

PROJECT FINANCE

NewsWire

August 2004

Ethanol: Wall Street Meets Main Street

by Todd E. Alexander and Jonathan L. Phillips, in Houston

The ethanol industry is in a period of extraordinary growth that is in large part driven by a ban on methyl tertiary-butyl ether, or “MTBE” — an ethanol substitute — and the availability of tax subsidies and credits at the state and federal levels. The industry has also benefited recently from a decline in the price of its primary feedstock — corn — and a substantial increase in the price of ethanol.

The combination of these factors has created favorable returns for producers, which naturally has translated into heightened interest from institutional investors, private equity houses and the money-center banks.

The fundamental issue for the future financing of the industry is whether these sources of capital will be able to satisfy their internal criteria for investment within an industry built to satisfy the needs and the requirements of farm coops and rural development banks.

Background

The industry had its roots as a means for domestic corn producers to hedge the price of corn against the price of ethanol. Ethanol facilities / *continued page 2*

IN THIS ISSUE

- 1 Ethanol: Wall Street Meets Main Street
- 5 The Distressed Projects Market
- 13 European View of the US Market
- 21 Why Do Some Toll Roads Fail?
- 26 Opportunities in the Tightening Gas Market
- 34 Still Feeling Burned About Foreign Markets
- 38 Renewables: Best Bet For Growth
- 42 Building Toll Roads Under Public-Private Partnerships
- 45 Environmental Update

IN OTHER NEWS

SYNFUEL plant owners face another round of trouble with the Internal Revenue Service.

The agency is moving on audit to disallow tax credits claimed by two utilities on the output from several synfuel plants that each owns or owned on grounds that the plants were not placed in service in time. The plants had to be operating by June 1998 to qualify. The credits are currently \$1.1036 an mMBtu on the synfuel produced. The credits were supposed to serve as an inducement to US companies to produce “synthetic fuel from coal.” The credits at issue in the two audits run into the hundreds of millions of dollars. The agency is / *continued page 3*

Ethanol

continued from page 1

themselves have tended until now to be owned by farm coops, who raised their equity from individuals and their debt on a project basis from rural development banks, municipal bonds and government agencies. These facilities did not benefit from long-term feedstock or offtake contracts, nor did they have long-term hedging plans in place to safeguard them from corn and ethanol commodity risks.

Ethanol production in the US is booming. MTBE bans in just three states are expected to add another 1.4 billion gallons a year in demand.

This environment has created a fragmented industry full of small facilities with limited access to equity and debt and without the specializations necessary to negotiate hedging mechanisms and other contractual nuances necessary to facilitate project financing.

At the same time, ethanol production in the US is booming. It increased by 32% from 2002 to 2003 and by 91% since 1999 when California first announced its plan to ban MTBE as an additive to gasoline. MTBE has now been banned in California, New York and Connecticut, and it is estimated that this ban alone will account for 1.4 billion gallons of increased annual ethanol demand, or roughly the industry's entire production in 1998.

This growth has continued into 2004. In May, the industry set an all-time monthly production record of 221,000 barrels per day, according to data released by the US Energy Information Administration. It was the eighth consecutive all-time monthly production record.

The federal government has made two important incentives available to ethanol producers. The first is a subsidy of up to \$7.5 million per project under a bioenergy program run

by the US Department of Agriculture. The bioenergy program is fully funded through fiscal year 2006 and is designed to encourage the use of "farm products," such as corn and other grains, for use in the production of energy. A producer's right to payment is based on the volume of year-over-year increases in its use of feedstock.

The second is a federal excise tax credit. The tax credit was first enacted in 1978 and has now been extended five times. It has two important blender incentives: a partial exemption from the gasoline excise tax and an income tax credit. The excise tax exemption is currently equivalent to 52¢ (reduced to 51¢ in 2005 and 2006) per gallon of ethanol for specific ethanol blends. The income tax credit usually equals the excise tax exemption and is based on gallons of ethanol purchased; however, the credit is classified as income to the producer effectively offsetting a portion of the gain. For this reason, most producers elect to use the

excise tax exemption rather than the income tax credit. Both benefits are scheduled to expire in 2007, although a bill extending both through 2010 has passed both houses and is currently stalled in a House-Senate conference committee.

At the state level, 36 of the 50 states have incentives to encourage production or use of ethanol. Of these 36 states, 22 have incentives supporting ethanol production and 32 have incentives supporting the use of ethanol as fuel. Developers of ethanol facilities may also have available to them tax-increment financing, property tax abatements and other similar support from states and municipalities.

A Shift in Paradigm

The ethanol industry began as a cottage industry that provided a means for domestic corn producers to hedge their own corn crops by producing relatively small quantities of ethanol and other by-products. These early days in the industry were marked by local coops raising equity from hundreds of individuals through significant effort. The equity was at best leveraged on a project basis at a 1:1 ratio, and debt was only available from limited sources with fairly short maturi-

ties, such as rural development banks, municipal bonds or government agencies. Because rural coops were developing the initial projects with limited financial resources, these projects were limited in size and capacity. To this day, farmer-owned ethanol plants comprise the single largest segment of ethanol producers, representing approximately 40% of US capacity.

The existing model is changing. Given the tremendous need for capital to satisfy the growing demand for ethanol and reported returns on equity in the 25 to 40% range, it seems unlikely that the farm coop model will continue to dominate the industry.

There are four emerging trends that we have recently seen that are likely to alter the make-up of the market substantially. The first is plans by existing corporate participants to increase their production. Examples of this include the Archer Daniels Midland Co. announcement that it is expanding its production capacity at four plants and the Cargill proposal to import ethanol from Latin America for the first time.

The second is proposals by developers to construct new facilities with annual production capacities of at least 80 to 110 million gallons, which is a significant departure from the 10 to 30 million gallon facilities generally favored by farm coops. These larger facilities will allow the developers to capitalize on economies of scale, but require greater access to equity and debt and more sophisticated funding sources to capitalize on leverage while maximizing returns.

The third is interest in siting facilities on either of the coasts where there are fewer existing facilities and demand is highest. This would reduce the cost of ethanol transport and, for the first time, require a large portion of the feedstock to be shipped from the corn belt.

The fourth is investment in the ethanol industry by companies not traditionally focused on the agricultural sector. Examples of this include the acquisition by Morgan Stanley Capital Partners of the ethanol production facilities, marketing operations of Williams Bio-Energy, and the acquisition by Abengoa of High Plains, one of the largest ethanol producers in the US, as well as an interest in another facility developed by Baard Renewables.

Traditional funding sources in the project finance community will probably provide a significant share of the debt and equity required for these new ethanol facilities because of their ability to accept

/ continued page 4

expected to move to disallow credits on the same grounds in some other pending audits.

A number of audits closed last year and earlier this year without any adjustment in the credits. IRS field agents tried unsuccessfully in those audits to argue that the plants fail to produce "synthetic fuel"; the plants add chemicals in most cases to already usable coal.

Meanwhile, the tax credits are scheduled to run through 2007, but will phase out automatically if oil prices return to levels reached during the Arab oil embargo in the 1970's. With oil prices escalating, questions are being asked whether there is danger that the credits will disappear.

A phaseout is not expected this year. The average wellhead price for domestic crude oil would have to surpass \$50 a barrel. That is the average price for the *entire* calendar year. The average price through May was \$32.65, according to US Department of Energy figures.

A phaseout would have occurred in 2003 as oil prices moved across a range of \$50.14 to \$62.94 a barrel. Thus, if the average wellhead price in 2003 had reached \$53.98, then credits would have been reduced by 30%. The range is adjusted each year for inflation. The 2004 price range will not be known until April next year.

Oil futures contract prices on NYMEX may provide an early guide to whether a phaseout is a risk next year. "For 2005, we will need to see sustained prices in excess of \$55 a barrel at NYMEX to cause a problem," one hedge fund manager said.

A check of the average wellhead price for the last 14 years against NYMEX prices shows a fairly consistent pattern where the NYMEX price is \$3 to \$4 a barrel above the average wellhead price used by the IRS.

CORPORATE RESTRUCTURINGS are on hold while companies wait to see what Congress does with a provision in a pending tax bill.

The pending bill would repeal a tax incentive for US companies to

/ continued page 5

Ethanol

continued from page 3

construction risk, use complex financing structures and supply large sums of money with long maturities for non-investment grade companies.

Nevertheless, several obstacles remain. Without a doubt, the biggest of these obstacles is the inability of ethanol producers to enter into long-term fixed price contracts for feedstock, typically corn, and offtake, typically ethanol and other co-products produced during the ethanol production process. This inability to use long-term contracts effectively to fix the differential between the cost of a facility's feedstock and its primary revenue sources is further exacerbated by the non-corollary nature of the price of feedstock and ethanol.

Overcoming Obstacles

Although prices for both corn and ethanol are relatively volatile, no one appears to have yet devised a cost-effective way to hedge the price of feedstock against the price of ethanol on a long-term basis. Under present conditions, an ethanol producer cannot purchase forward contracts for corn for more than six to 12 months without paying a significant premium, which effectively squeezes a facility's operating margins. Likewise, the purchase of forward contracts for ethanol or, alternatively, unleaded gasoline, which is closely correlated, have historically become prohibitively expensive more than six months forward.

This inability to demonstrate fixed operating margins has severely curtailed the ability of most ethanol facilities to attract capital from institutional investors, private equity houses and money-center banks. It has also created an industry of hedge specialists dedicated to the ethanol industry, fostered failed attempts by insurance companies to craft insurance coverages that would protect policyholders from excessive swings in the price of corn and ethanol, and encouraged efforts by ethanol producers to enter into long-term, fixed price contracts directly with farmers for their feedstock.

Ethanol producers have at least two other means of partially mitigating changes in the price of their feedstock through the use of dry or wet milling facilities. A dry ethanol facility produces dried grains with solubles — called “DDGS” — as a co-product. DDGS is sold as cattle feed where it is

mixed with corn, soy and other products. The fact that DDGS is a substitute for corn means the price of DDGS tracks the price of corn closely. Thus, as the price of corn rises or falls, so does the price of DDGS. This provides an effective hedge of approximately 30% of corn price fluctuations. A wet mill facility, although significantly more expensive to construct, has the benefit of being able to shift production among several core products and co-products, including ethanol, corn sweeteners, corn germ, corn gluten meal, fiber and stillage and other industrial starches. As the prices for corn and ethanol move divergently, operators are able to switch production to other higher-value outputs to offset market shifts.

Ethanol producers and their financing sources should also be able to mitigate risks by applying customary project financing techniques.

The following is a summary of some of those more commonly used. One technique is a pledge by the borrower of its rights to receive payments under the bioenergy program. These funds can then be used to either create an additional reserve for the lenders or to fund any reserves fully that may have been drawn prior to receipt of the bioenergy payment. A second is the coupling of a cash sweep with an amortization schedule that has a majority of the interest expense and principal repayment occurring in later years. This allows the borrower to prepay the loan if market conditions remain favorable while providing the borrower with a cushion if market conditions deteriorate. In fact, lenders using this structure often create a stepup in interest rates if the loan is not prepaid on an accelerated basis. A third technique that is widely used is a working capital facility provided either by a relationship bank or by the ethanol offtaker. This has the twin advantages of allowing the borrower to purchase feedstock during times when spot prices are below those budgeted and providing the borrower with a temporary cushion when its margins are squeezed. A fourth technique is the use of subordinated debt or preferred equity to increase the project's senior debt service ratio. This allows the borrower to better match its debt and equity with the risk appetites of the various funding sources.

Will the new players invest?

There is no doubt that the ethanol market has entered a phase of tremendous growth and that institutional investors, private equity houses and money-center banks are

all considering investments in the ethanol industry. Their ability to minimize the variability of their returns through the use of hedging techniques, different milling technologies and structured finance will ultimately determine whether they will be willing to invest in this industry. ☺

The Distressed Projects Market

One topic this year at a conference Chadbourne hosts annually for leaders in the energy industry was the state of the distressed projects markets in the United States. The conference took place in June.

Standard & Poor's issued a gloomy report about the outlook for the remaining merchant power companies early in the year, but by June, the rating agency had updated its outlook and was sounding somewhat less pessimistic. Electricity prices remain low in many parts of the United States. Private equity funds and other players continue to circle independent power companies in the hope of being able to acquire projects at reasonable prices. Several large portfolios of projects have been sold this year to financial players. A group of panelists at the Chadbourne conference discussed the latest developments in the market, including the Standard & Poor's reports, what assumptions the winners are making to win bids, and if Goldman Sachs and other bulge bracket players on Wall Street are really just 'buying up paper,' what happens to all the plants.

