Renewable Energy Projects:



Tax-Exempt and Other Tax-Advantaged Financing

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DISCLAIMER: Nothing contained in this pamphlet should be construed or relied upon as legal advice. Instead, this pamphlet is intended to serve as an introduction to the general subject of the use of tax-exempt bonds and other mechanisms to finance renewable energy projects, from which better informed requests for advice—legal and financial—can be formulated.

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CHAPTER ONE

Introduction

The term "renewable energy" describes energy that comes from natural resources that are naturally replenished, including solar energy, wind energy, geothermal energy, bio-energy, wave power, tidal power and hydroelectricity. Although the concept of renewable energy is not a new one, several factors, including global warming, the political climate, renewable portfolio standards ("RPS") and cap-and-trade regulations, the scarcity of other natural resources and investor interest have spurred a flurry of new activity among developers, governmental entities, investor-owned utilities and infrastructure and clean energy funds, as well as other financing participants towards developing renewable energy projects. Renewable energy projects are now being built throughout the country (and the world) at a pace that has never before been seen. Governments at all levels (federal, state and local) are increasingly motivated to have renewable energy projects built and have begun providing assistance (such as eligibility to use tax-exempt bonds, grants, tax credits, lower interest loans and other incentive programs) to developers of renewable energy projects and other project participants that are consistent with those goals. Developers are becoming more sophisticated in using these government incentive programs to generate the equity and/or debt they need to finance their projects.

This pamphlet is designed to introduce or broaden the understanding of developers, state and local agencies, investment banks, financial advisors, investment funds, banks, operators and other participants to the financing component, with particular emphasis on tax-exempt bond financing, as well as certain other "tax advantaged" tools in the financing of renewable energy projects, including tax credit bonds, tax credits and other governmental subsidies. The primary focus of this pamphlet will be on the financing of renewable energy projects, but will touch on energy efficiency projects as well.

Chapters 1 through 5 of this pamphlet introduce readers to some of the key participants in a renewable energy financing, key credit consideration for both private parties and governmental entities, the roles that federal and state and local government entities can fill in financing (primarily through incentive programs that encourage the development of renewable energy projects) and the benefits of tax-exempt financing. Chapters 6 through 8 focus on municipal bond structures (primarily tax-exempt) useful to private developers of renewable energy projects or other nongovernmental parties as well as to state and local government agencies and governmental municipal bond programs that may be of particular interest to state and local government agencies.

Orrick is the nation's premier tax-exempt bond counsel firm, with extensive experience in all types of energy financings, ranking number one (in terms of dollar volume of public power bonds issued) over the past decade. We have been bond counsel, underwriter's counsel, developer counsel, project counsel, lender's counsel or other counsel on more than 450 financings and refinancings of public power projects in the past decade, including some of the largest and some of the smallest renewable energy financings ever completed.

Moreover, Orrick's Energy and Infrastructure group is experienced in every significant fuel source and technology, including solar, wind, biomass, biofuels, geothermal, nuclear, oil and gas, waste-to-energy, ethanol and coal and other fossil fuels. Orrick's Energy and Infrastructure group works on billions of dollars of energy projects each year, including development, construction, merger and acquisition and financing matters and has consistently been recognized by Chambers USA (as well as other leading organizations) as one of the leading law firms for energy and project finance.

Orrick also has a significant Cleantech Group. Our emerging companies practice includes the representation of more than 1,000 emerging companies worldwide and our relationships with more than 100 venture capital firms and other financing sources.

Orrick is likely the only law firm with top ranked global experience in the four areas of law that are critical to the success of companies involved in the clean energy technology sector—emerging companies, energy project finance, public-private partnerships and intellectual property—to which we can also add tax-exempt and other tax advantaged finance expertise.

In combination, Orrick has nearly 150 lawyers focusing on energy and a

network of client and other relationships, which positions us at the forefront of the innovations and trends that are shaping the renewable energy sector in particular. Working with energy companies, developers, vendors and others that want to sell renewable energy equipment or power, and with companies and public entities that are interested in purchasing such equipment or power, we have found that the missing link is often financing.

CHAPTER TWO

Projects, Borrowers and Other Financing Participants

A. Types of Renewable Energy Projects

The universe of renewable energy projects is a large one. Such projects employ the use of the following as energy sources, as well as others:

- Solar
- Wind
- Biofuel
- Biogas/Biomass
- Geothermal
- Anaerobic Digestion
- Wave Energy
- Fuel Cells
- Tidal Energy
- Ocean Thermal
- Hydroelectric

B. Types of Financing Recipients ("Borrowers")

The term "Borrower" is used throughout this pamphlet to describe the party in a debt financing (generally a tax exempt bond financing but also other forms of debt financing) that receives a loan funded from bond proceeds or other types of loans and uses those proceeds to acquire, construct, install, rehabilitate or refinance a renewable energy project. Borrowers generally include state and local governmental entities as well as private entities. State and local government entities will generally be referred to collectively in this pamphlet as "public agencies." As used in this pamphlet, the term "public agencies" will generally not include the federal government or its agencies or departments.

Private Entities include:

- Public companies, including investor-owned utilities
- Privately-held companies
- Limited liability companies (often a special-purpose, single-asset entity)
- Limited partnerships (often a single-purpose, single-asset entity)
- 501(c)(3) corporations (including private universities, private schools, cultural institutions, health care corporations and corporations created to serve the needs of one or more state or local governmental entities)

Depending on context, private entities are sometimes referred to herein as "developers," as they are often the party that organizes, funds, originates or acquires early-stage development of projects.

Governmental Entities (a term intended to be more expansive than "public agencies") include:

- States
- State instrumentalities, departments and agencies
- Political subdivisions, such as cities or counties
- Public universities
- School districts
- Special districts
- Native American tribes
- Certain federal agencies (under limited circumstances)

C. Other Financing Participants

Other than the Borrower, a debt financing may involve several other financing participants.

- *Lender* – The Borrower may need to find a party willing to extend credit to its project. This party, the Lender, could be a credit enhancer (such as a letter-of-credit bank), a federal, state or local governmental entity that underwrites renewable energy projects, a bond purchaser in a private placement or an underwriter (described below) in a publicly offered capital markets transaction. The Lender plays a major role in structuring the financing and is a driving force in the transaction. Consulting a lender early is crucial to determining whether a transaction is feasible, what it will look like and when it can be completed. In a public offering of debt, the "lender" is the class of bondholders who buy the bonds of the Borrower.

- *Underwriter* – In a public offering of debt, an underwriter—generally an investment banking firm, but sometimes the capital markets group of a bank—underwrites Borrower debt by purchasing the debt from the Borrower and reselling it to investors. The underwriter takes an active role in structuring the transaction and can assist in obtaining other forms of financing, such as equity or subordinate debt.

- *Issuers* – For tax-exempt bonds and municipal tax credit bonds, the Issuer of such bonds generally must be a state or local government entity (a public agency). If the project to be financed is to be owned by the state or local governmental entity, it may be both Issuer and Borrower. If the project is to be owned or held by a private party, that party will be the Borrower of the proceeds of debt issued by a state or local governmental issuer. In the latter case, the Issuer is typically not looked upon to repay the debt or as a security for the debt, but rather is a conduit pass-through entity for the purpose of issuing tax-exempt bonds on behalf of a borrower.

- *Offtaker* – This is the entity that is the contractual purchaser of the energy produced from the facility. The entity can be a public or private utility or a large end user of the energy.

- *Equity* – Equity financing may take the form of corporate stock or subsidiary company (as limited partnership) interests to receive cash distributions and/or tax benefits associated with the project. Equity can take various forms and is discussed in more detail in Chapter 3.

- *Other Participants* – A borrower will also often retain an engineering firm or other feasibility consultant to analyze the technical feasibility of the project to be financed or the overall revenue producing capability of the project. The engineer's work can be simply for the benefit of a borrower or can be provided to investors to assist in marketing the debt.

The Issuer or the Borrower may engage a financial advisor to get an independent view of some of the advice received from the underwriter.

In addition, certain private parties often act as operators for certain public-private projects, as discussed later in this pamphlet.

CHAPTER THREE

Credit Considerations

A critical component of a successful renewable energy project finance is the development of a financing structure that is sufficiently attractive to lenders or to investors. There are two main models for structuring the financing of a renewable energy project: financing based on the creditworthiness of the Borrower and project financing.

A. Financing Based on Creditworthiness of Borrower

Private Entities

In this model, the Borrower's overall financial resources—its general fund and balance sheet—are promised as the source of repayment of the bonds or other debt. If the Borrower is a strong company, particularly if it has an investment grade rating from one of the major rating agencies, this structure would likely provide the most cost-effective borrowing. Depending on the strength of the Borrower, no collateral security may have to be pledged, or it may be necessary to pledge the assets being financed. Also, if the Borrower's balance sheet is strong and the amount of debt is small compared to the Borrower's overall debt profile, up to 100% of eligible project costs can be financed.

Public Agencies

For a public agency, a financing may consist of such agency employing the use of its electric system enterprise fund to secure debt. The considerations for an enterprise fund borrowing are (a) the scope of the enterprise for which the debt was incurred and by which it must be supported and (b) the priority of the allocation of enterprise revenues between debt and other costs borne by the enterprise and among different categories of debt. The issues must be examined, however, in the context of the general security requirements for enterprise debt. The basic security for the debt of an electric system enterprise is the ability of the agency to generate

revenues sufficient each year to (a) pay operation and maintenance expenses, (b) pay debt service and (c) pay for the renewal or replacement of existing facilities or the acquisition of new facilities necessary to enable the enterprise to continue to pay operation and maintenance expenses and debt service in future years. Investors are assured that an enterprise will be managed in a manner producing such result by an agency's agreement to comply with certain financial covenants.

