized.

Public policies behind certain kinds of contracts sometimes justify requiring a court to apply a
stricter test than “business judgment” before approving rejection. In NLRB v. Bildisco & Bildisco,
465 U.S. 513, 526 (1984), for example, the United States Supreme Court found that collective
bargaining agreements may not be rejected simply as a matter of business judgment, but only after a
showing that the “equities balance in favor of rejecting the labor contract.” Whether the public
policies behind PURPA, the federal statute that generally requires utilities to purchase power
produced by certain producers, and related state statutes are sufficiently compelling to require this
kind of elevated standard for rejection of power contracts is uncertain. See generally Wilson, The
Bankruptcy of PSNH: How Will it Affect Small Power Producers?, Alternate Sources of Energy,

167. Id.
168. Id.
Depending upon the timing of the project's financial difficulties, the only probable opportunity for the lender to be repaid the loan amount is for the project to continue operation under the framework of the attractive contractual terms that induced the lender to commit originally to the loan as a project financing. The project or project finance lender may be able, as part of the bankruptcy proceeding, to renegotiate the contracts to help cure financial problems, depending on the importance of the project to the other participants. While sale of the project is a possibility, the financial difficulties for the project may make that alternative impractical.¹⁷⁰

PROJECT FINANCE DOCUMENTATION

There are six categories of contracts in a typical project financing: (i) site acquisition, (ii) construction and completion, (iii) fuel and raw material supply, (iv) output or services sale, (v) operation and maintenance, and (vi) financing and equity contribution. Contractual parties of these agreements must note that in a project financing the cash flow of the project is considered the primary source of repayment, not the general credit of the project owners. Also, each contract must ensure that, if the facility does not operate in the manner anticipated by project feasibility reports, some contractual party will, through damages or similar obligations, make up the deficiency in cash flow necessary to service debt, pay principal, and operate the project.

In the project finance arena, the terms "bankable contracts" and "financeable contracts" have been coined and included in the vocabulary of project financiers and other participants. Generally, the terms are used to signify that a contract is instrumental to the project financing, that it satisfies the minimum legal and business requirements to ensure that the contractual obligations are predictable, and that the economic obligations permit the payment of debt service, operation and maintenance expenses, and a minimum return on equity necessary to retain the interest of the project owners in the project's success.

A complete analysis of each category of project finance contract is beyond the scope of this review. Nonetheless, there are basic provisions that must be reviewed to ensure that a contract is "bankable." First, the contract must be reasonably predictable in price and performance so that the project finance lender can "dimension" the potential risks. For example, if the construction contract does not obligate the contractor to deliver the completed facility at the agreed-upon performance levels on a certain date for a fixed price, additional costs incurred by the project to compensate the contractor may destroy the ability of the project to service the increased debt. This is not to suggest that every project finance lender requires that every construction contract must be completely fixed with respect to price. Rather, the contract must provide

¹⁷⁰. The trustee has the power to assign any executory contract to which the debtor is a party to another entity, regardless of the contractual terms or state law concerning anti-assignment clauses. 11 U.S.C. § 365(f) (1982); see also U.C.C. § 9-318(4) (1987).
sufficient predictability so that the internal credit policies of the lender can be satisfied.

Second, all of the project contracts must relate together with consistency in term, termination, and excuses for performance. For example, the force majeure clauses of all the contracts must be uniform in effect. If the force majeure clause of one contract excuses performance by the project in the event of a hurricane, but another important contract does not, the project may not weather the storm.

Third, the term of each contract must be sufficiently long to extend through the period necessary to amortize the debt. Thus, a site lease of ten years is inappropriate to a project financing with debt obligations running for fifteen years.

Finally, the project contracts must have the rudimentary elements of opportunities for cure by the lender. For example, project finance contracts must not provide the fuel supplier the right to terminate the contract without notice and a reasonable cure period.

CONCLUSION

The project finance field is a multi-billion dollar industry that is growing rapidly. In 1987 alone, over $5.6 billion in project financings of nonutility electric generating facilities were closed by lenders and investment bankers, exclusive of private placement and internally financed transactions that were also conducted on a project finance basis. This represented over twice the project finance closings for such facilities in 1986 (which amounted to $2.7 billion). Project financing is also used as a finance mechanism in the amusement park, hotel, and healthcare areas.

Project finance represents a vehicle for both efficient capital formation and cost savings to the project sponsor and ratepayers. It is a mechanism used by a full spectrum of borrowers (and not only by thinly-capitalized entities). The limited-recourse nature of a project financing provides financial insularity from each participant's other projects, and it protects the sponsor's general assets from most difficulties in any particular project. For these reasons, project finance is developing as an important tool to be included among the services offered by every business attorney.