The speakers are Thomas Plagemann, managing director-global energy for GE Energy Financial Services, Jacob J. Worenklein, president and chief executive officer of US Power Generating Co., William H. Chew, managing director of Standard & Poor's, Mary Power, vice president of DZ Bank, Merrick Kerr, chief financial officer of PPM Energy, Steven S. Greenwald, managing director of Credit Suisse First Boston, two independent consultants — Joseph Lane, formerly with ABN-Amro Bank, and David Wasserman, formerly with Sithe Energies — John Burges, a partner with MMC Energy, and Anadi Jauhari, head of project finance, Americas with Natexis Banques Populaires. Neil Golden, a Chadbourne partner in Washington, acted as moderator.

MR. GOLDEN: One question we will be debating this morning is whether there has been any / continued page 6

IN OTHER NEWS

export. The World Trade Organization declared the export incentive illegal and authorized the European Union last year to collect retaliatory duties until the US repeals it. The European Union began collecting duties of 5% on \$4 billion a year in US imports last March. The duties are increasing by 1% a month until they reach 17% next March.

In the meantime, both houses of Congress have voted to repeal the export tax incentive, but the bills each house passed are so different that it is not clear Congress will be able to reconcile them before the session ends in October.

The export tax bill the Senate passed would give the IRS broad authority to deny tax benefits in corporate restructurings retroactively to February last year.

The IRS already has authority under section 269 of the US tax code to deny tax benefits that a company secures by acquiring control of another corporation in cases where the principal purpose of the acquisition is to secure a tax benefit that would not otherwise have been available. "Control" means at least 50% by vote or value. The IRS can also disallow tax benefits from an acquisition by one corporation of property of another corporation in a transaction where the principal purpose is to secure tax benefits.

However, there are two exceptions where section 269 is not invoked currently. The IRS does not invoke it where the transferor corporation was already under common control with the acquirer. It is also not invoked where the taxpayer had other means to secure the same tax benefits.

The Senate bill would eliminate both exceptions in liquidations of subsidiary corporations into a parent company and in other intragroup reorganizations. The change would apply retroactively to transactions after February 13, 2003.

FOREIGN ELECTRICITY SALES must be registered as potential corporate tax shelters, the IRS said.

The result was not / continued page 7

Distressed Projects

continued from page 5

change in the market since Standard and Poor's issued a gloomy report on the merchant power sector in February called "The Worse Case Scenario Has Become the Base Case."

The report focused on 12 companies and said that approximately \$65 billion of the total \$125 billion in debt of these 12 companies will come due by 2010 at the latest. It suggested this is a substantial debt burden. The report characterized the events of the last few years as involving fewer retire-

The end game for the merchant power sector is not a magic moment when things get suddenly better, but a process of rational consolidation of projects.

ments of coal and nuclear plants than had been anticipated and smaller growth in demand for electric power because of a decline in the manufacturing sector. It said there is still substantial excess generating capacity. It said the merchant power companies will have to attract more private equity because there is no identifiable "end game."

By June, S&P was somewhat less gloomy but still had a negative outlook on 15 of 23 companies in the merchant power sector. It said there may not be improvements in the ratings until there is more clarity as to what is a sustainable cash flow for these companies.

Let me start with Thomas Plagemann. Where do you see the distressed projects market going? Will more projects be put up for sale in the near term or does the fact that a lot of these companies rolled over their bank debt recently mean there will be few additional sales until the refinanced debt comes due later in the decade?

MR. PLAGEMANN: I would not go so far as to say there is euphoria in the market, but there is certainly a sense that things have turned.

A lot of new capital has come into the market in the last

18 months looking for assets. When you look at what assets have sold during that time period, they are largely contracted or regulated assets.

These are not distressed assets. The merchant plants are the distressed assets. There have not been many sales of them. There was one recent notable transaction where the Duke North America assets were sold but, other than the efforts by a few utilities to bring a few merchant plants into the rate base, there has not been a lot of activity.

The real question is whether there are going to be many more transactions like the Duke sale.

We as an investor are income driven. We have an inherent problem with merchant assets because most such plants are not generating enough revenue to cover their fixed costs. This is a problem for any buyer looking for income. The challenge for us when bidding is to look for ways to bridge a 5- or 6-year period — maybe longer in some regions — before

electricity prices are projected to recover.

The banks today own many of the assets that have been the subject of the most distress. It is hard to figure out what is going on with the banks. They have a dilemma. They look at the value of these assets like the rest of us do and see a recovery in the market in the long term, perhaps even by the time their loans come due. But they are facing the problem of having to put additional money into these projects and, depending on which part of the bank is managing the plants, they may not be willing to do that.

It would be interesting to hear from some of the bankers in the audience about the current bank view of how best to deal with these plants. Will they simply sit on the plants until the market recovers and are they interested in selling? The Duke sale is a new data point for assessing comparable value.

Ripe for Consolidation?

MR. GOLDEN: We will get to the banks, but I would like to hear first from Jay Worenklein. What is the end game for the merchant power market?

MR. WORENKLEIN: In my mind, the end game is not a magic moment when things get suddenly better, but it is a process. The process is a rational consolidation of the merchant industry.

I see an industry that is ripe for consolidation. We have companies or lenders with large portfolios of plants with huge expenses that are not economic on a current basis. There is not enough critical mass in some portfolios. The portfolios are not on a large enough scale to have diversification of risk.

What I see is not so much a strategy of buying individual merchant assets because the asset is a great asset and is going to make a lot of money, but a strategy of trying rationally to build a portfolio, manage the portfolio, contract it at appropriate stages, at different times and different values and, at the end of the day, recognize that the load-serving entities are the core market.

We will never have a merchant power industry built up again in the US. It is not that people will have long memories. The problem was a fundamental flaw in the thinking that merchant power made sense. The flaw is we failed to see the enormous volatility that comes with electricity because of the lack of storage and because of the inadequacy of transmission. That volatility was amply demonstrated in California when one of the Duke plants went off line. A 50,000-megawatt system was brought down by the sudden loss of a mere 500 megawatts of capacity. Power prices that day and for some time after were up about 33%. That is enormous volatility for a minute shortage, but the larger point is that a similarly small excess destroys capacity prices.

There is no point in buying individual assets in the hope of a merchant recovery.

The load-serving entities still have the duty to serve, and they have a responsibility to contract for a supply of power. Auctions have been taking place around the country — in Arizona, New York City and elsewhere — as load-serving entities look at the highly-depressed state of the market. The regulators are saying to the load-serving entities that if they do not take advantage of the current market by locking in capacity when capacity prices are extremely low, then they should not expect permission during future shortages to get cost recovery for higher-priced capacity.

There is a logic to trying to build the right kind of portfolio to be able to serve that demand — to / continued page 8

intended, but the agency said that is what its rules require. IRS regulations identify six features that the US government believes are signs that a transaction may be a corporate tax shelter. US companies must report any transactions possessing any one of the six features to the IRS.

One such feature is if the transaction results “in the taxpayer claiming a tax credit exceeding \$250,000 (including a foreign tax credit) if the underlying asset giving rise to the credit is held by the taxpayer for 45 days or less.”

US utilities that own power plants in other countries earn revenue abroad from their electricity sales and pay taxes locally. The taxes can be claimed as a foreign tax credit in the United States. The big four accounting firms have been advising such companies that because the electricity is held for fewer than 45 days before it is sold, all such electricity sales must be reported as potential tax shelters. The IRS confirms this is how it reads its rules, but acknowledges it makes no sense.

All US manufacturing industries are in the same position since, with just-in-time inventory practices, no one manufactures and hold goods in a warehouse for more than six weeks before making sales.

US Treasury officials are studying the problem. The Electric Power Supply Association urged the Treasury in July to issue a quick announcement before the government is buried in forms reporting mundane commercial activities. Other industry trade associations are expected to weigh in, as well.

A POWER CONTRACT buyout payment had to be reported by the generator as ordinary income rather than capital gain, the IRS said.

A partnership owned a power plant that sold electricity to a utility under a 30-year contract. The project was a “qualifying facility” for regulatory purposes. The utility owned a 50% interest in the partnership. The other partner was unrelated. / continued page 9

Distressed Projects

continued from page 7

find assets for which contacts are possible, and to combine them in a rational portfolio. These individual asset acquisitions that we are talking about only make sense in the context of building a sensible portfolio. It makes no sense to own a standalone plant in Connecticut.

Moving to Tom Plagemann's point about what is happening with the banks, the banks are divided. What happened

The banks do not have to liquefy assets to clean up their balance sheets. In fact, we are seeing today a reversal of provisions taken earlier.

with the hedge fund entry — where hedge funds were able to buy pieces of loans before they became off limits and agents said they would not permit transfers — is that you have a three part division among banks.

First, a sizable portion of the banks have a workout mentality, which is what we saw happen before in real estate: "We don't have to sell." The banks are not under a macro pressure to reduce their exposure to the merchant power sector. From a bank-wide point of view, there is no crisis here at all. Even the individual institutions do not have crises. They do not have to liquefy assets in order to clean up their balance sheets. In fact, what we are seeing today is the reversal of provisions taken earlier. The major provisions taken in 2003 are being to some extent reversed as loan maturities are extended and people decide there is more value in their portfolios than they thought earlier. Many of the major banks and securities houses are feeling this way.

What it means if you have a workout mentality is your workout guys are leading the deal. They saw what happened in the last real estate bust. The basic motto is: why sell at the lowest point of the market? They think the whole game is

reserve margins, so they might as well hold until reserve margins get a little bit better. If you have that point of view, then you are not feeling any compulsion to sell. A deal must make very strong sense before you sell.

There is another point of view among bank steering committees that I call the project finance point of view. Holders of this viewpoint would say these assets are very complex; they are not office buildings. You have to manage them. You have to lobby regulatory commissions, participate actively in court proceedings, and make sure that what you

perceive to be anticompetitive behavior gets called so that the markets remain open to independent producers. The project finance point of view is we ought to sell because the unexpected happens and ownership of plants require hands-on management.

The third point of view is held by some smaller players. They may be hedge funds that bought debt in secondary trading. Say you just paid 70¢

on the dollar for an asset that really should not be worth more than 50¢, and now a workout plan is being proposed. There is no way you are voluntarily agreeing to sell. The presence of these smaller players means the voluntary workouts that we saw in 2003 will be much more difficult to arrange in the future. Every deal that is sold will have a prepackaged bankruptcy associated with it.

The point is deals will not sell in 2004 in a way that some bidders have been bidding. Many bids to date have been DIP financing kinds of bids, which is, "We will put in equity, but we want our equity to come out first," or "We will allow a little bit of debt to come out first, but then the bulk of our equity comes out before the remaining debt." The banks think to themselves, "If we want debtor-in-possession financing, we can arrange that ourselves and, if we do that with you, we will pay you only a debtor-in-possession kind of interest rate."

At the end of the day, there will be sales, but those sales will require that a fair amount of equity be put in and the debt be restructured in a way that the banks feel fundamentally makes sense. It could involve a write-off. It could involve

deferrals. It could involve more back-ended payments. Reaching agreement in some cases will require a clamp down on any holdout banks through a prepackaged bankruptcy.

MR. GOLDEN: Bill Chew, where does Standard & Poor's see the distressed debt market headed and what kind of recovery are you seeing in the merchant power sector?

MR. CHEW: I am not an expert on the distressed debt market, but one thing we see happening in the larger merchant power sector is a remorseless refocus on the quaint old-fashioned notion of fundamental credit, something that we would argue was lost earlier.

I recall a paper in late 1996 or early 1997 that one of my colleagues wrote that said there is no doubt the merchant plants being proposed at the time can be built, but if you want investment-grade credit, it will require capital structures that include equity layers that go well beyond anything that was being contemplated at the time. The paper was greeted with total disbelief. We proceeded to rate only two or three real merchant plants. Others in this business rated 40 or 50. We know what happened, and here we are today talking about distressed assets.

We think there is a fairly rudimentary drill you can do at the asset level. A discounted-cash-flow analysis looks at the entire range of possible scenarios. That is where we earn our stripes by being the most difficult guys at the table, but we think that type of rigorous analysis is a necessary part of the end game.

I agree with much of what Jay Worenklein said, but his scenario has the assets being handed to intermediate owners. The real question is: who are the long-term natural owners of these assets? We are talking about a major US industry and a major portion of the US economy.

Private Equity Role?

MR. GOLDEN: We have seen a rush in the last 18 months to two years by private equity firms to go after assets. Tom Plagemann, do private equity funds with short- to medium-term horizons have a role to play in helping this sector to recover?

MR. PLAGEMANN: That's an interesting question. I was about to agree with Jay Worenklein that a rational portfolio roll-up strategy is definitely the right approach. However, what Bill Chew said is correct. Who is going to do it? I do not see the hedge funds pursuing such a / continued page 10

The IRS said the payment the utility made to terminate the contract had to be reported as ordinary income by the partnership because there was no "sale or exchange" of the contract — a condition to being able to report the payment as capital gain. The contract was extinguished when the utility paid to buy out the contract. The IRS said this meant there was no transfer of property since the property disappeared.

