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DOMESTIC ENVIRONMENTAL ENERGY TECHNOLOGY AND INVESTMENT ABROAD UNDER THE ENERGY POLICY ACT OF 1992

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The Energy Policy Act of 1992 (EPAct)¹ generally addresses domestic energy policy issues. There are, however, two aspects of the Act which are international in scope and purpose. One aspect is the reform of the Public Utility Holding Company Act of 1935 (PUHCA)² with respect to investment in energy facilities located outside of the United States. EPAct lessens Securities and Exchange Commission (SEC) review of United States public utility holding company investment in foreign utility companies and exempts from regulation the ownership/operation of electric generating facilities located outside of the United States.³ The other international aspect of EPAct is the creation of government/industry cost-sharing programs that offer financial assistance to United States companies seeking to invest in energy facilities located outside of the United States which use environmentally benign energy technology that is manufactured in the United States.⁴ Although EPAct itself does not link these two international aspects of the statute, the advantages of each can be enjoyed by a single public utility holding company.

This article identifies the statutes and regulations relevant to an intrasystem arrangement where the environmental technology developed and produced by a domestic subsidiary of a public utility holding company is exported to an energy

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^{1.} Energy Policy Act of 1992, Pub. L. No. 102-486, 106 Stat. 2776 (1992) [hereinafter EPAct].

^{2.} Public Utility Holding Company Act of 1935, 15 U.S.C. §§ 79 to 79z-6 (1988) [hereinafter PUHCA].

^{3.} EPAct, supra note 1, §§ 711, 715; 15 U.S.C. §§ 79z-5a to -5b (Supp. IV 1992)(adding §§ 32, 33 to PUHCA).

^{4.} EPAct, supra note 1, §§ 1211, 1332, 1608; 42 U.S.C. §§ 13316, 13362, 13387.

facility, which the same holding company seeks to own/operate with financial assistance obtained through one of the cost-sharing programs established by EPAct.⁵ Part I of the article argues that United States holding companies, which invest in facilities located outside of the United States, should consider the use of environmentally benign energy technology at those facilities. Part II identifies the statutes relevant to the cost-sharing programs enacted under EPAct.⁶ Part III identifies the statutes relevant to public utility holding company investment in energy facilities located outside of the United States.⁷ Part IV identifies the statutes relevant to a public utility holding company's acquisition of an environmental energy technology subsidiary located in the United States.⁸

I. THE DESIRABILITY OF USING ENVIRONMENTAL ENERGY TECHNOLOGY IN ENERGY FACILITIES LOCATED OUTSIDE OF THE UNITED STATES

EPAct establishes three environmental energy technology transfer programs to facilitate a public sector/private sector partnership for investment in energy facilities located outside of the United States that use environmentally benign energy technology (i.e. (to be codified at, emission control technology or renewable fuel technology) which is manufactured in the United States. Congress has implicitly recognized that there is a growing global market not only for new sources of energy, but also for technology that minimizes the environmental consequences of energy production. 10

The environmental consequences of energy production may be summarized as resource depletion. Resources are depleted when used as inputs to energy production. For example, at current consumption rates, the estimated technically recoverable United States natural gas resource base will be depleted in approximately sixty-five years. Resources are also depleted when they are used as receptacles for the waste generated in energy production. For example, sulfur dioxide emissions from coal-fired generators degrade air quality. 12

Foreign governments are increasingly aware of the depletion of natural resources as a consequence of energy production and are taking steps to address

^{5.} The outcome of the current debate regarding the regulatory duties under PUHCA of the SEC and of the Federal Energy Regulatory Commission may affect the statutes and regulations relevant to the intrasystem transfer. See generally General Counsel Proposes FERC, State Primacy Over SEC Decisions, ELEC. POWER ALERT, Nov. 24, 1993, at 3 [hereinafter General Counsel]; Regulatory Attorneys Ponder Process Changes, CAL. ENERGY MARKETS, Nov. 19, 1993, at 2 [hereinafter Regulatory Attorneys].

^{6.} EPAct, supra note 1, §§ 1211, 1332, 1608 (to be codified at 42 U.S.C. §§13316, 13362, 13387).

^{7.} PUHCA, 15 U.S.C. § 79z-5a to -5b.

^{8.} PUHCA, 15 U.S.C. § 79k note (Supp. IV 1992)(as amended by EPAct § 713).

^{9.} EPAct, supra note 1, §§ 1211(a), 1332(a), 1608(a); 42 U.S.C. §§ 13316(a), 13362(a), 13387(a).

^{10.} Cf. T. Cartselos et al., Double-Digit Growth, INDEPENDENT ENERGY, Sept. 1993, at 20-30 (this survey of the growing global market for new sources of energy includes environmental requirements).

^{11.} D.F. Santa & P.J. Beneke, Federal Natural Gas Policy and the Energy Policy Act of 1992, 14 ENERGY L.J. 1, 4 (1993).

^{12.} Clean Air Act, 42 U.S.C. §§ 7401-7671q (1988 & Supp. III 1991); cf. R.L. Sarosdy, May Acid Rain Legislation Excuse Performance Obligations under Coal Contracts, 14 ENERGY L.J. 303 (1993).

the problem as they seek ways to meet their expanding energy needs. In an Action Plan for the Environment in Latin America and the Caribbean prepared in 1991 by the governments of most of the Latin American countries, the environmental consequences of energy use and development was listed as one of the principal environmental problems which those countries must address through law and regulation.¹³ In the People's Republic of China (PRC), the state-owned China National Technical Import and Export Corporation has recently entered into its sixth agreement to purchase an emission control coal boiler from the United States environmental control technology company, A. Ahlstrom Corporation, reportedly bringing the value of that company's boiler deliveries in the PRC to about \$145 million since 1992.¹⁴ The company attributes the lucrative China market for environmental control technology to two important trends. One is the privatization of power plants in an expanding economy which needs new energy supplies.¹⁵ The other is the PRC's increased reliance on native fuels such as coal, lignite, and industrial waste that otherwise cannot be burned in an environmentally acceptable manner.¹⁶