Rather than securing financing through its electric system enterprise, a public agency may choose to secure financing through its general fund either because such public agency does not have an electric utility or because such renewable energy project may provide broader benefits to the public agency as a whole. For example, a city without an electric utility may wish to finance the acquisition and installation of solar panels and related components for use on its administration buildings and facilities, including a city hall or a police station. Under such a scenario, a city may have to use its general fund to secure financing for such a project. General fund sources of repayment include property taxes, sales taxes, fees and special taxes (which may or may not be pledged). General fund financings are often implemented by public agencies for general capital improvements.

Off-Balance-Sheet Financing/Operating Lease

It may be desirable for accounting reasons for either a private entity or public agency to undertake a so-called "off-balance sheet" financing. An off-balance-sheet financing is a form of financing in which large capital expenditures (and the associated debt or other form of repayment obligation) are kept off of the balance sheet of such public or private entity through various accounting classification methods. Borrowers will often use off-balance-sheet financing to keep their debt-to-equity and leverage ratios low, especially if the inclusion of a large liability poses issues for existing debt covenants. Loans, debt and equity that are not off-balance-sheet, by contrast, generally do appear on Borrower balance sheets.

Examples of off-balance-sheet financing include joint ventures, research and development partnerships and operating leases (rather than purchases of capital equipment). Operating leases are one of the most common forms of off-balance-sheet financing. In a typical operating lease, the lessor, usually a bank, leasing company or other financial institution (often a special-purpose entity formed by the parties for the sole purpose of holding title to the asset), purchases the asset from a vendor and leases it to the Borrower, or lessee. The lease agreement requires the lessee to pay the

lessor periodic lease payments during the lease term. In these cases, the asset itself is kept on the balance sheet of the lessor, and the lessee/Borrower reports only the required rental expense for use of the asset as an annual operating expense. Generally Accepted Accounting Principles in the U.S. have set numerous rules for companies to follow in determining whether a lease obligation should be included on the balance sheet.

B. Project Finance

General Structure

By contrast, renewable energy projects can be (and often are) financed on a secured, non-recourse basis, meaning that the Borrower (referred to below as the Project Company) is obligated to make payments on the debt from project revenues only with recourse to other assets of the Borrower or its affiliates limited either entirely or to narrow circumstances, and the lender's primary security for the financing is a mortgage or lien on the asset itself and project revenues. This structure is generally known as "project financing."

Typically the Borrower is set up as a special purpose entity that is "bankruptcy remote" from its parents, meaning it would not be consolidated into any bankruptcy of the parent. In this way, only the credit of the project matters, not the credit of the Borrower or its parent.[1]

Following are typical steps for the Borrower to enter into a project financing transaction.

Step 1: The Project Sponsor (*i.e.*, the parent or developer) forms a special purpose vehicle (the Project Company), which will construct, own and operate the project (the Project Company takes on the role of the "Borrower," as described in Chapter 2). The Project Sponsor, as a shareholder of the Project Company, is not liable for the obligations of the Project Company unless it contractually agrees to such liability in negotiated and typically narrowly defined circumstances.

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[1] Rather than forming a special purpose project "company," a public agency could form a special purpose public agency as its Borrower such as a "joint exercise of powers agency." In the alternative, the public agency itself could act as non-recourse Borrower and have the renewable energy project be the sole source of credit for the financing, either on its own or through the formation of a special enterprise fund. In either case, this project financing discussion has general applicability to both private entities and public agencies.

Step 2: The Project Company obtains control of the facility site by entering into a long-term lease, or purchase, of the site.

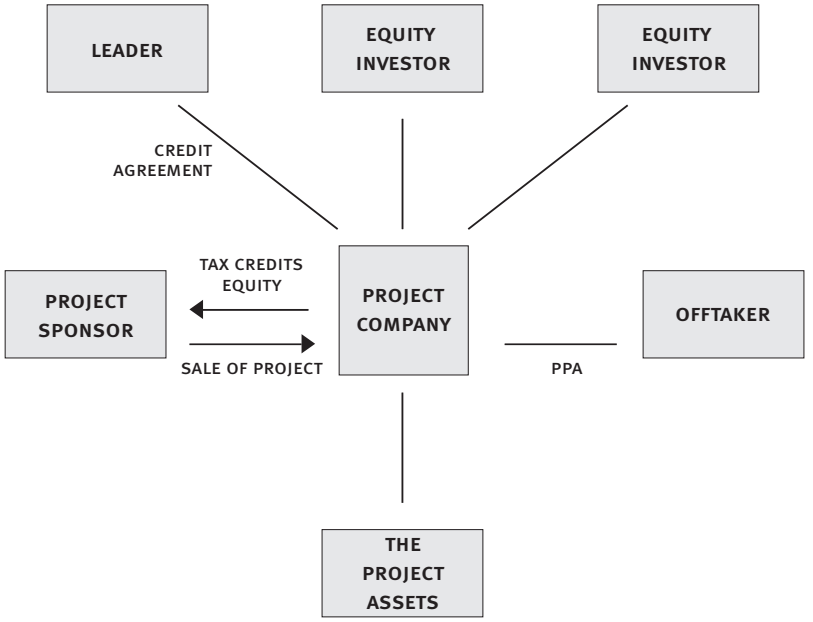
Step 3: The Project Company enters into one or more construction contracts with a contractor to procure the equipment for, and construction and installation of, the project.

Step 4: The Project Company enters into (1) an offtake agreement or power purchase agreement ("PPA") to sell its output (such as biofuel or electricity) to a creditworthy third party (usually a utility or commercial customer) and (2) a feedstock supply agreement to acquire the necessary fuel, unless the project is solar, wind or geothermal, where the fuel does not need to be purchased.

Step 5: The Project Company typically will not have its own employees so it enters into an operations and maintenance agreement (an "O&M Agreement"), and often an asset management agreement, to provide for necessary services to be performed for the Project Company. The agreements are often with affiliates of the Project Sponsor or third parties who are in the business of operating similar facilities.

Step 6: The Project Company enters into a credit agreement with one or more lenders (often through one bank acting as an agent). The lender group will rely on reports of independent consultants in performing its diligence.

Step 7: One or more additional equity investors may be admitted to the Project Company to provide equity funding (as further described below), as required by debt or as otherwise desired by the Project Sponsor.



Financing construction of a new renewable energy facility involves certain unique risks. Because the project has often not yet been built, there are no project revenues available to pay debt service. Moreover, construction may be delayed, costs may exceed projections and energy (or other product) may not be produced as expected. A new renewable energy project may, therefore, be initially financed with a construction loan, which typically bears a relatively high interest rate and includes reserves, additional Project Sponsor covenants and other additional security for the lender. If and when the project is fully constructed and at the "commercial operations date" (COD) (when the facility is complete, has finished testing and begins regular commercial operation), a new "term" loan is made to repay the construction loan, and the additional security for the construction loan is released.

The amount of debt and tax equity (as described below) that can be raised to fund the construction of a renewable energy project is typically limited by the cash and tax benefit generating capacity of the project. The cash equity is often the "plug" amount necessary to fund the cost of the project after taking into account available debt and tax benefits and any government grants or other subsidies.

Cash Equity

Typical forms of cash equity are as follows:

- The project sponsor's own equity investment, particularly from project sponsors with large balance sheets, including amounts spent to develop the project prior to financing.
- Private equity funds, which typically price their deals on a pre-tax basis (*i.e.*, without taking the tax benefits into consideration), and have significant funds to invest many with their own internal project management teams.
- Strategic investors with other kinds of participation in the project, such as equipment suppliers, contractors or operators.
- Offshore new entrants into the U.S. market, seeking more passive cash-oriented investments.

Cash equity may be in the form of stock or limited liability company interests in the Project Company or deeply subordinated debt that may be treated as equity for certain purposes.

Tax Equity

Tax equity is similar to cash equity in that the tax equity investor will typically contribute cash for the project, but in return receive primarily tax benefits instead of cash. A tax equity investor will invest a portion of the total equity required, but be allocated close to 100% of the tax benefits from a project, along with some cash distributions. A tax equity investor is typically a large company with significant and predictable taxable income, such as a bank or insurance company, though recently, other types of companies, such as utility companies, have recently been making tax equity investments.

Since a tax equity investor looks at its return on an "after-tax" basis (*i.e.*, it counts the tax savings it gets from being allocated the tax benefits), it is able to meet its target return with less cash being distributed to it, leaving more cash to be distributed to the cash equity investors. Once a tax equity investor has obtained all the tax benefits and achieved its target return (anywhere from 5 to 15 years), its remaining interest is automatically reduced and can be purchased by the project sponsor and/or other cash equity investors for fair market value at the time.

See the following chapter for discussion of certain types of federal incentives that are available to a tax equity investor and/or Project Sponsor and Project Company.

CHAPTER FOUR

The Role of Government in Renewable Energy Financings

A critical component of a successful renewable energy project finance is the development of a financing structure that is sufficiently attractive to lenders or to investors. There are two main models for structuring the financing of a renewable energy project: financing based on the creditworthiness of the Borrower and project financing.

A. Federal Government Incentives

There have been various federal programs that are available to subsidize renewable energy and energy efficiency projects that vary over time. While there are many federal grant, guaranty, loan and tax benefit programs that are constantly being created, expanded, renewed or altered (and as a result, a full discussion of such programs is beyond the scope of this pamphlet), the following are examples of programs that have recently been available.

Direct Federal Loans and Matching Grants

Section 1703 of Title XVII of the Energy Policy Act of 2005 authorizes the U.S. Department of Energy to support, in the form of loan guarantees, innovative clean energy technologies that are typically unable to obtain conventional private financing due to high technology risks. Federal loan guarantees are programs pursuant to which the federal government agrees to cover the debt obligation should a borrower default. They can help reduce borrowing costs and/or liquidity requirements for participating projects. Loan guarantees under this program are available on a limited basis for technologies that avoid, reduce or sequester air pollutants or anthropogenic emissions of greenhouse gases. Technologies that will or have been considered by the Department of Energy include: biomass, hydrogen, solar, wind/hydropower, nuclear, advanced fossil energy coal, carbon sequestration practices/technologies, electricity delivery and energy reliability, alternative fuel vehicles, industrial energy efficiency projects and pollution control equipment.