The IRS made its position known in a "technical advice memorandum," or a ruling by the national office to settle a dispute between a taxpayer and a field agent on audit. The ruling is TAM 200427025.

The IRS was bothered by the fact that the utility deducted its buyout payment against ordinary income, but then reported its half share of the income allocated to it by the partnership as capital gain.

TAX BENEFIT INSURANCE is raising questions in California.

The state franchise tax board issued subpoenas in June to two insurance carriers for all communications the insurers have had with California companies trying to buy tax benefit insurance. The carriers sell insurance policies that protect against the loss of certain tax benefits in corporate transactions.

Meanwhile, a bill introduced in the state assembly in June would declare tax benefit insurance null and void to the extent issued for a transaction that lacks economic substance. It would require the insurer to return the premium. It would also tax away as a penalty 75% of the proceeds received by a taxpayer "from insurance, guarantees, stop loss agreements, or other similar arrangements" in transactions that lack economic substance.

WIND DEVELOPERS remain frustrated in Iowa.

After working two years to persuade the state legislature to adopt a tax credit tied to electricity output at wind farms, the legislature finally passed a bill, but a / continued page 11

Distressed Projects

continued from page 9

strategy. I see them chasing yield. They are not builders of businesses from scratch. Maybe stepping into industries where they have some expertise, fixing things up, creating more efficiency and then reselling at a nice return is something to do, but they are not the right people to build a business from scratch.

We are a long-term investor. The long-term strategy would potentially be of interest to us provided we can solve the income issue that we have. I see the hedge funds taking

The problem with many of the bids to date is they have been DIP financing kinds of bids. The banks can provide DIP financing on their own.

a buy-low sell-high perspective. They think, “We are paying a rock-bottom price, this is an essential industry, at some point demand will strengthen, and we will sell at a profit.” I would like to know what Jay Worenklein thinks.

MR. WORENKLEIN: A number of hedge funds have pockets of long-term capital. Such funds could form a pool by investing \$50 million or so each for the purpose of acquiring a rational portfolio. Another part of the equation is wealthy family offices. We have been able to identify some of the families that are long-term investors and who like the strategy. However, third-party equity must also be part of the mix. Private equity does have a time horizon, but it is long enough in some cases to tolerate the build-up of a portfolio and then to allow time to exit in a rational way.

The income issue that Tom Plagemann mentions — the potential earnings dilution — is obviously a very critical issue for any public company. However, if you have a big portfolio, you will always have some cash flow. The thing to do is what Tom and his colleagues and others here have done in a very smart way, which is basically to tier the returns so that you

have preferential returns for those who need current income and something else for the private investors with longer-term horizons who don’t need current returns. As people become more comfortable that the strategy overall makes sense, funds will come together and it becomes a problem of execution. The key is to have a clear strategy and then have the patience and ability to execute it deal by deal.

Bank Calculus

MR. GOLDEN: One of the questions asked this morning is: when will the banks be ready to sell? Mary Power, you and I spoke about this at the break. You are with DZ Bank. What is

your bank’s strategy for dealing with distressed assets?

MS. POWER: It is as Jay Worenklein said. We are not looking to sell in a below-market environment. We solicit opinions from the experts about whether we would do better by selling now — what a sale would fetch, what offers are there on the table at this moment — or whether we would do better

to hold the assets for two or three years, wait for a market recovery and then fetch a higher price. In some instances, that has meant putting in a little extra money on a priority basis.

The bank groups have been fractured. I agree with the three different viewpoints that Jay said are found in bank groups. However, I am not sure that I agree with him on the makeup of those groups. We have seen large banks determine that they want to get out of the market, and they have sold off their positions — sometimes merely on a participation basis — because they have a general mandate to get out.

Most of the bank groups in the truly large distressed facilities are still trying to determine whether they should sell, and what the offer really is from the few people who are there bidding. Those offers are still being negotiated. The analysis of whether the banks would do better to hold the assets is ongoing, and the consultants keep revising the numbers. Jay is right when he says that no decision has been made yet, but we are in no hurry to sell.

Mr. GOLDEN: Bill Chew, there are many merchant power

companies that still have fairly poor credit, yet we are not seeing a lot of asset sales this year. Why not? One would think some of these companies would be selling more readily in an effort to improve their credit ratings.

MR. CHEW: It may not be commercially attractive for them to do. There is just too big a spread between bid and ask prices. It depends to some extent on who the holder is, but there seems to be a basic impasse that has prevented the sales. The Duke sale is the most visible. There have been other deals that are less visible — short sales, secondary market transactions and synthetics — but this is a classic situation where there is too much distance between what the banks who hold the bulk of these assets want and what the buyers are prepared at the moment to pay. Sales may accelerate. Some are predicting such an acceleration within the next six to 12 months.

MR. GOLDEN: Are there any comments from the audience? Merrick Kerr.

MR. KERR: I have a question about Mary Power's observation that the banks are reluctant to sell because the asset prices are below market. The market price is a function of supply and demand. The banks are looking for a price that is a product of the paper that they hold plus a make whole. My question is: do the banks reach a point in time when they have to take impairment because of the spread between what they need and the current market price, and might the taking of such an impairment break the impasse?

MS. POWER: There are accounting rules that require a bank, when a project or sponsor has come out of bankruptcy, to reset the debt to fair market value and to adjust the financing structure, but not always. In one case I have in mind, it was not required. There was a revaluation for GAAP purposes, but we retained the debt at the full level.

There are other instances for tax purposes where you may have to write down some of the equity. However, just because you write it down does not force a sale if you believe the market price of electricity will recover sufficiently in the next two or three years that you could ultimately recover your outstanding debt and a portion of your equity. Those are the sorts of issues with which we are trying to come to grips.

MR. KERR: So the reluctance to take a writedown is not what is motivating the banks to hold on to assets?

MS. POWER: Right. In fact, most banks have already made provisions for their bad loans, as Jay Worenklein intimated.

/ continued page 12

mathematical error limited the amount of credit a year to 1/1,000th of what was intended. The legislature is not expected to be able to fix the problem until next year.

TWO UTILITY ISSUES are on the IRS business plan for next year.

The IRS committed in its latest business plan to issue guidance on the tax treatment of "system upgrade payments made to electric utilities" and a revenue ruling on when spending on existing power plants can be treated as a "repair" rather than as an "improvement." The cost of repairs can be deducted. Spending on "improvements" must be treated as an investment in the power plant and recovered over time through depreciation. Both items were on the business plan last year, but the agency was unable to get to them. The IRS issues a business plan each July identifying topics that it has committed to address by the following June 30.

In a separate development, an independent power developer is questioning an increase in the "tax grossup" that Entergy requires from independent generators who want to connect power plants to the Entergy grid. The matter is before the Federal Energy Regulatory Commission.

Entergy insists that a grossup be paid on "system upgrade payments," or amounts that a generator advances Entergy to help pay the cost of improvements to accommodate the additional power that the generator wants to put on the Entergy grid. Entergy ultimately collects the cost of such improvements from all users of the grid through the tariffs it charges for wheeling electricity. However, it requires generators connecting to the grid to advance the money in the meantime, and then returns it later as Entergy is reimbursed through its wheeling tariff.

Entergy announced earlier this year that it is increasing the amount of the grossup from roughly 34% to 43%. It has temporarily suspended collection. A / continued page 13

Distressed Projects

continued from page 11

Groucho Marx

MR. GREENWALD: One of our workout guys at Credit Suisse made a comment to me along the lines of what Groucho Marx said about not wanting to be a member of any club that would have him as a member. His comment was something like, “I would not want to sell any asset that Blackstone is interested in buying.”

There is a lot of truth behind the comment. The buyers of these assets are smart guys. They want 25 to 30% returns. We as a lender do not need a 25% return. We just need a plus 2% return to make back our money. Our analysis of the value of debt on that asset is very different than what the equity buyers are looking to pay for the asset. That is why you have such a large gap at the moment between the bid and ask prices. The banks really believe that they can get out much closer to par than guys like Blackstone are willing to pay for the assets.

MR. WORENKLEIN: Some of the banks are starting to advocate sales structures that address this problem. The way to bridge the gap is to have a sale take place with some cash and a very large chunk of assumed debt. The assumed debt gets restructured. Depending on how troubled the project is and in what part of the country it is, you may have the debt being payable only on a cash-flow basis for some period of years. This is a way to bring the equity investors and the banks together on the proposition that when the markets recover, the banks will get their money back and yet, in the meantime, you can have somebody who knows the business actually managing the property. That is where it starts coming together for a potential deal.

MR. GOLDEN: Let me throw out another question. Does anyone think we are going to see more offtake contracts from financial players? Jay Worenklein mentioned buying projects and turning them into contracted assets. Does anyone think that financial players have a major role to play on the other side of those contracts?

MR. WORENKLEIN: One thing we are seeing is a disconnect between the near-term view and long-term view so that you have players who are prepared to enter into tolling agreements on a near-term basis. Such agreements give the plant owners enough cash flow to cover their fixed O&M costs. Such short-term tolling agreements are a guarantee

against being forced to put your hand in your pocket to pay for fixed O&M. There may be other players who can then take the risk in terms of terminable value.

MR. GOLDEN: Bill Chew, you have a comment?

MR. CHEW: The fundamental issue — not just for merchant power, but for the power sector generally — is who are the long term sources of financing? The basic problem is we have in the power business a commodity business that requires large amounts of capital. It is a particularly tough commodity that we all know cannot be stored. The transmission and regulatory issues and lumpiness of capital are particularly tough. That means long-term credit is absolutely paramount

MR. LANE: I just want to remind people that we do not have to generalize. There have been some discrete events. ABN-Amro took over a merchant plant from NRG and, after some work with the assistance of Lehman Brothers, it managed to sell the plant to Calpine and got out, I believe, at 85 or 90¢ on the dollar.

MR. WASSERMAN: I think the problem with the merchant market is with independent system operators and the fact that the traders are looking to trade against a price that is set by the ISOs. In a volatile commodity market like this, you are going to make all your profit in a given year probably over the course of a few weeks if not just a few days. However, when the market tightens, the ISO says the electricity price is not a true market price — it is due to transmission congestion — so it limits the price. The result is that traders are robbed of an entire year's profit. There is full downside risk but only limited upside. Until this problem is corrected, it will not be profitable to own merchant assets.

MR. BURGESS: The Duke sale earlier this year was 6,000 megawatts at \$90 a kilowatt. I am very interested to know whether the bankers are actually taking the provisioning levels down to that kind of number. That is a market-clearing price.

MR. GOLDEN: Are there any bankers who want to respond?

MS. POWER: We do not think one transaction makes a market. We do not believe there have been enough transactions yet to say what is market. Each transaction is a little different. We base our provisions individually in each instance on what we expect to receive back from the sale based on the price of electricity rather than the price of an individual transaction. Provisions have varied in transactions based on expected recoveries.

MR. JAUHARI: We are also a bank with merchant exposure. The banks that I have spoken to are willing to wait until the market recovers over the next three to five years and electricity prices improve. No one wants to sell at a value that is less than par. I can think of two or three transactions where incremental equity has been put into deals to buy more time until the market recovers. Turning to the question of provisioning for loans, banks are not required to take any loss, but if a bank sells a portion of its exposure, then it will be under pressure to mark its entire exposure to market. That is one reason banks are unwilling to sell a portion at 60¢ on the dollar. ☺

European View of the US Market

Another topic at the Chadbourne conference this year was what opportunities Europeans see in the US market, what they are telling their managements about the uncertain US regulatory climate, and how the collapsing US dollar figures into their calculations. The speakers are Merrick Kerr, chief financial officer of PPM Energy, Gordon Currie, senior vice president and general counsel of Centrica North America, Vim Verbraeken, head of project finance lending for Belgian lender KBC Bank, and Alfredo Cahuas, chief financial officer of USA Gamesa Energia. The moderator is Keith Martin.

MR. MARTIN: Let me start with the collapsing US dollar. I think it has come as a surprise to many people in this country that with the dollar having lost 40% of its value against the Euro since early 2002 and 25% against the British pound, European companies have not been rushing into the US to buy up cheap assets. Merrick Kerr, why not?

MR. KERR: When you look across the US at the assets that have been available — some pipelines, generation assets some of which have long-term contracts against them — although they are cheap in dollar value compared to the Euro, you are competing against private equity funds and others here with a lower cost of capital.

The other issue is I think companies make a mistake to behave opportunistically. You really need to have a reason beyond mere opportunity to be in a country and a strategy for pursuing it.

When we bought PacifiCorp, we */ continued page 14*

IN OTHER NEWS

generator developing a project in Arkansas has challenged the increase. The case is pending before FERC.

SOLID WASTE remains a debate topic.