It is not only domestic environmental protection concerns that prompt interest in environmental energy technology, but also the need to mitigate the occurrence of transboundary pollutants. SCECorp recently pulled out of Carbon II, the \$1.8 billion coal-fired electric generating plant under construction in Northern Mexico in part because of concerns over the migration of emissions into the United States.¹⁷ Although the project would meet Mexican emission standards, it would not meet the United States Environmental Protection Agency's new source performance standards for sulphur dioxide and particulates.¹⁸ The transboundary pollution issue brought this south-of-the-border project under the scrutiny of members of the United States Congress,¹⁹ and caused the World Bank to defer its involvement in financing the project.²⁰

The current debate among international lenders is whether to increase conservation's prominence in energy sector development or to focus on developing a competitive market for electricity.²¹ Whether conservation or

^{13.} See L.J. Jensen, Environmental Regulation in Latin America: A Rapidly Changing Legal Framework, NR&E. Fall 1993, at 23-24.

^{14.} U.S. Coal Boiler Supplier Steps Up Chinese Involvement, ELEC. POWER ALERT, Oct. 13, 1993, at 24-25 [hereinafter U.S. Coal Boiler].

^{15.} Id.; cf. China's Guangdong Province to Seek Bids for 9,240 MW of New Coal Units, ELEC. UTIL. WK., Sept. 27, 1993, at 17 (the PRC has requested bids for 9,240 MW of new coal units).

^{16.} U.S. Coal Boiler, supra note 14; see generally Air Pollution Prevention and Control Law [of the PRC], 1 GEO. INT'L ENVIL. L. REV. 145, at 151 (B.V. Brennan trans., 1988)(the law provides for civil penalties for toxic emissions).

^{17.} News Scan, Pub. Power WKLY., Oct. 18, 1993, at 2.

^{18.} See K.P. Maize, Carbon II Plant May Not Be Quite the Bad Neighbor It's Been Cracked Up To Be, ELEC, J., Oct. 1993, at 12.

^{19.} See J. Simpson, NAFTA Negotiations Boost Scrutiny of U.S. - Mexico Power Projects, PUB. UTIL. FORT., Oct. 1, 1993, at 42-43.

^{20.} See Maize, supra note 18, at 13.

^{21.} See International Lenders Debate Demand-Side Management Versus Capacity Addition, ELEC. POWER ALERT, May 26, 1993, at 16; cf. U.S. Coal Boiler, supra note 14, at 24 (U.S. Export-Import Bank assistance to U.S. geothermal project in Philippines). For a guide to international lending institutions, see L.M. Goodwin

competition wins the favor of international lenders, an environmentally sound project would likely attract both conservationists who are interested in natural resource stewardship, and promoters of competition who are interested in efficient natural resource management, risk aversion, and secure markets.

The energy facility which employs environmentally benign energy technology reduces potential environmental risks and potential non-compliance with rapidly developing environmental regulation around the world. As one commentator points out, "[c]ountries with weak environmental laws or enforcement programs will be strengthening them. The environmental laws of other countries will offer many traps for United States companies doing business overseas."²² Companies from the United States "should not be reacting to developments, but should try to anticipate what will happen and formulate sensible courses of action."²³ Furthermore, if the energy facility is fiscally stable due to its financial relationship with a United States holding company, it may be a secure market for the continued export of environmental energy technology and related services.²⁴

By diversifying domestically in an environmental energy technology subsidiary, a public utility holding company can enter the environmental energy technology market. By exporting the technology to an energy facility which the holding company seeks to acquire in pursuit of a piece of the global power market, the facility may be eligible for financial assistance through the government/industry cost-sharing programs established under EPAct.

II. PARTICIPATION IN TECHNOLOGY TRANSFER PROGRAMS

Participation in an environmental energy technology program requires the holding company to have an equity interest in the energy facility and that the facility utilize environmental energy technology (i.e., emission control technology or renewable fuel technology) that is manufactured in the United States.²⁵ There are three types of technology programs which are collectively referred to herein as "environmental energy technology programs." They are the Renewable

[&]amp; K.B. Weiner, A Developer's Guide to International Finance, PUB. UTIL. FORT., Aug. 1, 1993, at 14-15.

^{22.} J.A. Schlickman, Barriers to International Business Becoming 'Greener,' CORP. LEGAL TIMES, July 1992, at 19.

^{23.} Id.; see also G.M. Knapp, Proper Strategies Seen Easing Expansion Into Unexplored Markets, ELEC. POWER ALERT, June 23, 1993, at 9-10; Leonard S. Hyman, Expanding Your Orbit, PUB. UTIL. FORT., Feb. 1, 1993, at 16, 31-33.

^{24.} Cf. C.L. Van Orman, The National Energy Strategy - An Illusive Quest For Energy Security, 13 ENERGY L.J. 251, 261 (1992) ("Developing advanced technology and fully exploiting its commercial capabilities in products, processes, and services is essential to ensuring that U.S. businesses can survive in an increasingly competitive world market.").

^{25.} EPAct, supra note 1, §§ 1211(e)(3), 1332(e)(3), 1608(e)(3); 42 U.S.C §§ 13316(e)(3), 13362(e)(3), 13387(e)(3).

Energy Technology Transfer Program (Renewables Program),²⁶ the Environmental Technology Transfer Program (Environmental Program),²⁷ and the Clean Coal Technology Transfer Program (Clean Coal Program).²⁸

A. Program Purpose

The environmental energy technology programs are intended to foster a new industry in the United States and to help that industry compete globally.²⁹ One specific purpose of the programs is to assist in the reduction of our balance-of-trade deficit by exporting United States environmental energy technologies.³⁰ Perhaps most relevant to this discussion is the Congressional objective that United States participation in energy-related projects in foreign countries include United States technology as well as United States investment dollars.³¹ Although it is not required that the technology to be transferred be manufactured by the investing company, such an arrangement is not unlawful under EPAct. Furthermore, the intrasystem arrangement does advance the Congressional purpose of exporting United States technology to United States investments abroad.