This program requires that the Energy Department receive the payment of the costs of the Credit Subsidy Cost (CSC)—the expected long-term liability to the Federal Government in issuing the loan guarantee—directly from the Borrower. Another loan guarantee program (referred to as the Section 1705 program) had been available for renewable energy projects, but expired in 2011. By the end of 2011, the DOE's loan guarantee programs had supported nearly $36 billion in loans.

The Federal government has provided other direct loans or matching grant programs to support categories of renewable energy and energy efficiency projects. These include the Advanced Technology Vehicle Manufacturing Program (ATVM) (which supports advanced technologies in the automotive industry, a form of energy efficiency), the Smart Grid Investment Matching Grant Program (which provides up to 50% in matching federal grants for investments in smart grid technologies, which is critical to renewable energy projects and energy efficiency efforts), the U.S. Department of Agriculture's Biorefinery Loan Assistance Program (a loan guarantee program available for the development and construction of advanced bioenergy and bioproduct commercial-scale refineries), the Energy Efficiency and Conservation Block Grant (EECBG) and the State Energy Program (SEP) (both available for state and local energy efficiency programs).

On-Bill Financing

On-bill financing programs, like PACE programs (discussed later in this chapter), seek to address the often significant up-front costs of private energy efficiency and renewable energy projects. Under the on-bill financing model, utilities tie such up-front costs to a consumer's utility bills by allowing consumers to pay for energy efficiency improvements using utility bill savings. While generally administered at the state and local level the federal government has supported on-bill financing programs by providing seed money or interest rate buy-downs, or by covering administrative expenses. EECBG and SEP funds have been used to promote on-bill financing programs.

The following are examples of certain federal incentives that have been available to private developers who finance, own or invest in renewable energy projects.[2]

Investment Tax Credit ("ITC")

Owners of certain commercial renewable energy generation facilities have been eligible to receive an ITC for the development of qualified technologies, including those that employ solar, fuel cell, wind, geothermal, microturbine and certain co-generation technologies. The ITC is determined as a percentage of tax basis, with the percentage credit dependent on the type of facility and the placed in service date. For example, qualified solar facilities placed in service before the end of 2016 are eligible for a 30% ITC, and solar facilities placed in service in 2017 or later are eligible for a 10% ITC. Qualified wind facilities placed in service before the end of 2012 are eligible for a 30% ITC. The wind industry is attempting to obtain an extension of this sunset date. The ITC is unavailable for any facility that has received a production tax credit (described below).[3]

Production Tax Credit ("PTC")

In lieu of ITC, owners of certain commercial renewable energy generation facilities have been eligible to receive a PTC for electricity produced for a period of up to 10 years following the placed in service date for eligible projects. The PTC is determined as a certain amount per KWh of energy produced, with such amount varying by year and dependent on the type of facility. Eligible technologies include wind, biomass, geothermal, landfill gas, municipal solid waste, hydropower and marine and hydrokinetic. For example, wind facilities must be placed in service by the end of 2012 to be eligible for the PTC. The PTC is unavailable to solar facilities placed in service after January 1, 2006. The PTC is unavailable for any facility that has received an ITC. Thus, wind developers currently have the option to choose between the ITC or the PTC. However, unless the sunset dates are extended, these benefits will be unavailable to wind facilities placed in service after 2012.

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[2] While these incentives are not directly available to public agencies because such entities are tax-exempt, they can nevertheless indirectly share in the benefits of the incentives with private developers through the relatively lower costs of power that developers can provide as a result of the incentives. Such sharing can be achieved, generally, so long as the public agency has no initial ownership interest in the project. Illustrations of this dynamic are discussed later on in this pamphlet.

[3] Many developers of renewable energy projects had taken advantage of the Section 1603 grant program, which allowed developers to receive a cash grant of up to 30% of project costs in lieu of receiving the PTC or ITC. This grant program came out of ARRA. However, the cash grant program is essentially unavailable for projects for which construction had not commenced prior to the end of 2011.

Accelerated Depreciation and Bonus Deprecation.

Accelerated depreciation allowances are provided for investments in certain renewable energy property. Most renewable energy property employing the use of solar, wind, microturbines, geothermal, fuel cells and co-generation technology are entitled to use a five-year accelerated depreciation schedule under applicable tax rules. Accelerated depreciation can have the effect of reducing the developer's taxable income in earlier years and thus provide for a better return on equity investment. Under tax law, bonus depreciation allowances are available for renewable energy property placed into service before the end of 2012. Bonus depreciation allows for 50 percent of a project's tax basis to be depreciated in the project's first year of operation.

Developers typically have limited tax appetite and monetize the benefits of the accelerated depreciation, as well as ITC and PTC, by bringing in tax equity investors.

B. State and Local Governments

As mentioned, public agencies can participate in renewable energy financings as issuers of tax-exempt bonds (or other debt) or as borrowers of debt financing. However, public agencies can also take on other important roles in renewable energy financings where they are neither the issuer nor the borrower, including as purchasers or lessees of renewable energy projects, equipment or power.

Lessor/Lessee

Public agencies often take on lessor and lessee roles in renewable energy financings. It may be important for the developer or public agency to maintain ownership of a renewable energy project due to tax considerations or other business reasons, including the desire of the public agency to treat the asset being financed as off-balance sheet. Therefore, under these circumstances, it might be sufficient for the developer to obtain a license or easement to install the components of a renewable energy project or it may make sense for a public agency (such as a county, city or special district) to lease to the developer the building or the roof upon which components of a renewable energy project (such as solar installations) sits for a period of time. In some cases, to obtain tax-exempt financing for the project, it might be necessary for a public agency to own the installations. If a number of entities lease equipment or purchase power from a vendor or developer, such obligations can be pooled or securitized in a tax-exempt financing.

Offtaker

A developer may wish to partner with a public agency as a potential offtaker of the power produced from a renewable energy facility. For example, a developer may approach a county about installing a photovoltaic solar array on the rooftops of county-owned property and sell the county the power produced from such installations under a power purchase agreement (a "PPA") with the county. Alternatively, a developer may approach a municipally owned utility (hereinafter referred to as an "MOU") about purchasing output from a renewable energy facility (*i.e.*, a solar or wind facility) to offset some of the load it receives from nonrenewable sources of power. In either case, public agencies can be prime candidates to developers as offtakers of energy produced from renewable energy facilities. Public agencies have entered into PPAs either on a stand-alone basis or in conjunction with a tax-exempt financing. In addition, while public agencies would typically pay for electricity under a PPA on a pay-as-you-go basis, some have opted, instead, to make an up-front "prepayment" for energy to be delivered over time. For a further discussion on the role of public agencies as offtakers in connection with a "prepayment" tax-exempt financing, see Chapter 6.

Provider of Other State Incentives

Certain states provide financial incentives to encourage the production of renewable energy projects. Many states provide tax credits of various kinds. California, for example, has granted sales tax exemptions for the purchase of equipment and other tangible property for certain manufacturing processes related to such facilities and subsidies for certain qualifying retail electric distribution entities for solar projects up to 1 mw of generating capacity. In addition, California has granted property tax relief for new construction of solar facilities. The State of Oregon's Department of Energy has provided a Business Energy Tax Credit for certain qualifying projects. Developers and other financing participants may be able to take advantage of such incentives for particular states in which they do business.

General Project Assistance – Environmental, Approvals, etc.

Even where public agencies are not direct participants in renewable energy projects in any of the roles discussed above, they are often necessary (and even willing and enthusiastic) partners in the financing of renewable energy projects in other capacities. For example, public agencies are often instrumental in either approving

directly or facilitating environmental approvals for renewable energy projects. In addition, public agencies can often be instrumental in obtaining governmental subsidies and other incentive programs (such as the ones described above) for renewable energy projects. Elected officials and public agency staff are often very interested and motivated to encourage the development of renewable energy projects in local communities for several reasons, including the creation of jobs.

PACE Programs

In 2009, property assessed clean energy (PACE) financing programs emerged as a mechanism for attracting capital to fund distributed energy generation (generally solar) and energy efficiency improvements. Under the PACE model, a public agency arranges financing (which may include the issuance of bonds) for residential or commercial building owners to install qualified improvements. The financing is off-balance-sheet, and repayment is through special assessment installments added to the property tax bills of the properties receiving the improvements over a term commensurate with the improvements' useful life. These assessment installments are, of course, paid by the property owners (who may change from time to time). In the PACE model, the special assessments are the equivalent of special assessments traditionally used to pay for public improvements that specially benefit the property being assessed and as such are senior liens on the property. Objections to the senior lien status of PACE liens by the Federal Housing Finance Agency (FHFA), however, has significantly curtailed and in some cases derailed (at least temporarily) PACE programs for residential property. As a result, most of the PACE programs currently proceeding are for commercial buildings. Perhaps because commercial PACE projects are larger and commercial building mortgage loan documents are arguably clearer on the point, lender consent is generally being required for these programs, and thus lien priority is not an issue. There is currently legislation pending, however, to address the FHFA position as it impacts residential programs. Certain public agencies have forged ahead with PACE residential programs despite the FHFA objections, either because they believe their participating property owners are willing to live with

the FHFA restrictions,[4] or because they want to independently and actively promote such programs, or both.[5]

[4] It appears that in certain localities where PACE programs exist, banks may assume that a PACE lien will be obtained at some point in the future and thus take that into account in qualifying a borrower for a loan in the first instance (presumably making it harder to qualify for the loan). The banks may then require that PACE liens be paid off in the event of sale or refinancing of the property, although it has been reported that banks are not always requiring this.