Witnesses at an IRS hearing in early August criticized the tax agency for a proposal it made in May to change how “solid waste” is defined for tax purposes. Power plants that use “solid waste” as fuel qualify potentially for tax-exempt financing. “Solid waste” is defined currently as any material that has no value in the place where it is located. The IRS is proposing a different test in the future. Material would be waste only if it has been discarded. In addition, fossil fuels — like gob and culm — would never qualify as waste.

The witnesses also criticized another proposal. A plant qualifies potentially for tax-exempt financing as a “solid waste disposal facility” currently if at least 65% of the material going into the plant is waste. The IRS is proposing to increase the percentage to 80%.

Witnesses urged the IRS not to tinker with rules with which industry has been living for “20 or 30 years.” The IRS held the hearing to collect comments on its proposals.

A FOREIGN TAX CREDIT strategy is being challenged by the IRS.

Guardian Industries is a US-based manufacturer and distributor of glass products. It owns eight factories in Luxembourg, Spain, Hungary and Germany to serve the European market. All of its European operations are under a Luxembourg holding company that, in turn, owns a series of other Luxembourg subsidiaries. The holding company is an SARL, or *société a responsabilité limitée*, that is treated as disregarded for US tax purposes. The subsidiaries are mainly SAs, or *sociétés anonymes*, that are treated as corporations for US tax purposes.

Luxembourg allows groups of related Luxembourg companies to */ continued page 15*

European View

continued from page 13

thought the dollar was already weak against the UK pound. Since then, we have had a \$400 million gain purely on currency fluctuation. We hedged against the risk, and the hedges were so deep in the money by this year that we were able to free up that amount in cash. The point is it shows the significant risk that companies take on currency. Who can be

European companies are nervous about political risk tied to the lack of a clear regulatory framework in the US.

sure the dollar will remain at the current exchange rate?

MR. MARTIN: You suggested private equity funds have a cheaper cost of capital. Therefore they are better able to compete for assets that have been put out for bid. Why is that? Why are Europeans saddled with more expensive money?

MR. KERR: To be honest, it is not necessarily the cost of capital but the lament of all bidders who offer too low a price. When we have bid on contracted assets and pipelines, the number that we feel comfortable offering is significantly below what others are willing to pay for the same assets.

MR. MARTIN: I think almost everyone in the room would say the same thing: how could that other guy justify paying so much? Gordon Currie, why aren't Europeans here in greater numbers?

MR. CURRIE: I very much agree with what Merrick Kerr said. I cannot remember a single project of the many projects at which we have looked in the last two or three years where the relative level of the dollar to the British pound, which is our currency conversion as well, has been a factor in the early stages in whether we would bid. We think very much like Merrick said. You have to justify the acquisition on the strate-

gic merits and on a value basis in the local currency, and the treasury guys do their thing to get the earnings back to the UK.

MR. MARTIN: Wim Verbraeken, you and I spoke about this last night at dinner. You have another theory for why the Europeans are not here in larger numbers.

MR. VERBRAEKEN: It is as Merrick Kerr said. Those who rushed into a certain country because of particular circumstances — whether it is a crisis where assets are cheap or there is a currency advantage — have later regretted the decision. I get a sense from talking to European sponsors that people are nervous about political risk, and I am not only referring to California but to the lack of a clear regulatory framework and how the entire crisis in the power industry will ultimately play out. As an outsider, you are not part of the political game that is being played. Some sponsors

doubt whether they can compete at a political level with the incumbents.

Regulatory Morass?

MR. MARTIN: Marco Arcelli from ENEL, who could not be here, said something very interesting on a call last week to prepare for this conference. He is from Italy. He said, "I thought Italy was Byzantine enough, but here you have federal rules, state rules, county rules. I wonder whether there is a finish line." It was interesting to hear an Italian company describe the US as chaotic.

Let me focus on regulatory risk. Alfredo Cahuas, you are new to the US market. What do you tell your management about the regulatory risk here? Is it greater than what one would find in Spain, for example, or in Latin America?

MR. CAHUAS: I think the regulatory risk is more challenging here. You have a patchwork of federal and state laws that you need to follow. Just look at transmission and the patchwork of rules governing it. Our senior management in Spain finds it frustrating not to be able to get a single answer to the questions it asks. The answer is always, "It depends on the state where the project is located." The rules here are

more complex and difficult to understand, and this ultimately makes it more expensive to do business here.

MR. MARTIN: Gordon Currie, how great an issue is regulatory risk in this country?

MR. CURRIE: It is absolutely at the core of virtually everything we talk about when we try to explain to our UK parent what we are trying to do in this market. One thing European companies learn quickly is that it is not really at the federal level that so many of these issues play out. The old adage is that all politics are local. We have all had to endure some painful experiences to learn that what happens at the state level — or even at the municipal level — can be more profound than what happens nationally. We still pay attention to what the Federal Energy Regulatory Commission is doing, but we gave up long ago trying to explain what the national energy plan moving through Congress was all about. The board said don't bother us about it until it is done. It is at the state level that we are the most focused.

MR. MARTIN: Are there any parts of US that you simply ruled out as presenting too great a regulatory risk?

MR. CURRIE: It is not so much regulatory risk but the regulatory environment. We are not spending a lot of time in the southeast or northwest, given what we are trying to do as a retail energy provider, because these regions remain largely closed to competition. We are spending much more time in places like Texas and the northeastern US where, although there is uncertainty, there is also opportunity. We look at the US on a state-by-state level and, indeed, in Canada we do the same thing. In Canada, of course, we do it in two official languages so it gets even more complicated.

MR. MARTIN: Merrick Kerr, are there any parts of the US that you have ruled out because of regulatory risk?

MR. KERR: Not really. I don't think regulatory risk rules out an area altogether, but it does limit the potential for growth. Great uncertainty and regulatory confusion in an area make it difficult for us to persuade the Scottish Power executive board that there is much opportunity for growth. PPM is concentrating for now on the wind and gas storage businesses. I will say one thing in defense of the US. Trying to build a wind farm in the UK is more difficult than building one in the US, even in California. It got to the point where our group CEO went public in the press with his complaints. He said basically to the UK government, if you don't find a way to allow these plants to be built more quickly, we will take the money we had planned to invest in / continued page 16

file a single, consolidated tax return in Luxembourg.

The Guardian group paid a little over \$3 million in corporate income taxes in Luxembourg in 2001. Guardian argued that it could claim the entire amount as a foreign tax credit against its US taxes on grounds that the taxes are imposed on the holding company that sits atop the Luxembourg group and, since that company is disregarded — or does not exist — for US tax purposes, the taxes are considered imposed directly on the US parent.

The IRS appears to have disallowed the foreign tax credits on grounds that the Luxembourg taxes had to be allocated among all the Luxembourg companies whose income was reported on the consolidated return.

The US allows US companies to claim credit for income taxes paid to other countries. Credits can also be claimed for income taxes that foreign subsidiaries that are treated as corporations paid to other countries, but not until the subsidiaries distribute their earnings as dividends back to the United States. In this case, a \$58 million dividend was paid, but it may not have been large enough to drag with it all the foreign taxes that Guardian claimed as credits.

The case is now before the US Court of Federal Claims. It is Guardian Industries Corp. v. United States.

DOMESTICATION does not work, the IRS said.

US companies that invest in infrastructure projects in other countries often do so in a manner that lets them defer US taxes on the earnings until the earnings are repatriated to the United States. This requires investing through an offshore holding company treated as a corporation for US tax purposes and then exercising care to ensure that all entities below this offshore holding company are transparent for US tax purposes.

Transparency is normally a matter of sending a form — called a “check-the-box” election — to the IRS. / continued page 17

European View

continued from page 15

wind farms in the UK and put it into the US. The point is the US is not alone in having regulatory issues.

Cheap Dollar

MR. MARTIN: Chadbourne asked the audience at a conference in the early 1990's which country has the greatest regulatory risk, thinking it was China or India, and a majority of the audience responded New York state. Come back to the

There is no doubt the one thing you need to succeed is the political skills to play the regulatory game.

collapsing US dollar. European companies do not find the cheap dollar enough reason by itself to invest in the US market. Are there consequences from the cheap dollar for companies like yours that are already here operating?

MR. KERR: Scottish Power learned at home before coming to the US how deregulated markets work. It entered the US market by acquiring PacifiCorp. The original business plan was to get a foothold in the northwest in advance of deregulation in that market and use what we learned about competing in deregulated markets in the UK. Then, of course, the market changed because of California. The most important point for anyone entering the US market is you have to remain flexible.

Returning to the dollar collapse, it is of greater concern to companies that are already heavily invested in the US than to new entrants. We have a large balance sheet in the US. We have debt in US dollars that we are working hard to balance against our US assets. But as I said before, we are hedged. We have a tax base here for using production tax credits from our wind business. The entry through a utility gave us some

political influence at a local level and an A- credit rating to support what we wanted to do on the unregulated side. This proved a very good way to enter the US market. Whether others entering the market should use the same approach depends on what they want to do on the unregulated side.

MR. MARTIN: Alfredo Cahuas, Gamesa is a new entrant to this market. Does the weak dollar play into your calculations?

MR. CAHUAS: Our take is slightly different than my co-panelists' because, at the end of the day, we are a capital goods company. We manufacture and sell turbines. What does it mean to have a collapsing US dollar? It means that

our equipment is 20, 25, almost 30% more expensive, and it is hurting us. It actually hurts the entire wind sector when you consider that about 70 to 80% of the total capital cost of a wind farm is in the wind turbines and when you consider further that the majority of the manufacturing capacity is European-based. The weak dollar is a burden on the entire sector.

That said, I agree with what was said earlier that, at the end of the day, you look at whether there is any broader strategic reason to be in a market and then get the treasury guys to work on how to hedge the currency risk.

MR. MARTIN: One of the greatest areas of activity for European companies here is renewables. Witness that two of the European companies on this panel — Scottish Power and Gamesa — and a third that was to have been represented — ENEL — plus Airtricity on the preceding panel are focused on renewables. The US encourages renewables through tax subsidies. It is surprising to see so much effort in the one sector where one needs a US tax base to play effectively in the US market. Why have the Europeans focused on the one sector where they are at a competitive disadvantage?

MR. CAHUAS: I think one word — size. We believe that renewable energy will play an important part in the overall energy mix in the US. I doubt it will be as important as in Europe, but picking up something that Ciaran O'Brien from Airtricity said earlier today, when you look at the size of the pie, it is huge. Sure, Europe is a large market, but the penetra-

tion for renewables in Europe is already between 15 and 20%. In the US, it is about 2% taking into account all technologies. If we were to reach 5% market penetration in the US, we would be looking at total investments of \$18 billion. So, from that perspective, being in the US is absolutely critical.

Another point is I think all the elements are in place in the US. Yes, there are uncertainties. There are challenges with production tax credits, and they make it very tough for foreign participants like us to participate effectively with some of the local players but, at the end of the day, there is demand for renewable electricity. We are seeing more states moving to put renewable portfolio standards in place. Some states have consumer choice. There will be continued growth in this sector.

Too Much Politics?

MR. MARTIN: Let me switch topics slightly. Gordon Currie, you interviewed Chadbourne at one point as a potential counsel to Centrica, and one question you asked that was very interesting was about whether Chadbourne had any political muscle or ability to sway regulators and legislators in aid of projects. Do you think that is a more important skill when doing business in the US than, say, Canada or Britain?

MR. CURRIE: A public company in the UK or European Community cannot make political contributions unless it gets shareholder approval, and our company has adopted a policy of no political contributions. That does not mean we do not hire lobbyists. We just can't make political contributions. In Canada, political contributions are capped at \$1,500 per year per political party at the federal level and at correspondingly small amounts in the provinces. So you have a British company that has a regulatory constraint against engaging in the political contributions game at home and, in Canada, the dollar limits are so small as not to be meaningful.

There are complex rules in the US. You have first to learn them. When you are Centrica and a big player in the UK market — we go back more than a hundred years as British Gas — it is no trouble to get an audience. When I walk into this room, not everyone knows what Centrica is. It becomes more important for us to find out what the rules of the game are for making oneself heard whether they be political, regulatory or commercial.

I agree with something Merrick Kerr said. Being on the ground as a participant — particularly as an incumbent — is very important. Having employees who / continued page 18

However, the IRS maintains a list of types of entities — one per country — that cannot be treated as transparent. For example, an SA in any country in Latin America cannot be transparent. Thus, if a power plant in Argentina is owned by an SA, then US tax deferral will be harder to achieve.

Some tax counsel have tried to get around this problem by “domesticating” the project company, or reorganizing it under Delaware law. The project company remains an Argentine SA as far as Argentina is concerned, but Delaware will also recognize it as a Delaware company.

The IRS issued temporary regulations in early August to put a halt to this practice. The IRS said it will treat any company that is chartered in more than one country as a corporation for US tax purposes if it appears on the *per se* corporations list in any of its forms.

These rules are retroactive. The tax agency said the new regulations merely “clarify current law and do not change the outcome that would result under a proper application of existing rules.”