B. Project Solicitation, Selection, and Financing

The Secretary of Energy, through the Agency for International Development, establishes and administers the programs.³² The Secretary first identifies potential energy projects in foreign countries, where solicitations for projects are being conducted by the prospective host country or by a multilateral lending institution.³³ Next, the Secretary solicits proposals from United States firms for the design, construction, testing, and operation of the identified project.³⁴

Any solicitation will require the project proposal be submitted by a United

^{26.} EPAct, supra note 1, § 1211(a); 42 U.S.C. § 13316(a).

^{27.} EPAct, supra note 1, § 1332(a); 42 U.S.C. § 13362(a).

^{28.} EPAct, supra note 1, § 1608(a); 42 U.S.C. § 13387(a).

^{29.} See generally H.R. REP. No. 474, 102nd Cong., 2d Sess., pt. 2, at 68 (1992), reprinted in 1993 U.S.C.C.A.N. 2064, 2075.

^{30.} EPAct, supra note 1, §§ 1211(b)(1), 1332(b)(1), 1608(b)(1); 42 U.S.C. §§ 13316(b)(1), 13362(b)(1), 13387(b)(1).

^{31.} EPAct, supra note 1, §§ 1211(b)(5), 1332(b)(5), 1608(b)(5); 42 U.S.C. §§ 13316(b)(5), 13362(b)(5), 13387(b)(5).

^{32.} EPAct, supra note 1, §§ 1211(a), 1332(a), 1608(a); 42 U.S.C. §§ 13316(a), 13362(a), 13387(a).

^{33.} EPAct, supra note 1, §§ 1211(c),(f); 1332(c),(f); 1608(c),(f); 42 U.S.C. §§ 13316(c),(f); 13362(c),(f); 13387(c),(f)

^{34.} EPAct, supra note 1, §§ 1211(e), 1332(e), 1608(e); 42 U.S.C. §§ 13316(e), 13362(e), 13387(e)(the term "project" is not defined in the relevant sections of EPAct and is presumed to mean part or all of a facility that is or will be constructed).

States firm with an equity interest in the project.³⁵ Under a "Buy America" provision, at least fifty percent of the cost of any equipment furnished in connection with a project must be attributable to the United States manufactured components of such equipment.³⁶ Program solicitation is modeled after the domestic Clean Coal Technology IV program,³⁷ which is administered by the Department of Energy (DOE).³⁸ Program Opportunity Notices (PONs) for projects under the domestic program are also issued by the DOE.³⁹ EPAct provides the Secretary with a laundry list of factors to be considered in selecting the project. The Secretary is to consider, *inter alia*, the long term viability of the specific project, the kind of role model the specific project may provide for future projects, and the extent of the host country's involvement in the project.⁴⁰

EPAct does not describe the financial mechanisms in detail, but it is reasonable to expect that the financial mechanism for the international programs will be similar to that of the domestic Clean Coal Technology IV program. Under the domestic program, sponsors of selected projects are issued a grant or offered a contract or cooperative agreement.⁴¹ The DOE finances up to fifty percent of the project, sharing the costs with the project sponsor at each phase of the project (*i.e.*, design, construction, and operation).⁴² If the project turns commercial profits, the sponsor may be required to repay the Government's share on an annual repayment schedule. These payments might be made from gross revenues from equipment sales/leases, royalties, and licensing fees.

Financial assistance for the investment may be provided in combination with non-United States funding that is available to the project. Such funding may come from the host country. The financial assistance may be used to create a financing package for projects that seek to use financial assistance through other governmental programs.⁴³ The financial provisions for each of the programs vary slightly. But, such financial assistance does not favor one technology over another. Each of the programs has been appropriated \$1 million (U.S.) per fiscal year for the next six fiscal years.⁴⁴

^{35.} EPAct, supra note 1, §§ 1211(e)(3), 1332(e)(3), 1608(e)(3); 42 U.S.C. §§ 13316(e)(3), 13362(e)(3), 13387(e)(3).

^{36.} EPAct, supra note 1, §§ 1211(j), 1332(j), 1608(k); 42 U.S.C. §§ 13316(j), 13362(j), 13387(k).

^{37.} EPAct, supra note 1, §§ 1211(e)(2), 1332(e)(2), 1608(e)(2); 42 U.S.C. §§ 13316(e)(2), 13362(e)(2), 13387(e)(2).

^{38.} EPAct, supra note 1, §1211(e)(2); 42 U.S.C. § 5903(d).

^{39. 48} C.F.R. § 917.72 (1991).

^{40.} See EPAct, supra note 1, §§ 1211(h), 1332(h), 1608(i); 42 U.S.C. §§ 13316(h), 13362(h), 13387(i).

^{41.} See Financial Assistance Rules, 10 C.F.R. pt. 600 (1982); Special Contracting Methods, 48 C.F.R. pt. 917 (1991).

^{42.} Projects may be divided into budgeting periods, with a separate application made to continue beyond each period. See 10 C.F.R. § 600.21. If the DOE appropriated funds are not available, the DOE could disapprove continuation of the cost-sharing.

^{43.} EPAct, supra note 1, §§ 1211(d)(2), 1332(d)(2), 1608(d)(2); 42 U.S.C. §§ 13316(d)(2), 13362(d)(2), 13387(d)(2).

^{44.} EPAct, supra note 1, §§ 1211(m), 1332(m), 1608(n); 42 U.S.C. §§ 13316(m), 13362(m), 13387(n). In their dissenting views, certain members of the House Committee on Science, Space, and Technology questioned the fiscal responsibility of the overall spending in the Energy Policy Act, which necessarily includes

C. The Specific Programs

1. The Renewables Program

EPAct Section 1211 established the Renewables Program to foster the development and exportation of non-polluting, renewable energy technologies. Renewable energy technologies include: hydropower, photovoltaic electricity, wind energy, and solar thermal technologies. The renewables program was created to assist foreign countries in meeting their energy needs through renewable energy in an environmentally acceptable manner consistent with sustainable development policies, while encouraging United States firms to compete with non-United States firms in foreign countries with respect to supplying renewable energy technologies. 46