[5] Some of these agencies have taken the steps to judicially "validate" their PACE financing programs under state law, which necessarily includes validation of the PACE liens and their priority under the federal Constitution—finding they do not violate the due process ("takings") clause or the impairment of contracts clause.

CHAPTER FIVE

Advantages of Tax-Exempt Bonds

A. Introduction

This chapter will focus on tax-exempt bond financing, discussing (1) the benefits of tax-exempt financing and (2) what types of entities and/or projects are eligible for tax-exempt financing.

B. Why Use Tax-Exempt Bonds?

If available, tax-exempt financing is often the best financing option because it offers the lowest cost of borrowing to the Borrower, greater flexibility and usually the best terms. First, tax-exempt financing normally offers lower interest rates than taxable debt. Because interest paid on tax-exempt debt is exempt from federal income tax (and usually income tax of the state in which issued as well), the investor/lender requires less interest to produce the same after-tax return as taxable debt would produce. While the difference (or "spread") between taxable and tax-exempt rates fluctuates over time (and is relatively low as of the publication of this pamphlet), the fundamentally lower cost of tax-exempt debt generally remains constant and may be two or more full percentage points lower than comparable taxable debt. Lower bond yields generally translate into lower financing costs for Borrowers.

Second, tax-exempt debt generally has more flexible terms than conventional taxable debt, whether in the form of a bank loan or negotiable securities. Tax-exempt debt generally may be issued on a long-term (20 to 30 year or longer) fixed interest rate basis, compared to most taxable debt which is usually issued with a shorter term at a variable interest rate indexed to the prime lending rate, U.S. Treasury notes or bonds or LIBOR. Long-term debt is particularly well-suited to renewable projects that have 20 years or more of productive lifetimes, often with very low operating costs. If preferred, tax-exempt debt also may be issued on a variable rate basis, based on one of the foregoing indices or a tax-exempt index such as that maintained by the Securities Industry and Financial Markets Association (SIFMA). The tax-exempt

bond market can often accept debt financing of 100% of a project's cost, in contrast to a typical bank or traditional loan financing, which may be limited to 70–75% of the value of the asset financed. The financial covenants required in connection with tax-exempt financing are also usually less onerous and restrictive than those required in taxable debt financings. These covenants cover such matters as limitations on the ability of the borrower to incur additional debt or encumber property, required levels of liquid assets or asset to liability ratios, conditions on the acquisition or disposition of property and on mergers or consolidations.

C. Eligible Borrowers

Tax exempt financing eligibility is limited in terms of both who is borrowing and what is being financed. For example, tax-exempt financing is generally available only for capital assets or expenditures as distinguishable from expenses that are operating in nature such as operating, maintenance and expense costs. The following are general categories of tax-exempt financing (based both on who is borrowing and what is being financed) for which renewable energy projects are eligible.

Public Agencies

Public agencies have broad authority to finance renewable energy projects on a tax-exempt basis. Most public agencies can finance renewable energy projects with tax-exempt bonds so long as the beneficiary of such tax-exempt financing is the public agency itself, another public agency or agencies or the general public, and so long as such project furthers the public purpose of the agency (for convenience, such tax-exempt bonds will be referred to hereafter as "Governmental Bonds"). Generally speaking, such projects must be owned and operated by the public agency (see exceptions in the next chapter). Private parties may benefit from such financing indirectly as developers or operators (subject to certain limitations on terms and compensation structure) or by providing asset management or maintenance services. See the following chapter for a discussion of a few of such structures.

501(c)(3) Corporations

Similarly, certain nonprofit corporations have wide latitude in financing renewable energy projects on a tax-exempt basis. Nonprofit corporations that are exempt under Section 501(c)(3) of the Internal Revenue Code (the "Code") (such as certain hospitals, private schools and colleges, museums, cultural venues and charitable foundations) are also eligible to take advantage of tax-exempt bonds

(hereinafter referred to as "501(c)(3) Bonds") as borrowers to finance renewable energy projects in a similar manner to public agencies. Similar to Governmental Bonds, renewable energy projects for 501(c)(3) corporations are generally eligible for tax exemption so long as the beneficiary of such tax-exempt financing is the 501(c)(3) corporation, public agencies, the general public or, in limited circumstances, other 501(c)(3) nonprofit corporations, and so long as such projects further the tax-exempt purpose of the corporation.

For-Profit Entities

Unfortunately, unlike public agencies and 501(c)(3) corporations, for-profit entities have very limited options to act as Borrowers in a tax-exempt financing for a renewable energy project. The following are two examples.

Solid Waste Disposal Facilities

Portions of certain "waste-to-energy" renewable energy projects may qualify for tax-exempt financing under Section 142(a)(6) of the Code, which is available for solid waste disposal facilities. For example, certain facilities may take in municipal waste from city residents and process such waste for ultimate deposit in a landfill. Such processing of solid waste normally produces some form of biogas, such as methane, which can, in turn, be processed to produce a gas that can either power an electric generator onsite or be put into a pipeline for use by a third-party offtaker. Certain facilities may take in manure waste from a dairy or poultry farm and process such waste through a digestion process to produce biogas, which can be used in a similar manner that gas produced from municipal waste is used in the previous example. Borrowers eligible for this category generally include traditional solid waste companies but also include developers that employ other waste-to-energy technologies. See Chapter 7 for a further explanation of applicable rules.

Local District Heating or Cooling Facilities

In certain instances, it may be possible for a private Borrower to finance a portion of a renewable energy-powered heating or cooling facility (generally the pipeline component thereof) on a tax-exempt basis. In order to qualify, the facility must be deemed to be part of a "local district heating or cooling system," which is defined to mean any local system consisting of a pipeline network (which may be connected to a heating or cooling source) providing hot water, chilled water or steam to two or more users (i) for residential, commercial or industrial heating or cooling or (ii)

to process steam. Further, the local system must be confined to one that furnishes heating and cooling to an area consisting of a city and one contiguous county.[6]

For more information on eligibility for tax-exempt bond financing for private Borrowers, see Chapter 7.

There are, however, a few tax-exempt Governmental Bond structures (again where a public agency is the Borrower and Issuer) that can be very beneficial to for-profit entities in financing renewable energy projects. These are discussed in the following chapter.

[6] There are other categories of tax-exempt bonds that may be issued on behalf of for-profit borrowers (hereafter called "Private Activity Bonds") under the Code that pertain to financing renewable energy projects, but these categories tend to be too narrowly tailored or too impractical to implement to warrant discussions in this pamphlet.

CHAPTER SIX

Tax-Exempt Financing Structures: Public Agency Borrowers and Private Entity Participation

As discussed previously, public agencies can be both issuers and borrowers (or both) of tax-exempt bond debt. The general tax rules governing all tax-exempt bonds issued by or on behalf of public agencies (Governmental Bonds) are discussed in detail in Appendix B. The focus of this chapter is a discussion of the additional tax rules on Governmental Bonds structured to include significant participation by private entities, which can significantly benefit such entities. Following is a description of certain of these types of structures.

A. Governmental Bonds: Privately Operated Projects

As referenced in the previous chapter, a public agency can finance renewable energy projects with tax-exempt bonds, although tax ownership generally must remain with such public agency. Private parties may benefit from such governmental tax-exempt financing indirectly, however, as project developers and/or operators (subject to certain limitations on terms and compensation structure) or possibly by providing asset management or maintenance services. It is sometimes the case that the public agency and the private developer will enter into a design-build-operate-transfer (BOT) financing arrangement to finance the project. Under a BOT financing, the public agency designates the private developer as the entity to design, build, operate and maintain the project for a certain period while ultimate ownership resides with the public agency.

As referenced above, all Governmental Bonds are subject to the tax rules set forth in Appendix B. Certain additional tax rules govern how Governmental Bonds can be issued to finance projects operated or managed by private operators or managers (hereafter for convenience referred to as "managers"). These rules are set out in Revenue Procedure 97-13 and restrict the term of the management contract, the compensation of the manager and the corporate relationship between the manager and the public agency, generally as follows:

1. The term (including any renewal options exercisable unilaterally by the manager) may not exceed 15 years or such shorter term as may be required on account of the type of compensation provided (as explained below).
2. Compensation must generally fall into one of the following categories:
    a. At least 95% of the compensation is based on a periodic fixed fee, and the contract term does not exceed the lesser of 15 years or 80% of the reasonably expected useful life of the managed facility.[7] A one-time, fixed incentive payment or productivity reward based on gross revenue or expense targets, but not both, is allowed to be paid to the manager without affecting the fixed fee payment requirement;
    b. At least 80% of the compensation is based on a periodic fixed fee, and the contract term does not exceed the lesser of 10 years or 80% of the reasonably expected useful life of the managed facility. A one-time, fixed incentive payment or productivity reward based on gross revenue or expense targets, but not both, is allowed to be paid to the manager without affecting the fixed fee payment requirement;
    c. At least 50% of the compensation is based on a periodic fixed fee and the contract term does not exceed five years (subject to a right of cancellation by the public agency for any reason without penalty after three years); or
    d. 100% of the compensation is based on a per-unit fee, or a combination of a per-unit fee and a periodic fixed fee, and the contract term does not exceed three years (subject to a right of cancellation by the public agency for any reason without penalty after two years). Per-unit fee means a stated dollar amount for each specified unit of service and may automatically increase according to a specific objective external standard like CPI that is not linked to output or efficiency of a facility.

    For each category, no part of compensation may be based on net profits, although the portion of compensation not required to be a periodic fixed fee may be based on a percentage of gross revenues or a percentage of expenses (but not both) or based on a per unit fee.

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[7] A periodic fixed fee means a stated dollar amount for a specified period (but may automatically increase according to a specified objective external standard like CPI, which is not linked to output or efficiency of a facility).