It said this rule will not be used to determine where a company has its tax residence. Its tax residence determines whether it can take advantage of benefits under a tax treaty between the United States and another country.

The IRS also said it is studying whether to change how it defines a partnership as US or “foreign.” At present, the agency simply looks at the law under which the partnership was formed. It said it is considering “under what circumstances a different definition may be appropriate.” This can be important for partnerships that receive payments from the US, as US taxes are more likely to be withheld from payments to a foreign partnership. Also, US persons making capital contributions or sales of interests in “foreign” partnerships must report them.

Any change in the treatment of partnerships as US or foreign would only apply to new partnerships formed / continued page 19

European View

continued from page 17

are on the street talking to customers, talking to regulators, talking to all of the different stakeholders, including the people in this room, gives a company a different level of information. That information is by order of magnitude better than just relying on internal analyses and talking to advisers and lobbyists.

MR. MARTIN: Merrick Kerr, let me ask you the same

In the US, market penetration for renewables is only 2% compared to about 15 or 20% in Europe. Reaching just 5% in the US will require another \$18 billion in investment.

question. We think of ourselves in the United States as having a free market system. The government lets businesses do business largely unfettered by regulation. Is the US in fact such a political place that companies cannot function without lobbyists?

MR. KERR: One of the differences between our home market in the UK and the US is that, in the UK, you have five or six large integrated companies with generation and with customers, a couple transmission companies, and a handful of distribution businesses that are regulated, and everybody has the same access. There are some smaller wind developers in the UK, but you are basically talking about five or six very large companies with similar goals competing against one another under a common set of rules.

You come then to the US where you have municipal corporations, IPPs, fully-integrated IOUs, many wind developers of all shapes and sizes, and QFs — all competing in the same space under federal rules, under state rules, and under local rules. This is a very different environment from Europe, and if you do not have the right relationships with the regulators at each level, you are not going to win. There is no

doubt that the one thing you need to succeed is to be able to play the regulatory game.

Why the US?

MR. MARTIN: Let me ask the two biggest companies, starting with Gordon Currie — does the push you are making in the US market suggest there is not much opportunity elsewhere and, if there is opportunity elsewhere, where does the US rank in Centrica's view of good markets in which to pursue investments?

MR. CURRIE: The reason we are here is the US is a huge market. Yes, it is complex and, yes, it is difficult and, yes, the currency exposure is challenging. Welcome to being a multinational. That is just a fact of life, and you have to get on with trying to pursue the best opportunities. We think there are tremendous opportunities in North America for what we are trying to do. Therefore, the answer to your first question is

no, we are not here because there is an absence of opportunity elsewhere.

Where does North America, and I put it that way because we are heavily invested both in Canada and the United States, where does that rank in Centrica's plans? I'd have to say very, very high. That is a matter of public record and, indeed, our stock price is influenced significantly by what the analysts think of how we are doing in North America, despite the fact that on an overall consolidated basis, North America is still a relatively small portion of the overall mix compared to the business back in the UK.

MR. MARTIN: Merrick Kerr, where does the US rank in Scottish Power's hierarchy of opportunity?

MR. KERR: We have a different take on the US market than Centrica does. The level of our investment here is a bigger problem for Scottish Power. As much as 60% of our business is in the US. We grew through acquisitions in the UK, but then did a very broad search of basically continental Europe, Australia and the US and made the strategic decision that the US presented the best opportunity for further growth. We had a couple near misses before acquiring PacifiCorp.

after the new rules are issued. A change in ownership of an existing partnership could bring it under the new rules.

ARGENTINA is moving to encourage a domestic ethanol industry.

A bill introduced by 50 senators and supported by the vice president would provide tax breaks to companies that produce biofuels, defined as blends of vegetable oil or alcohol with gasoline or diesel fuel. Argentina is the second-largest exporter of corn after the United States. Corn is used as a feedstock for making ethanol.

In another development, the Argentine government announced at the end of May that it intends to impose a 20% tax on natural gas exports, and to increase existing export taxes on oil from 20 to 25% and on LNG, or liquefied natural gas, from 5 to 20%.

Separately, a recent decision by the federal Supreme Court involving several major oil companies shows how to avoid stamp taxes. Such taxes must ordinarily be paid on written contracts. They are collected by provincial governments. Verbal agreements are not subject to tax. An oil company made a written offer to buy a certain amount of oil. No further writings were exchanged. Rather, the seller acknowledged receipt of the offer and then accepted it simply by delivering the oil.

The Supreme Court said the province was barred from collecting stamp tax because the acceptance was not in written form. The case is Shell Petroleum Company Argentina S.A. (Neuquén Province). The case was decided in April.

PERU imposed a new mining tax in early June.

The rate is 1 to 3% of gross sales. It is 1% for companies with gross sales of less than \$60 million. Companies with gross sales of more than \$120 million pay 3%. Companies in between pay 2%.

Some of the largest mining companies operating in the country / *continued page 21*

The opportunities to grow PacifiCorp were not what we expected so we created PPM Energy on the unregulated side just three years ago with 12 people. It has grown today to 220 people and a lot of assets, and it represents a sizable investment for Scottish Power.

MR. MARTIN: What is interesting is the incumbents in the US market have been lamenting for the last few years the lack of opportunities here. Here are two European companies that see significant room for growth. I know that PPM Energy has identified wind farms and gas storage facilities as its two areas of focus. What does Centrica see as its principal opportunity?

MR. CURRIE: We are a retail energy provider but, consistent with the strategy in the UK and elsewhere, we look to hedge 25, 30, as much as 50% of our downstream obligations in the form of upstream physical assets. So, that means buying power generating facilities, investing in gas properties upstream and the like. We are not interested in being in the middle. Someone described it to me as the dumbbell strategy. We like to think of it a little differently. Both ends of the spectrum but not the role in the middle.

MR. MARTIN: Alfredo Cahuas, where does the US rank in Gamesa's hierarchy of opportunity?

MR. CAHUAS: It is a priority market, and that is something that our CEO has expressed time and time again. To take a step back, why are we here? There are opportunities elsewhere. In fact, we are very active in Europe and in the rest of the world. The reason we are here is it is a kind of natural progression for our company as we expand our international footprint. Given the size of the US market, clearly we need to be here.

Lessons Learned

MR. MARTIN: There is a feature in a magazine in Washington called *The Washingtonian* in which a writer, an intellectual, or a political figure is interviewed each month, and the last question is always, "What have you learned about life?" Gordon Currie, let me start with you. If you were advising a company entering the US market for the first time, what important lessons would you convey based on your experience to date?

MR. CURRIE: All politics are local. You have to look at the US market as a series of many small markets that are often very different. Doing business in the southwest is different than doing it in the northeast. Pay atten- / *continued page 20*

European View

continued from page 19

tion to what is happening in a clearly-defined region. Understand that region. Don't underestimate the power of incumbency. Be on the ground. That is a challenge because you do not want to invest until you think it is a place you can make money but, equally, you cannot truly understand a market — particularly the regulatory component — without being there in person.

MR. MARTIN: Another point you made to me before this conference is it is hard to get scale in this country given the fragmented market; just focus on one or two regions.

MR. CURRIE: Absolutely. In our case, we are in four regions in North America — two in the states and two in Canada — and, for the foreseeable future, we will try to mine those regions and avoid spreading ourselves too thin. Just to give one example of the challenge of trying to operate too broadly, the rules for billing of retail customers change not only between states but sometimes within states and different utility service territories. That means you cannot have a common platform where you just push a button and the computer spews out the bills. You are forced to customize. You need a call center where the employees understand the local rules. There are some economies of scale and there certainly is expertise that you can apply across the board, but the local theme is, to my mind, all important and it manifests itself in many different ways.

MR. MARTIN: And the call center is in India? [Laughter.]

MR. CURRIE: No, the call center is in Texas, thank you very much.

MR. MARTIN: Merrick Kerr, what would you advise a new entrant to the US market given your experience here?

MR. KERR: I agree with everything Gordon Currie said, but I would add spend time understanding the fundamentals of the market. Understand what makes the market work, what gets rewarded and then try to find the skill you have that will give you an advantage. If you come to the US without identifying an advantage, you will be eaten alive by the very large and very big players who are already here.

From the Scottish Power perspective, we could see right away that combined-cycle gas-fired power plants were in oversupply. We did not have to be geniuses to see that. What other things can we do? Wind was an obvious answer. The point is to identify a fundamental market that offers a

chance at a reasonable payout. We had a bit of an advantage given our experience with wind at home. Similarly, the gas storage business is one that offers an opportunity to trade around the gas supply. That was something else in which we had experience at home. The ability to trade gave us a competitive advantage. When such assets came up for sale, I was able to pay a little more for them than competing bidders because I knew I would be able to get the upside of optimizing and trading in those assets that others would be unable to achieve.

Figure out which parts of the business are going to be well rewarded and then whether you have or can create a bit of an advantage. Go for it if you can.

MR. MARTIN: Scottish Power established a beachhead in the US by acquiring a regulated utility. Is this a good place for others to start?

MR. KERR: That's difficult to say. Our original business plan did not work. We bought the utility in anticipation of having to compete in a newly-deregulated market. Where our strategy is now is to be very good at the regulation game. PacifiCorp has turned out to be a good investment because of growth in the local market, particularly in Utah where we are building two CCGTs, and we will get nice regulated returns on them. At the same time, the infrastructure for the distribution and transmission business also needs significant investment. Was that the expectation when we came over? No. But things turned out well.

MR. MARTIN: Alfredo Cahuas, what would you tell someone new to this market — perhaps not to move to Minnesota during the winter?

MR. CAHUAS: I agree with what has already been said about understanding the market fundamentals. One thing I would add from a continental European perspective is do not underestimate the cultural differences. Businesses are run differently here.

Returning to the broader theme of this panel, I doubt we will see a wave of utility takeovers by Europeans in the United States. Think back to 1999 and 2000 the last time people thought there would be a wave of M&A activity coming from European buyers, and it did not happen. It did not happen for two reasons. One reason is cultural differences had a big impact. They came out during due diligence. The other reason is that the European utilities had already invested heavily in Latin America, and they were still recovering from the lessons they learned there. We heard about

the Spanish utilities paying big premiums in Argentina, Brazil and elsewhere. So when the time came to look at the US, they were not ready. Their balance sheets were no longer as strong. ☺

Why Do Some Toll Roads Fail?

by Douglas M. Fried and Jeremy S. Rosenshine, in New York

The toll road landscape includes a number of failed projects. Sponsors of new projects — and the banks that lend to them — can learn valuable lessons from what went wrong in these earlier projects. This article looks at four problem areas: poor traffic forecasting, inadequate legal foundations, politically-motivated sovereign actions, and unanticipated events.

Poor Traffic Forecasting

One of the most important elements in evaluating the viability of a toll road project is determining whether drivers will use the road and to what extent they will be willing to pay a toll. These questions are extremely difficult because the answer is based on a prediction of human behavior. Sponsors and lenders will typically evaluate a broad range of statistical and other data to predict the use of a toll road. Traffic consultants will review traffic trends in the country and particular region where the road is to be located, congestion levels, land-use trends, current and projected levels of community development, socio-economic data and other information.

One area of vulnerability associated with faulty traffic forecasts is reliance on traffic patterns of existing roads that are irrelevant to predicting traffic patterns of the planned toll road. For example, the lower than anticipated traffic at the Garcon Point bridge in Santa Rosa County, Florida, which opened to traffic in May 1999, is attributed by some critics to the reliance on traffic patterns on a busy bridge in the next county that led to a popular resort area. In contrast, the Garcon Point bridge led to no similar attraction. Traffic patterns associated with developed areas, in which there is a pent-up demand to release congestion, are not appropriate to predict traffic in underdeveloped areas. / continued page 22

IN OTHER NEWS

have tax stability contracts with the government and will not be affected by the new tax. Share prices for mining stocks fell 5% in value on the Lima stock exchange immediately after enactment of the tax.

The government wrote the law as requiring “royalty” payments to the government — rather than as a tax. The use of the word royalty raises questions whether US companies will be able to claim amounts paid as a foreign tax credit in the United States. Such credits cannot be claimed for payments for which the payor receives a specific economic benefit from the government.

BRAZIL said that it will not collect withholding taxes on interest that Brazilian companies pay to foreign lenders on certain outstanding loans.

Brazil used not to collect withholding taxes on interest paid on loans with terms of eight years or longer. The law was changed at the end of 1999, and interest is now subject to a 15% withholding tax unless reduced by a tax treaty. Loans that were outstanding at the end of 1999 are “grandfathered” from withholding tax.

The question arises what happens if a grandfathered loan is extended. The banking system in Argentina views such extensions as a new loan. However, Law 10,925 treats the extension as the same loan as long as it complies with terms set by the central bank, including on the interest rate. The law took effect in May. It codifies an earlier provisional measure.