The United States Export Council for Renewable Energy (Council), a consortium of renewable energy industry trade associations, has identified Mexico as one country whose expanding energy needs can be met by renewable resources.⁴⁷ The Council supported the adoption of the North American Free Trade Agreement (NAFTA) because of its promise to reduce otherwise crippling Mexican tariffs on United States renewable energy technologies.⁴⁸ The Council reports that the NAFTA will phase out the current twenty percent tariff on United States wind turbines and will eliminate the ten percent tariff on United States solar photovoltaic technology.⁴⁹

2. The Environmental Program

EPAct Section 1608 establishes the Environmental Program to foster the development and exportation of technologies and related services which reduce emissions caused in the production of energy.⁵⁰ The House Committee on Energy and Commerce called the program a "'win-win' policy for the environment and for Unites States competitiveness. It establishes a cost-sharing program for transferring United States technology that will result in significant reductions in greenhouse gas emissions, and increased markets for United States industry."⁵¹ The United States, however, already has competition in this area. For

the technology transfer programs, in light of the deficit. H.R. REP. No. 474, 102nd Cong., 2d Sess., pt. 2, at 201 (1992), reprinted in 1993 U.S.C.C.A.N. 2064, 2180. But see Regulatory Attorneys, supra, note 5 (Congressional resolution to shift \$1 billion from DOE's nuclear and fossil fuel programs to efficiency and renewable energy programs).

^{45.} See H.R. REP. No. 474, 102nd Cong., 2d Sess., pt. 2, at 102, pt. 1, at 208 (1992).

^{46.} EPAct, supra note 1, § 1211(b); 42 U.S.C. § 13316(b).

^{47.} Renewables Back NAFTA, ELEC. UTIL. WK., Nov. 15, 1993, at 2; cf. J.P. Mathis & M.S. Escobedo, Mexico's Open Door to Cogeneration and Independent Power, 14 ENERGY L.J. 285 (1993).

^{48.} Renewables Back NAFTA, supra note 47, at 2.

^{49.} Id. at 2-3.

^{50.} EPAct, supra note 1, § 1608(b); 42 U.S.C. § 13387(b).

^{51.} H.R. REP. No. 474, 102nd Cong., 2d Sess., pt. 1, at 152 (1992), reprinted in 1993 U.S.C.C.A.N. 1954, 1975. Carbon dioxide, produced by the combustion of fossil fuels, is the most prevalent of the greenhouse

example, one Japanese government-industry consortium is already developing devices to control greenhouse gas emissions.⁵²

Eligible environmental projects might also include technologies which do not emit pollutants, thereby reducing emissions. Such technology might include fuel cell power plants, aeroderivitive gas turbines, ocean thermal energy conversion technology, and anaerobic digester and storage tanks.⁵³

3. The Clean Coal Program

EPAct Section 1332 establishes the Clean Coal Program to foster the development and exportation of technologies that reduce emissions from power plants which burn this non-renewable, traditional fuel. The Clean Coal Program is intended to develop markets for United States clean coal technologies that reduce sulfur dioxide emissions from coal-fired generators and to develop markets for United States coal resources.⁵⁴ Unlike other programs, the Clean Coal program targets developing countries and countries that are moving from non-market to market economies.⁵⁵ The Department of Energy reportedly forecasts that, by the year 2010, advanced clean-coal technology purchases worldwide could amount to \$24 billion (U.S.) a year and create up to 80,000 new United States jobs.⁵⁶

III. OWNERSHIP/OPERATION OF ELECTRIC GENERATORS LOCATED OUTSIDE OF THE UNITED STATES, INVESTMENT IN FOREIGN UTILITY COMPANIES

EPAct reforms PUHCA so that exempt and registered holding companies are able to acquire energy facilities located outside of the United States without going through the rigorous regulatory application procedures like those that apply to domestic diversification.⁵⁷ Notwithstanding the liberalized procedures regarding the underlying acquisition, the SEC retains jurisdiction over certain commercial relations between the facility and a registered holding company, such

gases which include nitrous oxide and methane. Carbon dioxide purportedly clogs the atmospheric window through which the earth would otherwise vent heat and in so doing contributes to the so-called greenhouse effect.

^{52.} New Scan, PUB. POWER WKLY., June 1, 1992, at 2.

^{53.} EPAct, supra note 1, § 1608(h); 42 U.S.C. § 13387(h).

^{54.} EPAct, supra note 1, § 1332(b); 42 U.S.C. § 13362(b).

^{55.} EPAct, supra note 1, § 1332(d); 42 U.S.C. § 13362(d).

^{56.} Goodwin & Weiner, supra note 21, at 6-7.

^{57.} See PUHCA, 15 U.S.C. § 79k; Adoption of Rules, Forms and Form Amendments Relating to Exempt Wholesale Generators and Foreign Utility Companies, 58 Fed. Reg. 51,488, 51,488-489 (SEC 1993) (to be codified at 17 C.F.R. pts. 250, 259).

as the intrasystem transfer of environmental energy technology.⁵⁸

A. Exempt Wholesale Generators Located Outside of the United States, EPAct Section 711, 15 U.S.C. § 79z-5a.

An exempt or registered holding company that seeks to acquire an exempt wholesale generator (EWG) located outside of the United States must obtain a determination from the Federal Energy Regulatory Commission (FERC) granting the facility EWG status.⁵⁹ State commission approval is also required before the exempt status is granted when the acquisition of the EWG would create a "hybrid" situation⁶⁰ or where a State commission had pre-existing jurisdiction over a "rate or charge for, or in connection with, the construction of [an EWG], or for electric energy produced by [an EWG]."⁶¹ An EWG is any person determined by the FERC to be "engaged directly, or indirectly through one or more affiliates as defined in Section 2(a)(11)(B), and exclusively in the business of owning or operating, or both owning and operating all or part of one or more eligible facilities and selling electric energy"⁶² An "eligible facility" generates electric energy for sale.⁶³ The "and selling" requirement may be satisfied by the lease of the facility.⁶⁴

Under 15 U.S.C. § 79z-5a(e), "an exempt wholesale generator shall be exempt from all provisions of [PUHCA]." An EWG may be a subsidiary company, an affiliate, or an associate company of a holding company. A number of electric generators that have sought and received EWG status are