3. In order to prevent the manager from having a relationship with the public agency that could substantially limit the public agency's ability to exercise its rights under the management contract, the manager cannot control (for example, appoint) more than 20% of the members of the governing body of the public agency and no board member of the public agency may be the chief executive officer of the manager or its governing board (or vice versa).

B. Prepay Governmental Bonds

Structure

Proceeds of Governmental Bonds may also be used to prepay for power to be delivered over time (for example, over a 20 year period) in certain situations and generally only with participation of a public agency that is a municipally owned utility (an "MOU"). The governmental bonds are issued by an MOU or another governmental entity on its behalf (in either event, the "Issuer" or, in its capacity as purchaser of power, the "Offtaker"). The prepayment (the "Prepayment") is made to the owner of the facility (the "Facility") and supplier of the power ("GenCo") in a lump-sum amount, and GenCo covenants to deliver power, generally a fixed amount of power, pursuant to a power purchase agreement (PPA), over a fixed period of time.[8] The power that has been prepaid can be delivered at one or more delivery points agreed to by GenCo and the Offtaker. Once paid, the Prepayment may be used by GenCo for

[8] It is unclear under current law whether the Prepayment for energy need be at a fixed price. For renewable sources such as wind or solar power, a two-tier PPA structure can be developed to meet the tax rules applicable to prepayments and address the uncertainties inherent in the production of energy from these sources. This two-tier structure is designed to allow for a fixed price prepayment for a certain amount of electricity (the "Tier I PPA") and the balance of the electricity to be purchased on a variable priced pay-as-you-go basis (the "Tier II PPA"). The Tier I and the Tier II PPAs can be included in the same PPA with the structure designed to identify the prepaid Tier I portion as being at a fixed price for a fixed amount, with the Tier II portion designed to cover the excess energy and variable costs. Payment for the excess energy and the excess costs is not included in the Prepayment, but will be made periodically as the excess power is delivered.

any purpose.[9] In a typical structure, GenCo finances the construction of the Facility using conventional financing prior to the COD. One of the reasons for this is that an MOU will generally only agree to issue the Prepayment bonds once commercial operation of the project has been achieved because it may not be palatable for the Issuer to take construction risk on the Facility. The conventional financing would then be taken out through a combination of the Prepayment, equity and grant moneys at or close to the COD. Equity investors would be allocated Facility-related investment tax credits, accelerated depreciation and other tax attributes. See Chapter 4 for a discussion of some of these attributes.

GenCo would either manage the project itself or engage the services of an operating company to manage and maintain the Facility pursuant to an O&M Agreement.[10] While the Offtaker may not be able to control the operation and maintenance of the Facility, it will have a significant interest in assuring a high quality operator is engaged. The PPA can provide that once all of the applicable tax incentives have been fully utilized and captured by GenCo, the Offtaker may purchase the Facility at fair market value at the time of purchase.[11]

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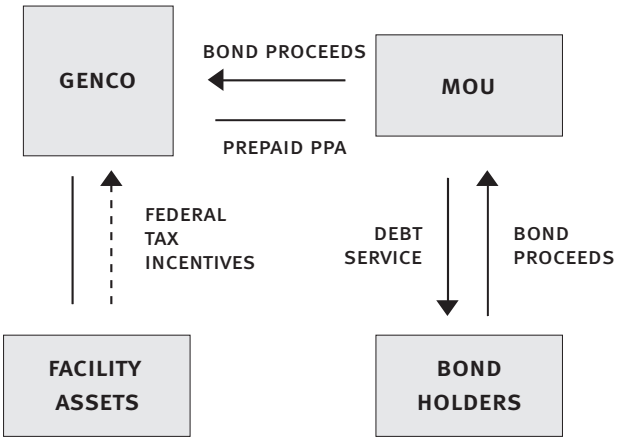
[9] The Prepayment GenCo receives for energy (i.e., the amount of the prepayment, minus any portion allocable to environmental attributes in respect of such power) should qualify as advance payments for goods held by GenCo primarily for sale to customers in the ordinary course of its trade or business and, as such, GenCo may, under a special rule in Treasury Regulations section 1.451-5(b)(1)(ii), elect to defer inclusion in income of the advance payments until the time such advance payments are included in GenCo's gross receipts for purposes of all of its reports (including consolidated financial statements) to shareholders, partners and other owners. Any portion of the lump-sum payment that is allocable to environmental attributes may have to be reported by GenCo as income in the year of receipt.

[10] Such contracts do not have to comply with the Revenue Procedure 97-13 rules described previously in this chapter.

[11] It was previously stated in this pamphlet that proceeds of tax-exempt bonds generally are permitted to finance capital assets. In the Prepayment model, the capital asset is, for tax purposes, the PPA itself, not the Facility. The Government Bond rules outlined in Appendix B (which must be followed in the Prepayment structure) apply in this context.



Federal Tax Rules

In order to fall within the applicable tax-exempt bond rules, the payment by the Offtaker must be properly characterized as a "prepayment" for federal income tax purposes, and not as a loan or deposit. Therefore, it is important that no portion of the Prepayment, once paid to GenCo, can be refunded or returned to the Offtaker based on the actions of the Offtaker; e.g., the Offtaker may not have any type of option or ability to request a refund of any of the Prepayment. The primary obligation of the Offtaker under the PPA is fulfilled once the Prepayment is made. With limited exceptions, there is little the Offtaker can do that would constitute a possible breach or nonperformance under the PPA. Rather, it is GenCo that has the significant future performance obligations under the PPA that could give rise to a breach or nonperformance.

Applicable federal tax rules require that at least 90% of the prepaid power delivered must be use for one or more "qualifying uses." The prepaid electricity is used for a "qualifying use" if it is either: (a) for the direct use of the retail electric customers within the Issuer's service area or (b) sold to a purchasing MOU for the direct use by retail electric customers within the service area of the purchasing MOU. A qualified service area is (a) any area throughout which an electric utility provided, at all times during a five-year period ending on the issue date, electricity distribution services or (b) any area recognized as the service area of the utility by state or federal law. A retail customer is a customer that purchases gas or electricity other than for resale.

Benefits

If properly structured, a tax-exempt Prepayment financing can provide benefits to both the private party developer and the public agency issuer. For the developer, the receipt of the Prepayment offers a significant, independent financing source for the project, particularly if the project is financed on the credit of the public agency (e.g., through a general fund financing lease, enterprise revenue fund borrowing or a "take or pay" PPA). For example, if the total cost of the construction of the project (which may include the takeout of a bank loan) is $100 million, a possible financing scenario could be that 50% or $50 million of such costs could come from proceeds of tax-exempt prepay bonds and 50% could come from equity sources or taxable long-term debt of the developer. In addition, because under the tax rules the PPA (rather than the Facility) is deemed to be the capital asset financed with the tax-exempt Prepayment bonds, the developer, as tax owner of the Facility, can take advantage of federal tax incentives that are available for the financing or renewable energy projects, such as ITC, PTC and depreciation benefits (see Chapters 3 and 4 for a general discussion of equity sources and such tax incentives for developers).

For the public agency, if the financing is structured such that tax-exempt bonds are not issued until commercial operation, the public agency does not have to take construction or development risk of the project. Moreover, the overall cost of the Prepayment to the public agency (which are applied by the developer to reduce its carrying costs of the Facility) is lowered relative to other renewable energy sources by the relatively low cost of tax-exempt financing as opposed to taxable debt, which the developer would otherwise need to use. While public agencies cannot take advantage of tax credits, tax depreciation benefits and certain other available subsidies for renewable energy projects because they are tax-exempt entities, they can benefit indirectly from such incentives by negotiating a lower Prepayment with the developer as a result of such benefits to the developer. MOUs have benefited from saving in renewable electricity costs from this structure over traditional pay-as-you go financing for energy or other non-prepayment structures for the above-referenced reasons. In addition, financings like these can allow MOU's to comply with any applicable RPS requirements. Finally, as referenced above, the public agency can structure the PPA such that it can own the project once the private developer has captured the full benefit of all tax incentives.

Alternative Taxable Structure

In a variation of the tax-exempt Prepayment structure (and one that does not involve tax-exempt financing at all), any public agency (an MOU or otherwise) can decide to make a prepayment for energy costs under a PPA using surplus cash on hand or through the issuance of taxable bonds. This alternative might be chosen by a public agency either because (a) in the case of an MOU, it decides that the above referenced tax rules are overly burdensome and the benefits of a prepayment structure without the tax-exemption benefits are still worth pursuing or (b) in the case of a public agency that is not an MOU, and therefore the tax-exempt prepayment path is unavailable, the benefits realized by a taxable prepayment structure may still be significant. A taxable prepayment can be structured much like the tax-exempt Prepayment structure described above. The benefits to GenCo under this structure are the same as the ones listed above. The benefits for the Issuer are substantially the same, except for those relating to the reduced cost of funds in a tax-exempt deal. However, such benefits may be outweighed by the flexibility of not having to comply with the tax-exempt prepayment rules. Using taxable debt or fund balance eliminates the need to comply with any of the tax rules such as the rules relating to qualifying uses or the requirement that allows for exempt prepayments to finance only fixed power and O&M costs. Moreover, as of the writing of this pamphlet, the spread between taxable and tax-exempt rates is relatively narrow, which mitigates the benefits of tax-exempt financing.[12]

[12] One relatively large MOU completed a taxable prepayment transaction (under different terms than laid out above) for a wind project at the end of 2011.

CHAPTER SEVEN

Tax-Exempt Financing Structures: Private Borrowers

As discussed previously, certain private entity borrowers can borrow on a tax-exempt basis to finance renewable energy projects, including 501(c)(3) corporations and other private entities who apply such bond proceeds to finance certain types of renewable energy projects. While there are different tax requirements for these different types of bonds, they are generally structured in a similar manner. Set forth below is a discussion of structuring tax-exempt bonds (referred to as "Conduit Bonds") with private entities (both nonprofit and for-profit) as Borrowers. This chapter concludes with a specific illustration of a private borrower structure: tax-exempt financing for a waste-to-renewable energy project.