INDONESIA formally cancelled its income tax treaty with Mauritius on June 24. The cancellation will take effect next January 1.

Foreign investors with projects in Indonesia often set up an intermediate holding company in Mauritius to own shares in a project company in Indonesia. Mauritius is an island in the Indian Ocean off the east coast of Africa. The investors then argue that the tax treaty with Mauritius means they are subject to withholding taxes at only a 5% rate — rather than 20% — on dividends received from the / continued page 23

Toll Roads

continued from page 21

On occasion, consultants have made use of regional travel demand models that are intended for non-traffic planning purposes but that may be inappropriate for use to predict vehicular traffic. Such a model was used to model traffic flow on the San Joaquin Hills toll road in California, which opened in various stages in the mid-1990s.

Another pitfall is the use of “steady-state” forecasts (forecasts that assume a steady, unchanging pattern) that

In a toll road project, evaluate the government’s history of honoring contracts as a guide to whether it will honor the concession agreement.

fail to incorporate the likelihood of traffic fluctuation during economic cycles. For example, the recession that affected Orange County, California in the early 1990s contributed to the failure of the Foothill Eastern toll road that also opened in various stages in the mid-1990s. Furthermore, the lack of success experienced by both the Pocahontas Parkway, a toll road in Virginia that was completed in late 2002, and the San Joaquin Hills toll road demonstrates that weekend and truck traffic patterns can vary significantly from the underlying models used to forecast traffic patterns. The underlying models made use of over-simplified assumptions about weekend traffic by equating weekend traffic levels to those experienced during a weekday.

A critical component in every traffic model is the difficult task of determining the monetary value to attach to the time being saved by toll road users and their willingness to pay for such time savings. Travel demand models should not assume that people will always choose, and pay for, the fastest route. Often they will not. The assumption that truckers will be willing to pay to use a road to save time has proven to be inaccurate. The lower than expected proportion of trucks on

the San Joaquin Hills road contributed to its failure. A detailed truck analysis is necessary if truck traffic is expected to be a significant part of future revenues.

Another difficult task is accurately to determine the “ramp-up period,” or how quickly drivers will accept a faster, less congested road. Historically, the “ramp-up period” has received insufficient attention, but is now considered an important factor that needs to be carefully considered. With respect to toll roads that have been financed with debt, structuring debt service payments using ascending debt service repayment schedules and capitalized interest beyond

the projected opening of the toll road may be used to mitigate the risk of payment defaults as a result of revenue shortfalls during the early years of operation. In addition, longer “ramp-up periods” should be considered where traffic growth is dependent on future development along the road.

Sponsors and lenders should take a conservative

approach to reliance on data and assumptions to protect against forecasting failures. Travel demand models that reflect the perspective of metropolitan planning organizations should be assessed and revised, if necessary, to better reflect the characteristics of toll road projects. A good example is the Central Texas turnpike, due to be operational in December 2007. The land-use and socio-economic assumptions in the forecasting model were modified downward compared to both historical data and future expectations to reflect more conservative traffic scenarios.

Future development plans should also be examined in view of the likelihood that they will actually come to fruition. Traffic consultants are developing increasingly sensitive models to reflect more accurately the inherent nuances attendant upon traffic patterns and demand in order to capture peak, off-peak, midday, night and weekend traffic.

Forecasts should incorporate the likelihood of multiple scenarios. Forecast sensitivities should incorporate the compounded effects of different assumptions and changed conditions such as changing economic environment, the possibility of sudden acceleration of improvements on

competing roads, delay in construction of a complimentary artery or the delay in implementation of a toll increase. Sensitivities should also reflect a slower acceptance rate by users, longer “ramp-up periods,” and other road-specific factors.

When the road has an electronic toll collection system, forecasting has unique complications. Since modern toll roads depend on electronic means instead of toll booths for toll collection, drivers may believe that it will be easier to avoid paying tolls. As a result, greater attention needs to be paid to attempted toll evasions. Revenue forecasts should take into account the measures that will be put in place to enforce toll collection. Such measures may include policing the road, fines and penalties, revocation of drivers’ licenses and vehicle registration, and impoundment of vehicles, among others. The cost and probable success of such measures should be factored into the road’s revenue forecast.

Toll road developers and lenders should, at the outset, analyze as many different traffic and revenue sensitivities and scenarios that are possible to help account for possible revenue shortfalls. From a lender’s perspective, while certain mechanisms such as cash traps and mandatory prepayments may help protect against certain traffic and revenue shortfalls, they will not protect against a major forecasting error. One of the best ways for the toll road developer and lender to mitigate the risk of inaccurate traffic and revenue forecasts is to have a creditworthy government or government entity provide a traffic or revenue guaranty for an agreed percentage of the expected traffic or revenues. For the government or government entity to get comfortable with providing such a guaranty, it will need to undertake an analysis of the reliability of the forecasts.

Inadequate Legal Foundations

Since some governments lack the financial resources or willingness to finance the development of road networks, governments may choose to grant concessions to the private sector to build, operate and maintain toll roads.

For a private or quasi-private toll road to succeed, lenders and sponsors need to assure that adequate legislation and governmental authority is in place to permit not only the road’s development but also the uninterrupted ability to collect tolls, at a minimum, for as long as the road needs to service its project debt. Legislation also / continued page 24

IN OTHER NEWS

project company and they are exempted from any capital gains taxes when they later sell the project company shares.

Investors are now looking at Holland and Labuan Island as alternative locations for such holding companies. There are questions whether Labuan companies qualify for treaty benefits in some countries. The island is part of Malaysia.

FEDERAL GRANTS that are spent on elevating homes and protecting other properties against possible floods must be reported by property owners who benefit from them as income, the IRS said in an internal legal memorandum.

The agency made the memorandum public in late July.

None of the property owners receives any cash under the program. Rather, the federal government gives the money to state and local governments, which pay private contractors directly to do the work.

Nevertheless, the IRS said that property owners who benefit from the work are better off and have to report the spending on their properties as income. The tax agency recognizes a “general welfare exception” to having to report income. However, it said the exception does not apply here; it only applies to grants to cover “expenses or serious needs in the aftermath of a major disaster” or an economic need such as where payments are made to low-income elderly to help with fuel costs during the winter. It said payments to businesses are almost never covered by this exception.

Recipients of gifts ordinarily do not pay tax on them. However, the IRS said the grants are not a gift because the federal government is not making them from a “detached and disinterested generosity,” but rather in the hope of saving money in the long run on disaster payments. The memorandum is ILM 200431012.

/ continued page 25

Toll Roads

continued from page 23

needs to be in place allowing for, among other things, the relevant land to be legally and timely delivered to the developer and also authorizing not only the collection of tolls but also the enforcement against delinquent users, when necessary. Legislative authority also needs to be in place that authorizes, within reasonable parameters, or does not prevent, the concessionaire's right effectively to raise toll

Make sure legislation is in place — without crippling conditions — to allow condemnation of land on a timely basis, the collection of adequate tolls, and enforcement of contract rights.

rates to service the road's debt. Sponsors must confirm that such legislation and authority are in place at the outset and are not subject to any conditions or further governmental action.

A government's decision to build a toll road can raise a broad range of objections. Some societies view access to any road as a fundamental right and consider collection of tolls by private entities to be unconstitutional and fundamentally discriminatory. They may argue that toll roads create a two-tier system in which people of ordinary means drive on dilapidated roads while the affluent pay to drive on new or improved highways. Sometimes, the public simply is not ready for a toll system.

In Hungary, the public was not prepared to pay for the higher level of service provided by a toll road. The Hungarian M1 motorway, which opened in 1996, captured annually less than 50% of the initially-estimated traffic. Due to the traffic shortfall, only half of the toll revenue forecast was achieved. While the concession contract for the M1 permitted the concessionaire to raise toll rates to cover the revenue shortfall, the general political environment prevented the conces-

sionaire from effectively doing so. Soon after the toll road opened, litigation ensued on the grounds that the high toll rates were socially unjustifiable. These proceedings effectively led to the capping of the toll rates by courts that found the right to raise toll rates under the concession contract was not supported by appropriate legislation. The Hungarian experience demonstrates how the legal framework failed to accommodate and enforce toll increases vital to the road's success even though toll increases were allowed under the concession contract. Extensive public relations about the

benefits of the road are required well in advance to educate the public and "sell" the concept to prospective users. It will be difficult for a toll road to be successful if toll levels, in the long run, exceed socially-acceptable levels.

In Poland, the government awarded a concession to build the A1 motorway between Gdansk and Torun. Following the award, the scope of the government's authority to

support the project under the Motorways Act of 1994 was called into question. The Motorways Act assumed that traffic and GDP growth would enable major road projects to become self financing irrespective of state funds and with only limited government guaranties. Under the Motorways Act, government funds could only be used for preliminary activities related to the development of the road such as acquisition of the land. The authorized level of government financial support proved to be insufficient to secure the financing package for the road. Consequently, the project needed to be restructured to provide for government grants, "availability payments" and a "shadow toll" mechanism.

The "availability payments" allow the concessionaire to be paid irrespective of whether actual demand exists for the toll road so long as the concessionaire meets certain performance criteria set by the government. Such criteria may include ensuring the availability of a specified number of lanes over a specified period of time. When a "shadow toll" mechanism is in place, the government (and not the actual users) pays a "shadow toll" per user to the sponsor based on either an actual or estimated level of traffic. The restructur-

ing required an amendment of the Motorways Act to permit the government to make the availability payments, make grants and provide interest-free loans to the concessionaire to support investment in the road. However, despite the amendment to the Motorways Act, the A1 motorway has not yet been constructed, even though the Polish government claims to support the project.

Failure by the government to condemn land and secure rights-of-way can result in extended construction periods or even prevent completion of the project altogether. Resistance by landowners to surrender their land and protracted negotiations over damages can be detrimental to the concessionaire's ability to build the road. Construction of portions of the cross-Israel highway toll road, which opened in early 2004, were delayed when local communities resisted turning over land for political reasons. Appropriate legislation supporting the road enabled expedited condemnation, landowner compensation and an appeal process so that local resistance did not prevent timely completion of the road. If the rights-of-way for the road are not secured prior to construction commencement and the necessary and proper power of eminent domain is not vested in the correct entities, delays may occur. Sponsors need to have a good understanding of the applicable condemnation or other relevant process, legislation, and risks.

Sovereign Action and Unanticipated Events

Some toll roads have failed because of actions by sovereign governments and other unanticipated events. These events have included expropriation of the toll road by the government or repudiation of a government obligation to support the project, declaration of a moratorium or other restrictions against payments on foreign debt, detrimental regulatory actions, civil and political unrest, labor strikes and change in law generally.

A good example of such an event occurred in Venezuela. In 1997, the Venezuelan Ministry of Infrastructure awarded Autopista Concesionada de Venezuela — called “Aucovan,” a Mexican-Venezuelan joint venture — a concession to construct, operate and maintain a new highway between Caracas and the northern coast of Venezuela. Under the concession contract, the Venezuelan government guaranteed Aucovan an internal rate of return of over 15% on its investment. In the early stages of the project, the road encountered massive unexpected protests from the / continued page 26

UNDIVIDED INTERESTS are getting another look from the IRS.

Nuclear power plants are usually owned by a group of utilities, each of which takes a share of the electricity in kind. An entity might be formed to own the power plants, but the various utilities that own it opt out of the partnership tax rules and treat themselves as if each owned an “undivided interest” in the power plant directly. They make an election under section 761 of the US tax code to receive this treatment.

Each utility might finance its ownership interest separately. For example, the IRS has ruled in the past that a utility can do a sale-leaseback on its undivided interest in such a plant.

Such arrangements are also common in power projects where a private developer teams up with an electric cooperative as joint owners of a new power plant.

The IRS said in late July that it is reviewing its rules for when it will let two or more companies claim they own a project by undivided interest rather than as partners and is collecting comments on how the current rules should be altered. It hinted that companies might not be allowed to opt for ownership by undivided interests if “an agreement with a third party, such as a lender . . . limits the rights of the coowners to take or dispose of their underlying shares.”

The IRS announcement is in Notice 2004-53. Comments are due by November 15.

CREDIT DEFAULT SWAPS are also under study by the IRS. They raise difficult US tax issues.

The agency published a list of questions in late July that it has about them and asked for input from the public. It will eventually publish guidance.

A credit default swap is an arrangement where a company that is concerned about the creditworthiness of a counterparty to a contract buys something like insurance or a guarantee against a default. The / continued page 27

Toll Roads

continued from page 25

trucking industry over toll increases that the concessionaire had a right to charge under the concession contract. Notwithstanding this contract right, the Venezuelan government succumbed to heavy public pressure and prohibited the concessionaire from charging any tolls at all. As a result, the concessionaire was unable to fund construction and gave notice of termination of the concession contract. The Venezuelan government characterized the trucker protests as a *force majeure* event and argued that the trucker demonstrations were unexpected. However, it failed to convince the arbitration panel, an essential element required in order to prove the *force majeure*. In this case, the Venezuelan government's *force majeure* argument did not cause the road to fail. But it could have.