^{58.} See PUHCA, 15 U.S.C. § 79m, 17 C.F.R. § 250.87 (1993); Intrasystem Service, Sales and Construction Contracts Involving Exempt Wholesale Generators and Foreign Utility Companies, 58 Fed. Reg. 51,508 (1993) (to be codified at 17 C.F.R. pt. 250) (proposed Oct. 1, 1993); see generally Adoption of Rules, Forms and Form Amendments Relating to Exempt Wholesale Generators and Foreign Utility Companies, 58 Fed. Reg. 51,488 (1993) (to be codified at 17 C.F.R. pts. 250, 259). The SEC adopted proposed rules 53, 54 (re: EWGs) and 57 (re: notices and reports). The SEC is still considering comments on proposed Rules 55 and 56 (re: foreign utility companies), see Proposed Rules and Forms Relating to Exempt Wholesale Generators and Foreign Utility Companies, 58 Fed. Reg. 13,719 (1993) (to be codified at 17 C.F.R. pts. 250, 259)(proposed Mar. 15, 1993).

^{59.} PUHCA, 15 U.S.C. § 79z-5a(a)(1); see Order No. 550, Filing Requirements and Ministerial Procedures for Persons Seeking Exempt Wholesale Generator Status, 58 Fed. Reg. 8897 (1993) (to be codified at 18 C.F.R. pts. 365, 381), F.E.R.C. Stats. & Regs., Regulations Preambles ¶ 30,964, reh'g granted in part, Order No. 550-A, 58 Fed. Reg. 21250 (1993) (to be codified at 18 C.F.R. pt. 365), F.E.R.C. Stats. & Regs. ¶ 30,969.

^{60.} PUHCA, 15 U.S.C. § 79z-5a(d)(a "hybrid" may exist where an EWG owns or operates a portion of any facility where any other portion of the facility is owned or operated by an electric utility company that is an affiliate or associate company of such EWG unless that portion of the facility has been deemed "eligible" by the appropriate State commission pursuant to § 79z-5a(c)).

^{61.} PUHCA, 15 U.S.C. § 79z-5a(c).

^{62.} PUHCA, 15 U.S.C. § 79z-5a(a)(1).

^{63.} PUHCA, 15 U.S.C. § 79z-5a(b) (a foreign EWG may make wholesale or retail sales).

^{64.} PUHCA, 15 U.S.C. § 79z-5a(a)(2)(B); see InterAmerican Energy Leasing Co., 62 F.E.R.C. ¶ 61,283 (1993), rev'd, Order No. 550-A, supra note 59.

^{65.} PUHCA, 15 U.S.C. § 79z-5a(e); but see PUHCA, 15 U.S.C. § 79z-5a(d)(prohibition against "hybrids").

linked to a Virginia-based holding company, Dominion Resources, Inc.⁶⁶ EWGs abroad seek the exempt status so that the United States parent can avoid becoming a registered holding company. Investment in an EWG does not in and of itself jeopardize an exempt holding company's 15 U.S.C. § 79c exemption from SEC jurisdiction.

A registered holding company, in addition to obtaining a grant of EWG status from the FERC, must comply with SEC rules regarding financing in connection with the acquisition of an EWG.⁶⁷ A registered holding company is required to keep separate books and records for all EWGs.⁶⁸ Furthermore, the SEC retains jurisdiction over the ongoing commercial relations between the registered holding company and the EWG. Jurisdiction extends to any sales, service, and construction contracts between the EWG and registered holding company.⁶⁹ Therefore, unlike the situation with an exempt holding company, the SEC retains jurisdiction over a registered holding company for the transfer of environmental energy technology from a subsidiary company to an EWG located outside of the United States which is owned/operated, directly or indirectly, by the same registered holding company.

The SEC's Final Rules on EWGs shed some light on the standard the SEC would apply in considering whether to approve transactions with respect to matters that remain subject to its jurisdiction, such as the issuance or guarantee of securities by the registered holding company. If the transaction will have a "substantial adverse impact" on the financial integrity of the registered holding company system, it will not qualify for the partial safe harbor provided by the rules, and will be subject to heightened review. Pursuant to 17 C.F.R. § 250.53(a)(1) (the so-called "retained earnings test"), the SEC shall not make a "substantial adverse impact" determination for the issuance or guarantee of securities if the "[a]ggregate investment does not exceed fifty percent of the system's consolidated retained earnings."

Another rule that applies solely to registered holding companies is 17 C.F.R. § 250.53(a)(3), which requires that "[n]o more than two percent of the employees of the system's domestic public-utility companies [may] render services . . . to exempt wholesale generators . . . in which the registered holding company, directly or indirectly, holds an interest; provided, that the Commission has

^{66.} See, e.g., Belize Electric Co., Ltd., 63 F.E.R.C. ¶ 61,267 (1993) Determination of Exempt Wholesale Generator Status; Central Termica Alto Valle S.A., 63 F.E.R.C. ¶ 61,264 (1993) Determination of Exempt Wholesale Generator Status; Dominion Management Argentina S.A., 64 F.E.R.C. ¶ 61,078 (1993) Determination of Exempt Wholesale Generator Status and Denial of Refund of Filing Fee.

^{67.} PUHCA, 15 U.S.C. § 79z-5a(h); 58 Fed. Reg. 13,727 (1993) (to be codified at 17 C.F.R. § 250.53).

^{68. 58} Fed. Reg 13,727 (1993) (to be codified at 17 C.F.R. § 250.53(a)(2)).

^{69.} See PUHCA, 15 U.S.C. § 79m; 17 C.F.R. § 250.87; Intrasystem Service, Sales and Construction Contracts Involving Exempt Wholesale Generators and Foreign Utility Companies, 58 Fed. Reg. 51,508 (1993) (to be codified at 17 C.F.R. pt. 250)(proposed Oct. 1, 1993).

^{70. 58} Fed. Reg. 13,720; cf. 58 Fed. Reg. 13,722 (The SEC is not to consider the effect of the capitalization or earning of any EWG upon the registered system unless the approval would have a "substantial adverse impact" on the financial integrity of the company).