General Structure

In the typical Conduit Bond structure, a public agency (the "Issuer") acts as a conduit, or intermediary, between the private party Borrower and the bondholders (the investors or source of capital) and has no actual liability on the debt or responsibilities (other than to apply amounts received from the Borrower to repay the debt). The transaction is structured around two major legal documents. The first is a trust indenture or equivalent instrument between the Issuer and a commercial bank (the "Trustee"), which defines the terms of the bonds, provides for their issuance, payment and redemption and governs all of the flows of funds to and from the bondholders. The Conduit Bond proceeds typically will be deposited by the Issuer into a Project Fund held by the Trustee, and the Borrower will draw down these funds as needed to pay for its project.

The second major document is a financing contract. Simultaneously with the issuance of the bonds, the Issuer and the Borrower will enter into a financing contract. Most often, this will be a loan agreement, but may also be an installment sale agreement or a "full-payout" lease (for convenience, the financing contract will

be referred to as a "Loan Agreement"). The Loan Agreement will cover, among other things, the following areas:

1. The loan of bond proceeds by the Issuer to the Borrower;

2. An unconditional promise (without allowance for any offsets or defenses) by the Borrower to repay the loan by making payments sufficient to pay the principal premium (if any) and interest on the Issuer's bonds, as they become due;

3. Provisions to pay fees or costs of the Trustee and the Issuer and to maintain any required reserves;

4. The promise of the Borrower to build the project as planned and approved and to maintain and use it;

5. Any financial covenants, security agreements or other terms desired by the lender or underwriter to secure the bonds (the security may include a deed of trust, a guaranty or other security arrangements outside the terms of the Loan Agreement itself); and

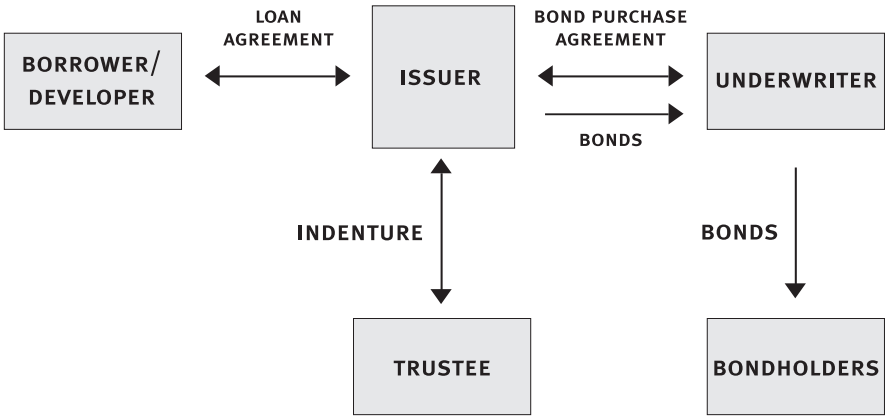
6. Remedies on default.

The Borrower's obligations to repay the loan, which will be the underlying credit and source of payment of the bonds, will be either the Borrower's general credit (balance sheet or otherwise) or strictly limited to revenues generated by the project (*i.e.*, project financing) with no recourse to the Borrower's other assets (other than perhaps a mortgage or lien on the project). In either case, the Borrower may obtain a third-party "credit enhancement" to secure a higher rating on the bonds or to provide liquidity for variable rate demand debt. This will typically be a letter of credit or standby purchase agreement from a highly-rated bank or an insurance policy from a monoline bond insurance company. With bank credit much harder to obtain since the financial crisis began in 2008, potential Borrowers of Conduit Bonds have also sought to place bonds directly with large institutional investors (mainly mutual funds). Bonds in this instance are typically issued for self-sustaining projects which are owned by a single-purpose entity (again, a project financing), and are usually not rated. Interest rates for these bonds are much higher than for credit-enhanced bonds, and there are normally other limitations to ensure that only sophisticated investors can purchase them, but this may be the only viable

rate financing option for such projects.

At the bond closing, the Issuer will assign to the Trustee all of its rights and interest in the loan agreement and in any deed of trust or other security instruments. The Borrower will make its loan repayments directly to the Trustee, which will remit them to the bondholders. In the event of a default, the Trustee will act on behalf of the bondholders to enforce all rights available under all of the financing documents. The Issuer's role is purely to act as a conduit to provide the tax exemption on the bonds, and after bond delivery, the Issuer will have virtually no involvement with the bonds, the project or the Borrower. Thus the bonds are limited, special obligations of the Issuer, payable solely from the payments made by the Borrower under the loan agreement and from enforcement of any security interests or credit enhancements. The issuance of these bonds will not affect, or be affected by, the credit rating of the Issuer.

THE DOCUMENTS



General Tax Rules

The following describes general tax rules that apply generally to Conduit Bonds. Unless otherwise noted, such rules apply to both for-profit and nonprofit private Borrowers.

Good Costs. It is a requirement for all Conduit Bonds that at least 95% of the tax-exempt bond proceeds, including investment earnings on unspent proceeds, be allocated to capital costs associated with the project (so-called "Good Costs").

The costs of issuing the tax-exempt bonds are not Good Costs and, therefore, count against the 5% limit on Bad Costs. Similarly, certain capital costs of the project that otherwise would be Good Costs will not qualify if those costs were originally paid too long before a qualifying "reimbursement resolution" has been adopted (see the discussion in Appendix B relating to the reimbursement of prior capital expenditures for these rules).

Other General Rules. Except as noted herein, all of the tax considerations that apply generally to Governmental Bonds apply to Conduit Bonds (see Appendix B for a discussion of these rules). The following are additional general tax rules that apply to Conduit Bonds.

1. *Costs of Issuance*. Costs incurred in connection with issuing the Conduit Bonds, such as underwriter's discount or fees, fees of bond counsel and other lawyers and consultants, rating agency fees, trustee's fees and the like, may be included in the bond issue. Under federal tax law, no more than 2% of the bond issue may be used on costs of issuance (which do not include the cost of any bond insurance or credit enhancement); as a result, the Borrower may need to pay some costs of issuance from its own funds, particularly for smaller bond issues, or may finance costs of issuance with taxable bonds or other borrowings.

2. *Interest*. Generally, only interest that accrues prior to the date the project is placed in service is treated as a Good Cost. Interest payable during the construction period is generally made out of bond proceeds, with the result that project revenues are not needed for bond debt service during such period.

3. *Volume Cap*. Each state receives, under Section 146 of the Internal Revenue Code, an annual allocation, called "volume cap," to be allocated to issuers of Private Activity Bonds.[13] In most cases, an Issuer must receive a state volume cap allocation to issue Conduit Bonds, except for bonds for 501(c)(3) nonprofit corporation borrowers.

4. *TEFRA Approval*. In addition to receiving an allocation of volume cap, Conduit Bonds used to finance a particular project must be approved by both (i) an "applicable elected representative" of the Issuer or the governmental entity on whose behalf the bonds are issued and (ii) an applicable elected representative of the jurisdiction in which the project will be located. This requirement is set forth in the Tax Equity and Fiscal Responsibility Act of 1982 ("TEFRA") and is referred to as TEFRA approval. The governmental body or bodies giving such approval—they could be cities, counties, a state or some other entity—must publish a notice in an appropriate newspaper at least 14 days before a hearing, conduct a TEFRA hearing and give TEFRA approval prior to issuance of the bonds.[14]

   The governmental body may be the State, the city or the county in which the project will be built or acquired. Often, this entity is also the Issuer, in which case the TEFRA hearing and approval can be conducted by the same body when the bonds are approved (the TEFRA notice must still be published two weeks ahead of time).

   In addition, there are two additional rules that apply to Conduit Bonds issued on behalf of for-profit private entities only.

5. *Special Rules for Acquisition/Rehabilitation Projects*. Tax-exempt bonds are sometimes used to finance the acquisition and rehabilitation of a renewable energy project, rather than the construction of a new project.

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[13] The amount of volume cap awarded to each state is based on the state's population. Every state receives a certain minimum amount, however, so the least populous states actually receive proportionally more volume cap per capita than do other states.

[14] Although the governmental body must give the public a chance to speak at the TEFRA hearing, approval is not put to a public vote and the governmental body may give approval in spite of public opposition to a project. It is rare for the TEFRA process to be a major obstacle to issuance of bonds.

Stringent rules apply to such transactions, and under no circumstances may Conduit Bond proceeds be applied to acquire used equipment. The Borrower of an acquisition/rehabilitation project must also spend on rehabilitation of a building an amount equal to at least 15% of the total amount of bond proceeds used to acquire the buildings (but not the land) and must spend on rehabilitation of a structure other than a building an amount equal to at least 100% of the total amount of bond proceeds other than a building. In other words, tax-exempt bonds cannot be used merely to acquire an existing project if no improvements are made and it is rare for Conduit Bond proceeds to be used to acquire a used asset other than a building in need of rehabilitation.

6. *Land Limitation*. The amount of proceeds of a Private Activity Bond that is spent on costs capitalizable to land must be less than 25%.