While the Venezuelan government failed on its *force majeure* argument, it was successful in avoiding its obligation to guarantee the concessionaire its 15% rate of return. In the arbitration, the government convinced the arbitrators that the concession contract contained no clear formula for determining lost profits. The concession contract also did not specify clearly how to calculate the net present value of the alleged lost profits. Even though a financial model was incorporated into the contract, the arbitrators determined that the project was unlikely to generate profits even if the concession contract had not been terminated. This case demonstrates the risks involved when a foreign government succumbs to domestic pressure and decides to avoid its obligation to support the project.

While risks associated with the politics of a country are difficult to protect against, it may be helpful to evaluate the government's history of honoring government contracts as a guide to whether it will honor future contracts.

The occurrence of unanticipated events, unrelated to actions taken by a host country government, have also contributed to toll road failure. Each of these events or risks has the effect of hindering or preventing the road development or collection of revenues. The types of unanticipated events are diverse and far too numerous to enumerate, but a few examples highlight the risks. In Denver, for example, revenues on Highway E-470, which was opened in various segments over the course of the 1990s, fell after Denver International Airport suffered a falloff in passengers in the

wake of the September 11 terrorist attacks. In California, traffic on the San Joaquin Hills toll road suffered after competing roads (the I-5 and I-405) were widened after the toll road was completed. Similarly, traffic on the Dulles Greenway was affected by the later widening of Route 7. Occurrences such as San Joaquin and Dulles can be mitigated by a thorough review of regional transportation plans. In other cases, even a careful review will not reveal future competing roads that are planned after the fact. Sponsors should negotiate for a government undertaking to restrict construction of any future roads that could compete with the toll road. Should the government refuse to surrender that right, the concession contract could provide for compensation if the toll road is adversely affected by a competing road. While some risks are truly unforeseeable, others are foreseeable. Concession contracts should include provisions that broaden a sponsor's protection against the many future events that may occur outside the sponsor's control.

Conclusion

The lessons learned from prior toll road failures can help contribute to the success of new toll road projects. While toll road sponsors and lenders can use different methods to address risks on which prior toll roads faltered, an analysis of the unique facts of a new project will be crucial to the project's success and to securing a robust stream of revenues. ☺

Opportunities in the Tightening Gas Market

Daniel Yergin and Michael Stoppard wrote recently in "The Next Prize" about an emerging natural gas shortage in the United States and the growing dependence of gas-consuming countries on a small number of gas producers much as exists currently with oil. The tightening gas market in the US has set off a flurry of development of new terminals for regasifying natural gas that is shipped to the US in large tankers in liquid form. A panel at the Chadbourne conference in June talked about the ramifications for the US power industry — most independent power plants built in the 1990's run on natural gas — and for participants in the

project finance market, many of whom are hoping for opportunities to finance LNG terminals.

The speakers are David Hauser, group vice president and chief financial officer of Duke Energy, John Holcomb, vice president of Pace Global Energy Services, Alycia Lyons Goody, vice president and managing counsel of Calpine Corporation, Steven S. Greenwald, managing director of Credit Suisse First Boston, Robert Drumheller, vice president for finance of the Overseas Private Investment Corporation, Leocadia I. Zak, general counsel of the US Trade Development Agency, Noam Ayali, a partner in the Chadbourne Washington office, and Christopher D. Seiple, director for global power at Cambridge Energy Research Associates. The moderator is Kenneth Hansen, a partner at Chadbourne and a former economics professor and former general counsel of the US Export-Import Bank.

MR. HANSEN: Prices for natural gas today are roughly 20 times higher than in the 1970's when gas prices remained regulated. There are predictions they could rise to 30 times that, although there may be limits on how high prices can go, at least in the longer term. Escalating prices are a sign of an emerging shortage. The experts predict a continuing tightening in the supply over time in the United States. At the same time, there is excess supply in Europe.

If even half of the LNG regasification projects that are proposed for the United States were actually built, we would be in an overbuild situation like we went through recently with merchant power plants. In the 1970s, four LNG terminals were built in the US and, in due course, all of them were mothballed for lack of need. It is hard to believe that would happen again, but it sets the stage for some of the issues this panel will explore today. The first question is for David Hauser. From your vantage point at Duke, is it your expectation that the experts are right — we face a long-term tightening of gas supply in the United States?

MR. HAUSER: We see demand continuing to increase. Duke has two pipelines heading up into the northeast from the Gulf. One is Texas Eastern that heads up to the area around New York City, and the other is Algonquin that goes up toward the Boston area. Texas Eastern had nine of its 10 heaviest days ever last winter in terms of traffic, and Algonquin had seven of its 10 heaviest days ever last winter. Demand on both pipelines is continuing to rise. Part of that is due to weather. Part is due to generation from power plants in the northeast. The trend is up. We see more demand for infrastructure in the region / continued page 28

IN OTHER NEWS

purchaser might pay a lump-sum premium at the start. It might make periodic payments over time. If a default occurs, then it receives either a payment for the loss in contract value caused by the default or it receives a replacement instrument that will give it the value it originally expected.

Among the questions the IRS has are whether a US withholding tax or insurance excise tax should be collected on the premium payments by a US purchaser of a credit default swap to a foreign seller and the timing of when payments in either direction under the swap can be deducted and when they have to be reported as income. Most of the issues have to do with cross-border swaps. For example, another question is whether foreign suppliers of such swaps are considered engaged in a trade or business in the US; that might subject them to taxes as if they were US residents.

The IRS described the various theories that have been advanced for analyzing credit default swaps in late July in Notice 2004-52.

HIGHWAY USE TAXES must be paid on special trucks that utilities use to plant poles and make other repairs, a US appeals court said in July.

Florida Power & Light argued that two types of trucks it uses are essentially mobile equipment rather than highway vehicles. The federal government collects a tax of \$100 to \$550 a year on heavy trucks weighing 55,000 pounds or more. The big accounting firms have been urging utilities to file for refunds of the taxes they paid.

FP&L challenged the tax as it applied to 410 trucks equipped with pintle hooks. These types of trucks are used to lift linemen to work on poles and power lines, push and pull cable, and dig holes and set poles. It also disputed whether tax had to be paid on insular washer vehicles that are equipped with 1,200 gallon water tanks and are used to clean power lines.

The tax only applies to “highway vehicles.” A truck is not a “highway / continued page 29

LNG Projects

continued from page 27

and, as a consequence, we are very interested in the LNG business.

MR. HANSEN: So you see a tightening of the market coming from the demand side. How about the ability of the domestic supply side to respond?

MR. HAUSER: Supplies from the Gulf will begin soon to

The Middle East is likely to be the high-cost supplier in the world gas market, which makes for a different dynamic than with oil in terms of its ability to influence prices.

taper off. New LNG terminals are a way to add to supply. We think the Gulf area is a logical home for such terminals for two reasons. The infrastructure for them is already in place; you have pipelines in place that are ready to move the gas away from the Gulf to the northeast and Florida. Environmental issues are less of an obstacle because the area already has a fair amount of visual pollution associated with derricks and similar equipment.

MR. HANSEN: John Holcomb, any thoughts about the ability of domestic capacity to respond on the supply side?

MR. HOLCOMB: North American gas production will start to decline in a few years. One wild card is the Rocky Mountains, but the problem with looking to the Rocky Mountains for supply is access. Pipelines would have to be built to move the gas to market. Nevertheless, they could help fill the supply gap in the medium term.

Large Gas Users

MR. HANSEN: Alycia Goody, how does a company with a big fleet of gas-fired power projects deal with the coming shortage?

MS. GOODY: We have seen an increase in demand and, for us, that translates into an increase in pricing. We were expecting \$6 gas in the first quarter of 2004. Last year, I think our

average cost was \$5.50 and, in 2002, it was \$3. So we have seen an increase in price and, for us, that has an effect on our spread.

We do have a large fleet, as you mentioned, of gas-fired plants. We have 88 plants in all. Of those, I am guessing that 68 or 70 are gas-fired and, of our 24,000 megawatts of supply of electricity, I suspect 21,000 of that is gas-fired. Gas prices are a big issue for us.

Fortunately, we have 800 bcf of proven reserves that we own. We put some of the reserves recently into a natural gas

trust in which we retain a 25% ownership interest. Our reserves represent roughly 20% of our gas requirements.

That still leaves a large amount of gas that we have to buy. Calpine operates on a system-wide basis for both fuel and electricity. It gives us more flexibility. For example, when selling electricity, we do not do it on a unit contingent

basis, but rather we trade around our assets, dispatch the most economic plants first, shut down plants that are not economic, sell the gas that we have from those plants, and purchase power in the market, if necessary, as cover. We can avoid imbalance charges by using system planning for our gas supplies, as well. I think this gives Calpine an advantage.

That is how we operate currently. We are constantly looking for ways to improve operational efficiency and to improve our technology. We are looking at LNG as an option. We were involved in an LNG project in California, but withdrew due to local opposition. We are investigating possibilities in the Alaskan north slope. We have the supplies we need for now. We are doing prudent planning for the longer term.

MR. HANSEN: So your focus is on managing the source of supply rather than on changing the composition of your demand from gas to other fuels?

MS. GOODY: Yes. In fact, at a recent meeting, the Calpine board took the unusual step of committing not to invest in any baseload power production facilities. What we want to do is restrict our investments to facilities whose emissions are low or lower than the most efficient combined-cycle power plant.

MR. HANSEN: So you will be going heavily into nuclear? [Laughter.]

MR. GOODY: I don't think that's what the board had in mind.

MR. HANSEN: More seriously, if there are sustained high gas prices for a substantial period, then one would expect a shift on the demand side into fuels other than gas — coal, nuclear, renewables. David Hauser, is this occurring at Duke?

MR. HAUSER: Our regulated utility is big in nuclear and coal, and it has some gas and hydro. We just joined a consortium to look at nuclear. If you had asked me five years ago whether another nuclear power plant would be built in my lifetime, I would have said, "No way." But the world is changing. There is a very real possibility we will see construction of new nuclear power plants within the next 10 years.

The challenge with coal is that the price of it is also going up dramatically. The chemical factory you have to put on the back of a coal plant is incredibly expensive. Some new coal plants will be built. The truth is it will take a mix of all the fuels you mentioned to supply the electricity this country needs. The news media tend to focus on one thing at a time. The talk this past year has been about nuclear power. Before that, we were focused on coal and, before that, it was natural gas. You need all of them because each will have its moment of supply disruption and spiraling prices.

MR. HANSEN: My guess is there are not a lot of new projects being developed this week, but the overcapacity in electricity generation will pass.

MR. HOLCOMB: If consumers start thinking that \$6 gas is here to stay for the long term, then they will start looking at other options. The options include moving factories to other countries. Look at US aluminum companies that are looking at building their new smelters in other countries. You will start to see the same thing on the power generation side.

Opportunities

MR. HANSEN: Any change in the market gives rise to opportunities. Steve Greenwald, what do you see as the business opportunities coming out of the circumstances in the gas market?

MR. GREENWALD: In terms of financing opportunities for people in this room, I think they are fairly limited because the super majors are doing most of their financing on balance sheets.

Taking regasification terminals first, let us say six or seven of them are built. Shell will not use project financing. Neither will Exxon. Chevron will not use project / continued page 30

vehicle" under the IRS regulations if it is essentially mobile equipment. However, in order for this exemption to apply, heavy machinery must be mounted on a specially-designed chassis and "the chassis could not, without substantial structural modifications, be used" to carry any other load besides that particular equipment.

An appeals court said that the utility failed to prove its trucks fit under the exemption. The case is *Florida Power & Light Company v. United States*. The court released its decision on July 8.

SERBIA revamped its tax system in late July.

The Serbian parliament voted on July 23 to replace an existing sales tax with an 18% value added tax, with some goods and services being subject to a special rate of 8%. The change will take effect next January 1.

The country has also reduced its corporate income tax rate from 14% to 10%. However, dividends, interest and royalties that Serbian companies pay to foreigners will remain subject to a 20% withholding tax unless reduced by a tax treaty. New depreciation schedules have been put in place.

TURKEY is hoping to become a base for offshore holding companies making investments in the Balkans, central Asia and the Middle East.

The government proposed to parliament in June that dividends received by such holding companies would not be taxed in Turkey. There are conditions. This would be true only for dividends from investments held for at least two years. The holding company would have to own at least 25% of the project outside Turkey. The project earnings would have to be subject to tax in the project country at least at a 20% rate. At least 75% of the earnings would have to come from an active business rather than from bank deposits or other passive investments.

Turkey would collect only a 5% withholding tax at the border to lift the earnings from Turkey back to the US or a tax haven.