^{71. 17} C.F.R. § 250.53(a)(1).

previously approved the rendering of such services."⁷² The intrasystem transfer should not fall within the scope of this limitation, however, if the domestic technology subsidiary is not deemed to be a public utility.

B. Foreign Utility Companies, EPAct Section 715, 15 U.S.C. § 79z-5b.

A foreign utility company (FUCO) is defined as any company that:

- (A) owns and operates facilities that are not located in any State and that are used for the generation, transmission, or distribution of electric energy for sale or the distribution at retail or natural or manufactured gas for heat, light, or power, if such company—
 - (i) derives no part of its income, directly or indirectly, from the generation, transmission, or distribution of electric energy for sale or the distribution at retail of natural or manufactured gas for heat, light, or power, within the United States; and
 - (ii) neither the company nor any of its subsidiary companies is a public utility company operating in the United States; and
- (B) provides notice to the Commission, in such form as the Commission may prescribe, that such company is a foreign utility company.⁷³

A FUCO is itself exempt from PUHCA regulation and is not to be deemed a public utility company even if it is a subsidiary, an affiliate, or an associate company of a holding company or of a public utility company. Because a FUCO is not deemed a public utility company, investing in one should not jeopardize a holding company's exemption under 15 U.S.C. § 79c. A public utility company which is an associate company of the FUCO is subject to SEC reporting requirements. 55

Both exempt and registered holding companies must notify the SEC that the foreign facility claims FUCO status. SEC Form U-57 is used to effect such notice. Investment in or acquisition of a FUCO does not require SEC approval. Prior to EPAct, registered holding companies were required to seek SEC approval but EPAct liberalized the SEC's regulatory approval process for FUCO investment by registered holding companies.

Registered and exempt holding companies are subject to different require-

^{72. 17} C.F.R. § 250.53(a)(3).

^{73.} PUHCA, 15 U.S.C. § 79z-5b(a)(3).

^{74.} PUHCA, 15 U.S.C. § 79z-5b(a).

^{75. 15} U.S.C. § 79z-5b(e)(1); see 58 Fed. Reg. 13,723 (1993)(the domestic associate of the foreign utility company must file an annual report with the SEC of the foreign utility activities).

^{76.} PUHCA, 15 U.S.C. § 79z-5b(a)(3)(B); 58 Fed. Reg. 13,727 (1993)(to be codified at 17 C.F.R. § 250.57).

^{77.} PUHCA, 15 U.S.C. § 79z-5b(a)(3)(B); 58 Fed. Reg. 13,727 (1993)(to be codified at 17 C.F.R. § 250.57); see 17 C.F.R. § 259.207 (1993).

^{78.} PUHCA, 15 U.S.C. § 79z-5b(b),(c).

^{79.} See 58 Fed. Reg. 13,719 (1993) (The new PUHCA section and proposed rules "provide a complete safe harbor for certain acquisitions of foreign utility companies" by registered holding companies); see generally 138 CONG. REC. H11427 (daily ed. Oct. 5, 1992); 138 CONG. REC. S17615 (daily ed. Oct. 8, 1992).

ments with regard to state certification of the FUCO investment or acquisition, and with regard to SEC regulation of financial and commercial relations between the FUCO and the holding company. An exempt holding company that seeks to acquire a FUCO must include in its notification to the SEC a certification from all relevant state commissions that said state commission has the authority and resources to protect ratepayers and that it intends to exercise its authority. A registered holding company is not required to provide state commission certification. State certification is required of an exempt holding company because a holding company that is exempt under 15 U.S.C. § 79c may itself be a public utility company subject to state commission jurisdiction, or may have public utility subsidiaries that are subject to state commission jurisdiction.

The following two SEC cases may serve to show the distinction between an exempt and a registered holding company in the FUCO acquisition context with respect to state certification.

On July 16, 1993 Duke Power Company (Duke), an exempt holding company.83 acting on behalf of Compania de Transporte de Energia Electrica en Alta Tension Transener S.A., an Argentine Corporation (Transener); Duke Transener, Inc., a Delaware Corporation (Duke Transener); and Compania Inservora en Transmission de Electrica Citelec S.A., an Argentine Corporation (Citelec), filed a notification with the SEC that Transener, Duke Transener, and Citelec were claiming FUCO status.⁸⁴ Under the arrangement, Duke Transener is an operator of the Transener facilities. 85 Transener holds an exclusive concession for the transmission of high tension electric energy in Argentina. 86 Also under the arrangement, Citelec acquires a sixty-five percent equity interest in Transener.87 Citelec was formed for the purpose of acquiring and holding such equity interest.88 Duke Transener, with others, holds a fifteen percent equity interest in Citelec. 89 Accordingly, Duke Transener owns a 9.75% equity interest in Transener. 90 Duke Transener is a wholly-owned subsidiary of Duke Energy Group, Inc., a wholly-owned subsidiary Church Street Capital Corp., which in turn is a wholly-owned subsidiary of Duke.91

Duke represented in its Form U-57 that the relationship between the domestic public-utility associate companies of Citelec and Duke Transener within the Duke holding company system (i.e., Duke Power Company and Nantahala

^{80.} PUHCA, 15 U.S.C. § 79z-5b(a)(2).

^{81.} Id.

^{82.} See PUHCA, 15 U.S.C. § 79c.

^{83. 1} MOODY'S INVESTORS SERVICE, INC., MOODY'S PUBLIC UTILITY MANUAL 502 (Earl Stephens ed., 1993) [hereinafter MOODY'S].

^{84.} Duke Power Company, SEC Form U-57, Notification of Foreign Utility Company Status Filed Under Section 33(a) of the Public Utility Holding Company Act of 1935, at 1 (July 16, 1993)[hereinafter Duke].

^{85.} Id.

^{86.} Id.

^{87.} Id.

^{88.} Id. at 1-2.

^{89.} Id. at 2.

^{90.} Id.

^{91.} Id.