Solid Waste Disposal Waste-to-Energy Financing (For-Profit Borrower)

As discussed briefly in Chapter 5, for-profit Borrowers can use tax-exempt solid waste disposal Private Activity Bonds ("SWPABs") to finance certain portions of a privately owned and operated waste-to-energy facility using the general structure and following the tax rules discussed above. Portions of the waste-to-energy facility that can be financed with SWPABs include land, buildings, equipment or other property that (i) processes solid waste in a final disposal process, an energy conversion process or a recycling process, (ii) performs a preliminary function to one of the aforementioned processes or (iii) is functionally related and subordinate to a facility described in (i) or (ii). The fact that a solid waste disposal facility makes a profit or has more than one function (e.g., resource recovery facilities, which also generate energy) does not necessarily disqualify it. However, at least 65% by weight or volume of the material entering any solid waste recycling facility must be true waste, which is defined as garbage, refuse and other material derived from any agricultural, commercial, consumer or industrial operation or activity that is either used material or residual material that is reasonably expected to be introduced to a solid waste disposal process within a reasonable time.[15] Used material is defined as

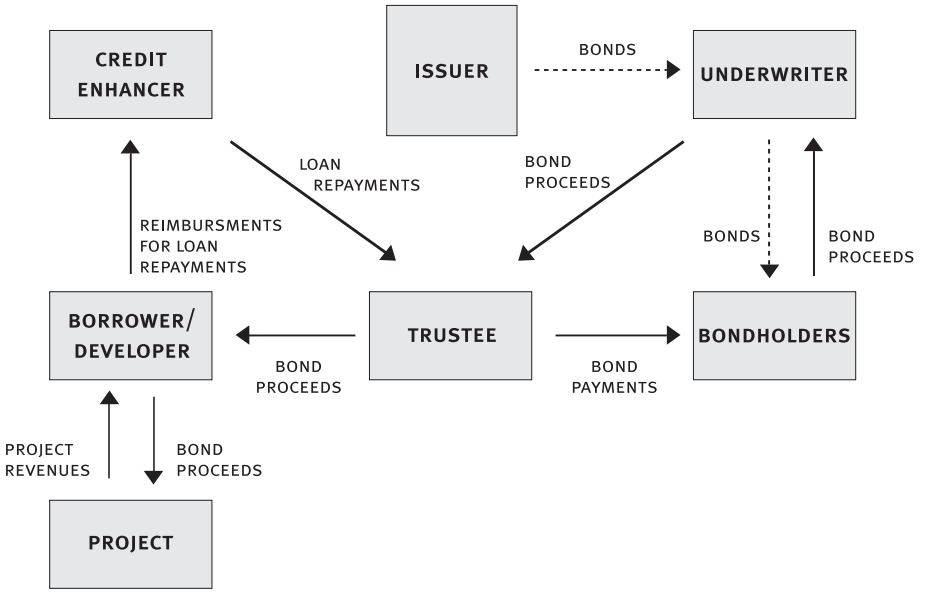
[15] Until recently, applicable tax rules required that solid waste have "no market or other value at the place at which it is located" (previously referred to as the so-called "no value rule"). The IRS released final Treasury Regulations that eliminated this requirement in August 2011.

any material that has been previously used as an agricultural, commercial, consumer or industrial product or as a component of any such product and is also defined to include animal waste produced by animals from a biological process, e.g., cow manure. Residual material is defined as any residual byproduct or excess unused raw material that remains from the production of any agricultural, commercial, consumer or industrial product. Material qualifies as residual material only to the extent that it has a fair market value that is reasonably expected to be lower than that of any product made in that production process. The following items are specifically excluded from the definition of solid waste: (1) virgin materials other than virgin material that constitutes an input to a final disposal process or residual material, (2) solids within liquids and liquid waste, (3) certain precious metals, (4) hazardous material and (5) radioactive material. Many types of projects have been financed, including recycling facilities, materials recovery facilities, transfer stations, landfills, combustion-type resource recovery facilities and waste digesters. Also, facilities such as vehicles, office or maintenance buildings, gas or leachate collection systems or pollution control devices on an incinerator, generally will qualify if they are necessary and subordinate to a solid waste facility.

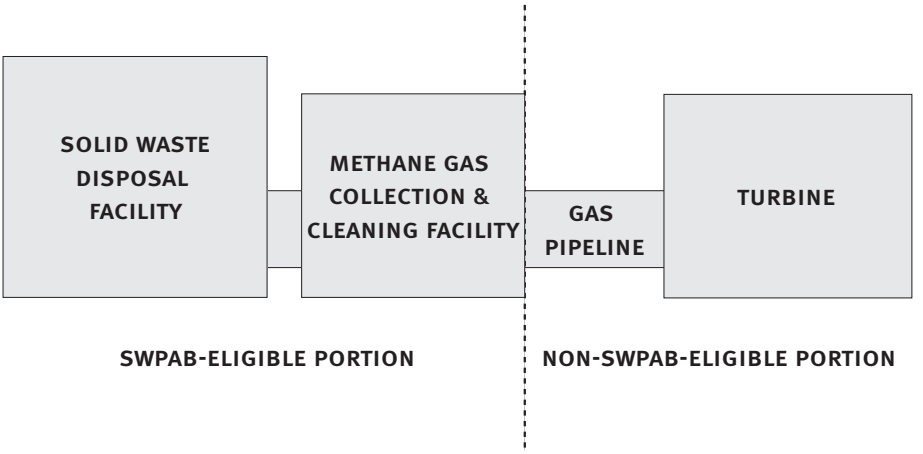
Portions of a facility that transfer and or utilize materials after they have been converted from a waste into a useful form do not qualify; for example, in a resource recovery project, once waste has been burned and converted to steam, the part of the facility used to transport the steam or use it to generate electricity is not part of the "solid waste disposal facility." Therefore, a significant portion of a private Borrower-owned and/or operated waste-to-energy may qualify for tax-exempt financing, but not all of it. Any non-qualifying portion of the facility would be financed with equity or taxable debt or may qualify for some other form of tax-exempt debt.

The following illustrate a general financing structure for SWPABs issued to finance a waste-to-energy project.

THE MONEY FLOW



PROJECT COMPONENTS



For more information relating to the steps to issuing Conduit Bonds, see Appendix A.

CHAPTER EIGHT

Tax Credit Bonds for Renewable Energy Projects

General

Tax credit bonds, unlike tax-exempt bonds, generally entitle the bondholder to a federal tax credit at a rate determined by the Secretary of the Treasury. In some cases, the issuer of the bonds may choose to receive the tax credit in the form of a direct payment from the federal government. The tax credit reduces the net interest payments an issuer is required to pay, or limits the discount at which the bond must be sold, to attract investors.[16] With an investor tax credit, the federal government is providing a return to investors that subsidize the borrowing. Tax credit bonds that subsidize investments in renewable energy and energy efficiency, through both the issuer and investor tax credits, are discussed in the following sections. The following is a discussion of the two types of tax credit bonds that have been available for renewable energy projects.

Qualified Energy Conservation Bonds (QECBs)

Qualified energy conservation bonds (QECBs) are tax credit bonds that can be issued by state, local or tribal governments to fund various energy efficiency projects. Eligible projects include capital expenditures on facilities eligible to be financed with CREBs (described below), public buildings intended to increase energy efficiency by at least 20%, financing certain types of research projects that investigate increasing energy efficiency, mass commuting projects, demonstration projects and public education campaigns. Congress initially authorized the issue of $800 million in QECBs. ARRA increased the authorized issuance to $3.2 billion. The tax credit rate is 70% of the market interest rate as calculated by the Treasury.

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[16] Issuing a bond at a discount means the amount paid for the bond is discounted significantly from the face value. For example, an investor may pay $9,000 for a bond with a face value of $10,000. At bond maturity, the investor would receive $10,000 from the issuer, $1,000 more than what was paid for the bond ($10,000 less $9,000).

Given this credit rate, QECBs will be issued to investors at a discount or with a supplemental interest payment. Generally, like most tax credit bonds, the holder of the bond is entitled to a federal tax credit allowing the issuer to make limited interest payments to bondholders. For QECBs issued after March 18, 2010, issuers can elect to claim the tax credit directly as a cash subsidy rather than allowing bond purchasers to claim tax credits.

QECBs are allocated among states in proportion to each state's population. QECB programs are administered on a state-by-state basis. One perceived advantage of allocating bonds based on population is that the states would have equal access to the federal subsidy. The disadvantage is that not all states may have the same need for energy efficiency projects. Developers and other financing participants are encouraged to check with individual states about any residual allocations of QECBs.

Clean Renewable Energy Bonds

Clean Renewable Energy Bonds (CREBs) have been made available to tax-exempt entities investing in renewable energy projects that are not able to take advantage of other tax incentives. CREBs can be applied to finance qualified energy production projects, which include: (1) wind facilities, (2) closed-loop biomass facilities, (3) open-loop biomass facilities, (4) geothermal or solar energy facilities, (5) small irrigation power facilities, (6) landfill gas facilities, (7) trash combustion facilities, (8) refined coal production facilities and (9) certain hydropower facilities. Eligible entities include governmental bodies, cooperatives and public power utilities. CREBs, as tax credit bonds, reduce the cost of financing for renewable energy projects receiving a CREB allocation. Thus, CREBs provide an incentive for public utilities to invest in renewable energy projects and allow tax-exempt entities to better compete with projects able to claim tax credits. However, no new CREB allocations are currently available.

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APPENDIX A

Steps to Issuing Conduit Bonds

The scheduling and steps to completion of a Conduit Bond transaction depend on the choice of transaction type (governmental, conduit or pooled), choice of Issuer, the policies and procedures of the Issuer, the type of project, the type of Borrower (governmental for-profit or not for-profit), the financing structure, applicable state law and other factors. In general, however, the following is illustrative of the basic steps in a typical Conduit Bond issue.

Consult Bond Counsel. Bond Counsel is the law firm primarily responsible for rendering an opinion on the validity and tax exemption of the Conduit Bonds and for drafting the legal documents to be executed by the Borrower and the Issuer in connection with the financing (and, in some cases, for creating a special purpose entity or a not-for-profit corporation to act as Borrower and, in the latter case, for obtaining a 501(c)(3) determination). It is important to have a Bond Counsel experienced in similar renewable energy revenue bond financings and, given the tax-driven nature of most such financings, particularly experienced in the complex tax laws that govern the tax exemption of interest on the Conduit Bonds.