Power and Light Co. (Nantahala)) were limited. Duke's relationship to Citelec and Duke Transener is limited to the fifteen percent indirect equity interest in Citelec and one hundred percent indirect equity interest in Duke Transener. Nantahala is not involved in the ownership of Citelec or Duke Transener or in the management or operation maintenance of the Transener facilities. Because Duke is an exempt public utility holding company, Duke's Form U-57 contained certifications from the two state commissions with jurisdiction over the electric retail rates of Duke (i.e., the State of North Carolina Utilities Commission and the Public Service Commission of the State of South Carolina).

On July 19, 1993, Entergy Corporation (Entergy), a registered holding company, sacting on behalf of Entergy Transener S.A. (Entergy Transener), an Argentine Corporation, filed a notification with the SEC that Entergy Transener was claiming FUCO status. Entergy Transener will also serve as an operator of the Transener facilities discussed above. Like Duke Transener, Entergy Transener holds a fifteen percent equity interest in Citelec, and accordingly, a 9.75% equity interest in Transener. Entergy represented that none of the domestic associate public-utility companies within the Entergy holding company system would have any separate relationship with Citelec or Transener. Because Entergy is a registered holding company, it was not required to include any state certification in its Form U-57.

Although a registered holding company is not required to include a state certification in its notice to the SEC, a registered holding company may be subject to additional SEC requirements regarding the ownership of a FUCO once the SEC promulgates rules under 15 U.S.C. § 79z-5b(c)(1).¹⁰⁰ Under the Proposed Rules,¹⁰¹ the registered holding company that seeks to acquire a FUCO must satisfy the same affirmative criteria for financing to qualify for the partial safe harbor that the SEC uses with regard to EWGs. The registered holding

Shall promulgate rules or regulations regarding registered holding companies' acquisition of interests in foreign utility companies which shall provide for the protection of the customers of a public utility company which is an associate company of a foreign utility company and the maintenance of the financial integrity of the registered holding company system.

^{92.} Id. at 3.

^{93.} Id.

^{94.} Duke, supra note 84, Exs. A - B.

^{95.} MOODY'S, supra note 83, at 2684.

^{96.} Entergy Corporation, SEC Form U-57, Notification of Foreign Utility Holding Company Status filed under Section 33(a) of the Public Utility Holding Company Act of 1935, at 1 (July 19, 1993).

^{97.} Id.

^{98.} Id. at 1-2.

^{99.} Id. at 2.

^{100.} PUHCA, 15 U.S.C. § 79z-5b(c)(1) provided that the SEC:

^{101. 58} Fed. Reg. 13,719 (1993)(as of this writing, the Proposed Rules specifically regarding FUCOs are not yet final). Cf. 58 Fed. Reg. 51,488 (1993)(to be codified at 17 C.F.R. Pts. 250, 259)(final rules regarding EWGs).

company must meet the retained earnings test requiring an aggregate investment in a FUCO not to exceed fifty percent of its consolidated retained earnings. Furthermore, the holding company must maintain separate books and records for all FUCOs. No more than two percent of the registered holding company's domestic utility company's employees may provide services to the FUCO, and the utility must obtain SEC approval to provide such services. The transactions necessary to implement an intrasystem environmental energy transfer to a FUCO within a registered holding company system will be subject to SEC regulation.

C. Summary Comparison of EWG/FUCO Acquisitions

Conceivably, a FUCO that exclusively generates and sells electricity could also qualify as an EWG. The different treatment of the two appears in the regulatory approval process, and varies depending on whether the holding company is registered or exempt. On balance, it seems less burdensome and less time-consuming for both exempt and registered holding companies to obtain an EWG.

A registered holding company acquiring an EWG with internally generated cash need only obtain certification from the FERC as to the EWG status of its project. State commission approval of an EWG acquisition is also required in "hybrid" or pre-existing jurisdiction situations. As of this writing (i.e. prior to the issuance of final FUCO rules) a registered holding company that seeks to acquire a FUCO need only file a Form U-57 notification with the SEC. Once FUCO rules are established, however, acquisitions must comply with the terms of such rules, and one may anticipate that whenever possible, registered holding companies will opt for the EWG route for their electric investments abroad.

Exempt holding companies will normally choose to obtain EWG status for their projects. State commission approval of an EWG acquisition by an exempt holding company is only required in the "hybrid" or pre-existing jurisdiction situations. Otherwise, only the FERC certification is required for EWG acquisitions by exempt holding companies. In contrast, the state is always involved in a FUCO application by an exempt holding company. When an exempt holding company seeks to acquire FUCO status, each of the state commissions with jurisdiction over the retail rates of the public utility within the exempt holding company system must certify its oversight of the FUCO acquisition.

^{102.} PUHCA, 15 U.S.C. § 79m; 17 C.F.R. § 250.87; see Intrasystem Service, Sales and Construction Contracts Involving Exempt Wholesale Generators and Foreign Utility Companies, 58 Fed. Reg. 51,508 (1993); see also 58 Fed. Reg. 13,722 (1993).

^{103.} But see 17 C.F.R. § 250.53(a)(the SEC retains jurisdiction to approve the issuance or guarantee of securities for the acquisition).

^{104.} PUHCA, 15 U.S.C, § 79z-5a(c)-(d).

^{105.} Id.

IV. ACQUISITION OF A DOMESTIC ENVIRONMENTAL ENERGY TECHNOLOGY SUBSIDIARY

When Congress liberalized investment in energy facilities located outside of the United States under PUHCA, it did not liberalize the acquisition of a domestic company. Current federal regulation of diversification by exempt and registered holding companies is in full force and effect in the context of acquiring a domestic technology transfer subsidiary.¹⁰⁶

An exempt holding company that seeks to acquire a domestic subsidiary to develop, produce, and transfer environmental energy technology must continue to meet the objective criteria for the holding company's exempt status.¹⁰⁷ There are guidelines which an exempt holding company may follow to avoid jeopardizing its 15 U.S.C. § 79c exempt status when proposing to engage in non-utility diversification.¹⁰⁸

The registered holding company that seeks to acquire a domestic subsidiary to develop, produce, and transfer environmental energy technology must comply with the requirements of 15 U.S.C. § 79k(b)(1). The subsidiary business must be "functionally related" to the operations of the registered holding company and must be in the public interest. 109

A. Registered Holding Companies

Registered holding companies are limited to a single integrated public utility system "and to such other businesses as are reasonably incidental, or economically necessary or appropriate to the operations of such integrated public utility system." The SEC must find that such other businesses are "necessary or appropriate in the public interest or the protection of investors or consumers, and not detrimental to the proper functioning of [the registered holding company] system or systems." Based on these PUHCA limitations on the operations of registered holding company systems, the SEC has developed a two-part test. First, the SEC determines whether the activity of the proposed acquisition is "functionally related" to the operations of the registered holding company. Second, the SEC determines whether the "other business" is in the public interest. 113

^{106.} For a general discussion of regulation of diversification by holding companies, see D. HAWES, UTILITY HOLDING COMPANIES § 3.05 (1987).