In both Borrower-driven (*i.e.*, conduit) and Issuer-driven financings, it is important to involve Bond Counsel early in the financing to determine whether the project(s) proposed for bond financing are eligible for tax-exempt financing and to help design the basic legal and structural conditions for such a financing. Most bond counsel will provide preliminary advice on these matters without charge.

Find a Lender (Public Offering or Private Placement). See Chapter 2 for a general description of Lenders.

Engage the Underwriter (Public Offering). See Chapter 2 for a general description of Underwriters.

Choose the Issuer. If the Lender is not going to be the Issuer, determine with Bond Counsel what public entity will serve as the Issuer of the Bonds. In some states or in some situations, there may be several possible issuers with different policies, procedures, politics, governing laws and fees.

Financial Advisor. Because there are pros and cons to financing structures and because there are many underwriters and private placement buyers from which to choose, some Issuers and Borrowers engage a financing consultant or financial advisor to explore the options and recommend the best approach for their project.

Adopt a Reimbursement Resolution. If the Borrower intends to use bond proceeds to reimburse itself for project expenditures incurred prior to the issuance of the bonds, the Borrower will want the issuer to pass a "reimbursement resolution" establishing a date after which (and up to 60 days before which) costs incurred can be reimbursed with bond proceeds (borrowers who are 501(c)(3) corporations can pass reimbursement resolutions without the assistance of governmental issuers). Bond Counsel can describe the specific tax rules regarding reimbursements and will normally provide this fairly simple resolution on request.

Apply for (and Receive) Volume Cap. Unless the Borrower is a 501(c)(3) corporation, the project will need to receive an allocation of volume cap authority (see Chapter 7) to have tax-exempt Conduit Bonds issued on its behalf. The Issuer and the Borrower should become familiar with the application procedures for volume cap in the state(s) where project(s) will be located.

Conduct TEFRA Hearing and Approval. See Chapter 7. Bond counsel is normally responsible for making sure the TEFRA process is completed. From a tax law standpoint, TEFRA approval does not need to be received until just before the transaction closes, but Issuers and other entities having control over the transaction (such as the state board charged with allocating volume cap) often require TEFRA approval early on.

Drafts of Documents. Bond Counsel, Underwriter's Counsel and Lender's Counsel (if applicable) prepare and circulate to the working group drafts of the bond documents, the underwriting documents and the loan documents. These typically include some combination of an Indenture, a Loan Agreement, a Tax Certificate and Agreement, a Bond Purchase Agreement, an Official Statement,

possibly a Letter of Credit or other Credit Enhancement Agreement, a Mortgage or Deed of Trust, sometimes subordination and intercreditor agreements and ancillary loan security documents.

Conference Calls. The finance team holds conference calls to discuss the foregoing documents, followed each time by circulation of revised drafts.

Ratings. If it is possible for the Bonds to receive a public rating, there would need to be interactions between the financing participants and outside credit rating analysts. These processes can take several weeks.

Issuer Approval. After receiving substantially final drafts of any major document to which it is a party, the bond issuer adopts a bond resolution (drafted by bond counsel) authorizing the sale and issuance of the bonds, execution and delivery of the legal documents and distribution of the Official Statement, if any.

Preliminary Official Statement. For a public sale, a preliminary Official Statement containing information about the bonds, the Issuer, the project and any credit enhancement, but excluding certain final pricing information, is mailed to potential purchasers of the Bonds.

Bond Sale. For a public sale, the underwriter completes marketing of the bonds to the public and enters into the Bond Purchase Contract with the Issuer, which is usually accepted and approved by the Borrower in the case of a conduit transaction. For variable rate bonds, this step may take place the day before closing; for fixed rate bonds, the bond sale occurs a week or more before closing.

Final Official Statement. For a public sale, a final Official Statement containing the final sale information is prepared for delivery to purchasers of the Bonds at or before receipt of their purchase confirmations.

Closing. The Bonds are delivered to the Underwriter or directly to the Lender, as the case may be, in exchange for payment of the purchase price of the Bonds simultaneously with delivery of final executed copies of the legal documents and various certificates, receipts and opinions. In the case of a conduit financing, the loan is typically funded concurrently, and real estate documents securing the loan of the bond proceeds to the Borrower, as well as the Regulatory Agreement, are recorded in the county recorder's office of the county in which the project is located.

APPENDIX B

Governmental Bond Tax Rules

This appendix describes the general tax rules applicable to Governmental Bonds with no signification participation by a private entity (for a discussion of Governmental Bond structures with significant private party participation, see Chapter 6). As previously discussed, as a general matter, only bonds issued to fund capital expenditures will qualify for tax exemption (an example where the renewable energy project itself is not deemed to be the capital expenditure for these purposes is discussed in Chapter 6). A capital expenditure means any cost of a type that is properly chargeable to a capital account (or would be so chargeable with a proper election) under general federal income tax principles. For example, costs incurred to acquire, construct or improve land, buildings and equipment generally are capital expenditures.

The most common way for public agencies to finance renewable energy facilities is through the issuance of Governmental Bonds. A bond issue will be a governmental bond if: (i) five percent or less of the proceeds of the bond issue are loaned to a nongovernmental person ("Private Loan Test") and (ii) either (a) ten percent or less of the proceeds of the bond issue are used directly or indirectly in trades or businesses carried on by other than a state and local governmental unit (the "Private Business Use Test") or (b) the amount of revenues derived (directly or indirectly) from such trade or business use and payments or property used in such trade or business that secure the bond issue total ten percent or less of the debt service on the bond issue (the "Private Payment or Security Test"). For purposes of the Private Business Use Test, uses by the federal government (including its agencies and instrumentalities), Section 501(c)(3) tax-exempt organizations and other persons (other than state and local governmental units) who are not natural persons are treated as trade or

business activities.[17]

In determining whether a renewable energy facility or the energy generated by it is used in a trade or business, use of the facility by members of the general public is not taken into account. For example, if an issuer through its energy facility provides energy to residences and private businesses (e.g., corporations, associations or partnerships) and both the residences and the private businesses are charged a uniform rate for electric services, purchases of energy by such residences and businesses will be viewed as use by members of the general public. Conversely, if an issuer provides energy to private trades or businesses through "take or pay contracts" or similar output-type contracts or on a basis other than the basis on which the service is provided to members of the general public pursuant to contracts fixing quantity and price for periods exceeding thirty days, such use and the related payments will be aggregated in determining whether the ten percent threshold of the Private Business Use Test and the Private Payment or Security Test has been exceeded. Even if bonds are treated as Conduit Bonds because of the Private Business Test and the Private Payment or Security Test, they still may be eligible for tax exemption if they fit into a category described below.

For a discussion of tax rules relating to the private operation of a Governmental Bond or financed project, see Chapter 6.

Other Tax Considerations

1. *Expenditure Requirements*. As of the issue date of the bonds, an issuer must generally reasonably expect to spend at least eighty-five percent of the proceeds of the bonds on the governmental projects for which the bonds were issued within three years and no more than fifty percent of the proceeds may be invested in taxable securities with a guaranteed yield for more than four years (the "Three Year Rule").

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[17] The Private Business Use Test threshold is reduced to five percent in the case of a private business use, which is: (i) unrelated to any governmental use also being financed with the issue or (ii) disproportionate to the related use being financed. Bonds will also be treated as Private Activity Bonds if the lesser of five percent or $5,000,000 of the proceeds of the issue are used to make loans to persons other than state or local governmental units.

2. *Capitalized Interest*. Generally, capitalized interest may be financed with the proceeds of the bonds for a period commencing on the issue date and ending on the later of three years from such date or one year after the date on which the project is placed in service.

3. *Costs of Issuance*. The costs of issuance associated with the bond financing may be financed with proceeds of the bonds. In addition, municipal bond insurance premiums, letter of credit fees and liquidity fees may be financed with proceeds of the bonds.

4. *Existing Property*. A governmental bond may generally finance the acquisition of existing property. Note, however, that there are significant restrictions that in many cases may preclude the use of governmental bond proceeds to acquire existing, nongovernmental output facilities.

5. *Reimbursing Prior Capital Expenditures*. In addition to paying the cost of a project (whether new construction or acquisition/rehab) after issuance, tax-exempt bonds may, under certain circumstances, be used to reimburse the bond obligor for costs incurred before bonds are issued, as well as to finance certain costs associated with the bond issuance itself.
   - Certain preliminary "soft costs," such as architectural, engineering, surveying, soil testing and similar costs, paid prior to commencement of acquisition, construction or rehabilitation of a project may be reimbursed up to 20% of the aggregate issue price of the bonds issued to finance the project. Land acquisition, site preparation and similar costs are not included in such "soft costs."
   - Any other capital expenditures (including costs of issuance) paid before the bonds are issued may be reimbursed if they are paid after or not more than 60 days before the Issuer of the bonds expresses "official intent" to reimburse such expenditures by resolution, declaration or other action that meets the requirements of applicable tax regulations,[18] provided that the reimbursement is made no later than 18 months after the later of the date the cost is paid or the date

[18] Public entities and nonprofit 501(c)(3) corporations may adopt their own reimbursement resolutions, but for-profit Borrowers need to have the Issuer adopt a reimbursement resolution for their projects.

the project is placed in service (but in no event more than three years after the cost is paid).

- One of the first steps in any serious consideration of a tax-exempt financing for a renewable energy project should be the adoption by the Issuer of an official intent reimbursement resolution. Properly drafted, it can be fairly general, simple and nonbinding. There is no cost or liability for not issuing the bonds or not using the proceeds for reimbursement.

6. *Reserves*. In some cases, a debt service reserve fund may be established and held by the bond trustee. This reserve fund may be funded with bond proceeds and generally may be equal to the lesser of 10% of the bond issue, 125% of average annual debt service on the bonds or maximum annual debt service on the bonds. The debt service reserve fund is used to pay debt service on the bonds if for any reason the bond obligor fails to pay.

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