^{107.} PUHCA, 15 U.S.C. § 79c (Section 79c provides five bases for exemption from registration).

^{108.} See Pacific Lighting Corp., 45 S.E.C. 152, 161-62 (1973).

^{109.} See Michigan Consolidated Gas Co. v. S.E.C., 444 F.2d 913, 916 (D.C. Cir. 1971).

^{110. 15} U.S.C. § 79k(b).

^{111.} Id.; see generally Annot., 16 L.Ed. 2d 1218 (1967).

^{112.} See Michigan Consolidated Gas Co. v. S.E.C., 444 F.2d 913, 916 (D.C. Cir. 1971)(application of gas utility subsidiary of registered holding company for authority to acquire common stock and short term notes to finance construction of housing projects denied for want of "functional relationship" to core utility business).

^{113.} Id.

The kinds of "other businesses" that the SEC has approved as "functionally related" and in the public interest include: pipeline construction, production and transmission facilities, coal properties, oil and gas exploration, gas by-products, and refineries. The kinds of other businesses that the SEC has not approved include land development, electrical instruments, and cable television. 115

The SEC determines whether the "other business" is "functionally related" to the registered holding companys' operations on a case-by-case basis. 116 It seems reasonable to expect that a successful argument can be made that a subsidiary which develops and produces environmental energy technology would be "functionally related" to the registered holding company operations and that such a venture is in the public interest.

The SEC's proposed amendment to Rule 87 would require prior Commission approval before any non-EWG/FUCO affiliate of a registered holding company could provide services (including use of personnel and intellectual property) to an affiliate EWG/FUCO.¹¹⁷ The proposed amendment is directly related to the intrasystem transfer of environmental energy technology from one subsidiary of a registered holding company to an EWG or FUCO. The proposed rule amendment is currently the subject of heated debate between state regulators and industry actors.¹¹⁸ The apparent purpose of the proposed rule is to ensure that the core utility is not drained of its best personnel, and that technology developed at ratepayer expense receives fair compensation (at least at the cost to develop it) from the exempt affiliate. So long as there is no harm to the domestic system, and compensation is fair and at least at cost, the SEC may approve the transfer.

B. Exempt Holding Companies

An exempt holding company is not required to meet the "functionally related" test, but it must continue to meet the objective criteria for its exemption. In 1973, the SEC formulated what are known as the "Casey and Loomis" guidelines where an exempt holding company proposes to engage in non-utility diversification:

1. All nonutility activities should be segregated from utility activities through separate corporate subsidiaries.

^{114.} HAWES, supra note 106, § 3.05[1].

^{115.} Id.

^{116.} See Gas Related Activities Act of 1990, Pub. L. No. 101-572, § 2(c), 104 Stat. 2810 (codified as amended at 15 U.S.C.A. § 79k, at 139 (Supp. 1993))(each determination under § 11 shall be made on a case-by-case basis, and not based on preset criteria).

^{117.} Intrasystem Service, Sales and Construction Contracts Involving Exempt Wholesale Generators and Foreign Utility Companies, 58 Fed. Reg. 51,508 (1993)(to be codified at 17 C.F.R. pt. 250)(proposed Oct. 1, 1993)

^{118.} See States Urge Strengthened Oversight of Affiliated Foreign, EWG Deals, ELEC. POWER ALERT, Dec. 8, 1993, at 17.

^{119.} See generally PUHCA, 15 U.S.C. § 79c.

- 2. There should be no services, materials, or contracts between the utility and other subsidiaries except to the extent that such contracts are subject to the supervision of state regulatory agencies.
- 3. There should be no use of utility-operating management, funds, or credit for nonutility purposes.
- 4. Nonutility investments should constitute only a relatively small component of the entire system.
- 5. Activities should be either complementary in a significant way to the utility operations or have an established successful (i.e., profitable) record for a reasonable period of time. 120

Meeting these guidelines seems to allay in sufficient measure the SEC's concerns regarding "the hazards to the public interest in any situation where the financial integrity of a utility company could be affected by diversification into nonenergy related businesses which are less established or involved higher risks." It seems reasonable to expect that an exempt holding company could diversify into the environmental energy technology business and adhere to these guidelines, although the requirement that nonutility investments constitute only a "relatively small component" of the entire system may be difficult to meet.

V. CONCLUSION

The intrasystem arrangement, where a holding company acquires an environmental energy technology subsidiary and transfers the technology to its facility abroad, may be a prudent investment strategy. Furthermore, the holding company may be able to obtain financial assistance for the project under one of the cost-sharing programs if the project is eligible and selected for the program. The intrasystem arrangement is a means whereby the energy facility may be environmentally risk-averse through the use of environmental energy technology, and in turn, the energy facility may be a good customer for continued environmental energy technology sales and service. EPAct does not prohibit such an intrasystem arrangement, and such an arrangement may advance the Congressional goal of stimulating domestic employment and fostering United States global competitiveness in the environmental energy technology sector.

^{120.} See Pacific Lighting Corp., 45 S.E.C. 152, 161-62 (1973).

^{121.} HAWES, *supra* note 106, § 3.05[2] at 3-36 (quoting Lykes Bros. Inc., SEC Holding Co. Act Release No. 20,487, at 764 (Apr. 6, 1978)).