/ continued page 31

LNG Projects

continued from page 29

financing. I see few opportunities in the regasification area for classic project financing. A few will be done that way, but very few.

If you move away from regasification, many upstream deals are being project financed in one way or another. All the Qatari deals appear ripe for project financing. Qatar Petroleum has about a \$20 billion plus capital expenditure

An interesting trend has been the convergence of generation technology costs. It gives governments more ability to tilt the balance in favor of one technology over another.

program over the next four or five years. Qatargas 2 is being project financed. The company has announced that a regasification terminal in the UK will be project financed. The project is at least a year away from financing. Rasgas 2 will be project financed. Rasgas 2 is five times the size of the deals that have been done to date, so the numbers are just staggering. Many of these deals are going ahead without the kind of offtake contracts that we are used to seeing. What happens is a super major takes the price risk. Qatargas 3 will attempt a financing into Henry Hub with price risk here in the US. It is the same thing with the UK deal with Qatargas 2 where the price risk will be on the lenders. Rasgas 2 will be moved from Exxon Mobil's account and financed into the US.

The bottom line is there will be opportunities on the upstream side, but I see much more limited opportunity on regasification.

MR. HANSEN: David Hauser — opportunities?

MR. HAUSER: Another opportunity is in financing shipping capacity. The LNG tanker fleet will have to expand significantly in order to bring all the liquefied natural gas from overseas to the US. Those tankers are expensive. They run upwards of \$200 million a ship. There are not many shipyards that can construct them.

MR. HANSEN: Robert Drumheller?

MR. DRUMHELLER: Let me supplement what Steve Greenwald said. I am Rob Drumheller from the Overseas Private Investment Corporation. In the last couple months, a number of project developers have talked to us about financing for projects in countries in which financing is historically a little bit more difficult to arrange. OPIC is open in 156 countries; Qatar unfortunately is not one of them, but I think we may be open in Qatar by the end of the year.

We have had several people talk to us about some of the projects that Steve Greenwald mentioned. We have also had conversations recently about a potential project involving Repsol in South America. Repsol has gas in Bolivia and is looking at a possible liquefaction project in Chile. It will pipe gas to the coast and then deliver it to the western US coast.

We have had two people talk to us about projects in Africa. One is in Angola and would involve most of the upstream producers there — Exxon, Chevron, people like that. One is a British Gas project in Ecuador. British Gas has an offtake contract for the gas and has plans to bring it to the United States.

All of this has happened in just the last eight to 10 months. After seeing no liquefaction projects for several years, there is clearly growing interest in developing such projects and doing so in a range of markets in addition to the huge number of LNG projects that are in Qatar.

MR. HANSEN: Thank you. Robert is head of structured finance at OPIC. We also have the general counsel here from a sibling agency of OPIC — the US Trade Development Agency. Lee Zak, what are you seeing by way of interest in such projects?

MS. ZAK: We are seeing the same thing that OPIC is seeing, only we are a little farther forward on the front line. What our agency does is provide grant assistance in connection with project planning, so we have been spending time on gas projects for at least the past year if not longer. We are seeing an interest not only in liquefaction projects, but also in pipelines all around the world. Receiving terminals are needed in Asia to handle all the Qatari gas. There are oppor-

tunities in this hemisphere in Trinidad and Tobago for pipelines and terminals to supply gas to the US market.

Price Risk

MR. HANSEN: Bringing the focus back to the US, the Asian and European markets are characterized by long-term contracts against which one can lend or in which one can take a security interest. The US has been a short-term spot market kind of place in which the financiers don't have the same sort of assurance going in that the debt can be repaid. One could infer that might be one reason why the major oil companies have to make this happen. Anyone else trying to raise financing for a regasification terminal will not be able to do it. My question to you, Steve Greenwald, is whether that is right? How would anybody else — if he cannot do it entirely with equity — get such a project in the US financed?

MR. GREENWALD: It comes down to what the bankers believe is the breakeven price. I heard numbers today for a delivered price in the US of \$4 for gas from Qatar. I suspect most banks will be unwilling to assume that gas will always be at \$4 or above. That number probably includes a reasonable return on the equity. Therefore, if you take out that return on equity and focus on what is available to amortize the debt and pay interest on it, the number is lower. I don't know how far down it goes, I have heard numbers at three to three-and-a-half dollars on a cash breakeven basis including debt service.

I question how many banks are going to lend against three or three-and-a-half dollar gas. Memories are a bit long these days. It was not so long ago that gas was selling in the US for less than \$3. What will be interesting, at the end of the day, is the extent to which the super majors will be willing to take some of the price risk off the table.

Exxon Mobil took \$200 million of price risk off the table when it did the Rasgas 2 financing. That goes back seven or eight years. The export credit agencies are looking at the Qatargas 2 project with Exxon Mobil into the UK. It raises the same question about price risk. Conoco will face the same issue with Qatargas 3. I know that we would not lend against three-and-a-half dollar gas, but it will be interesting to see at what number the financing can be done and how the price risk is shared among the parties.

MR. HANSEN: John Holcomb, back to you. Going overseas again, there are rumors of a European gas bubble. Is that a passing phenomenon, or more broadly, / continued page 32

IN OTHER NEWS

ISRAEL is reducing its corporate tax rate from 36% to 30% in stages between now and 2007. The Knesset approved the reduction on June 29.

ESTONIA altered its tax rules.

Withholding taxes will no longer be collected on interest paid to nonresidents or on dividends paid to foreign shareholders who own at least 20% of the Estonian company paying the dividends. The changes are retroactive to May 1 when the country joined the European Union.

PARTNERSHIPS sometimes play games to get more "outside basis" to one of the partners.

The IRS issued new rules in early August that would make this harder to do. The new rules are merely proposed. They would not take effect until the IRS republishes them in final form.

Many infrastructure projects in the US are owned by limited liability companies that are treated as partnerships for tax purposes.

The outside basis that a partner has in his partnership interest is important because it limits the amount of tax depreciation that the partner can claim from the partnership.

"Outside basis" is the investment that a partner has in his partnership interest. It changes over time. It starts as the sum of what the partner paid for the interest and contributed in capital to the partnership. It increases as the partnership must report taxable income from the partnership. It decreases as the partner is distributed cash.

A partner can include in his outside basis a share of partnership-level debts. Thus, for example, since the project debt is usually borrowed by the project LLC, he can include a share of this project debt.

The rules for how such debt must be shared among partners are complicated. If any of the partners bears the economic risk of loss on the debt, then the entire debt is put into his outside basis. This gives him more / continued page 33

LNG Projects

continued from page 31

what do you foresee in Europe and Asia — a shortage like that here or an excess supply situation?

MR. HOLCOMB: I do not expect the European gas bubble to last very long. At the same time, you have Russia with the ability to serve the entire market. Moving to Asia, demand for gas in China is increasing so rapidly that it is driving world prices. China will continue to be a very intensive energy user.

MR. HANSEN: On the supply side, there has been specula-

If a single tanker blows up anywhere in the world, the US will be talking more firmly about energy independence. An explosion could radically change the way we look at LNG.

tion about the possibility of a gas version of OPEC. Noam Ayali, do you want to say anything about the prospects for a gas OPEC?

A Gas OPEC?

MR. AYALI: I am not sure what acronym will end up being used, but it is clearly no longer mere speculation. The organization is in the works. There have been meetings recently in Cairo. To me, the interesting question is whether the predictions that people are making about future gas prices have adequately taken this possibility into account. A gas exporting country organization could try to establish a price range for gas — both through a floor and a cap — to ensure that LNG liquefaction plants are economical. It is a wild card.

MR. HANSEN: Chris Seiple, what assumption is Cambridge Energy Research Associates making about cartelization of the supply side?

MR. SEIPLE: We do not see a GOPEC playing a substantial role in the global natural gas business as OPEC plays in

the oil business. In part, that's because many of the main oil suppliers are concentrated in the Middle East. Although many of the same countries are also large gas suppliers, so is Australia. It is not clear that the interests of the large gas suppliers line up in the same way as those of oil producing countries.

The second factor is the Middle East is the low-cost supplier of oil. In the LNG business, given many of the places where supplies will be moving, the Middle East is more likely to be the high-cost producer. That creates a slightly different dynamic in terms of the ability of the Middle Eastern countries to influence prices.

All of that said, one should not lose sight of the fact that some of the countries where the larger LNG projects are being developed are politically unstable. The risk is not so much that we will see a GOPEC able to control prices, but that political turmoil will disrupt the supply of LNG to the gas-consuming countries. This suggests strongly that US policy should be to

develop a diversified portfolio of supply and not to rely too heavily on just a handful of jurisdictions.

MR. HANSEN: Here is an in-the-spirit-of-times-of-terrorism question. After September 11, the Boston harbor was closed for quite a while to LNG tankers. There have been rumors that Algerians, in particular, have been stowing away on such tankers as a way to gain entry into the US. Steve Greenwald, do you see the risk of terrorism as a factor that could impede financing of these projects?

MR. GREENWALD: I do not think the threat of terrorism, per se, would affect the financing of a regasification terminal in the US. Such a threat could have an indirect effect by making it harder to get permits for a project. Two years ago, there was a financing in connection with the British Gas contract at the Lake Charles refinery. Terrorism was obviously on everyone's mind at the time, and yet the financing was done. I believe it was December 2001. The big issue was the ability to buy insurance. As long as insurance can be purchased, terrorism should not be a problem. Permitting will be the biggest issue.

On the upstream or liquefaction side, only in extreme cases do I see terrorism as a major concern.

Energy Independence?

MR. HANSEN: This is the last question, and it is for the whole panel. Politicians talk from time to time about energy independence. Should the United States make energy independence a goal?

MR. HAUSER: Energy independence is something at which Duke looks, but we do not believe it is real world. We are trying for now to figure out how to make the LNG business work. It will help bring additional supplies to the US market.

MS. GOODY: I would echo what David just said. It is something at which Calpine looks, but I question whether it is a realistic goal within our lifetimes.

You said something earlier about the heyday of natural gas-fired power plants having passed. We may be at the nadir of the heyday. I suspect that the obituary is being written prematurely. There will always be room for natural gas-fired power plants. When I started some years ago in the energy industry, nuclear power was the answer; it was going to be too cheap to meter, and we see where it has gotten us. I grew up with Seabrook. Nuclear may have a future, but terrorism and waste management are issues with it. Coal certainly is an important part of the US energy portfolio, but emissions are a problem and new coal sources will be an issue. There will still be room for natural gas in the mix.

MR. HANSEN: Any comments from the floor?

MR. SEIPLE: I have two points. First, an interesting trend over the last 20 years has been the convergence of generation technology costs. It now costs approximately the same thing to build a coal facility, a wind facility, a nuclear facility, and a gas-fired power plant. The specifics differ from region to region, but it is approximately the same, which is interesting. It makes us think that we will see greater diversification of technology as we go forward and that government policy can play a much more substantial role in tilting the balance in favor of one technology over another because it does not have to spend as much to tip the scale.

Second, on the question whether US energy independence makes sense, I think it is important to keep in mind that if a single tanker blows up somewhere in the world in the LNG business, we will be talking more firmly about energy independence. Whether we like it or not, tanker safety is a big issue. An explosion could radically change the way we look at LNG. ☺

IN OTHER NEWS

room to absorb depreciation from the partnership.

By law in most states, general partners are liable for partnership debts. What some partners have done is to form a special-purpose LLC to be the general partner. They treat the special-purpose LLC as “disregarded” for tax purposes. In other words, they take the position that the entity does not exist. It is a shell; it has no assets other than the partnership interest. However, they argue for tax purposes that all the project debt should be put into the outside basis of the general partner because it is exposed by law on the project debt.

The IRS said in proposed regulations in early August that it will treat a disregarded entity as economically at risk for partnership debts in the future only to the extent of the “net value of the disregarded entity’s assets.” The net value has to be recalculated after certain events. (Any shift in how the debt is shared after such a recalculation could have tax consequences.)

The new rules will take effect when the IRS reissues them in final form. They will only apply to new debts incurred after such republication.

More significantly, the IRS said it is studying whether the same principle should be extended to other partners “that are capitalized with nominal equity.”

MINOR MEMOS. The Nevada governor proposed to state regulators in July that the state collect a temporary surcharge on electricity bills to fund a trust that would secure commitments by the two Nevada utilities — Nevada Power Co. and Sierra Pacific Power Co. — to buy renewable electricity under long-term contracts with independent power projects. Lenders to such projects worry that a judge might one day set aside the power contracts if the utilities file for bankruptcy. The trust would be dismantled when the utilities regain their financial stability . . . North Carolina enacted a 15% income tax credit in early August for companies / *continued page 35*

Still Feeling Burned About Foreign Markets

US power companies made a push overseas starting in the early to mid-1990s as the opportunities to grow abroad looked more promising than what was by then a crowded US market. However, by the time Enron collapsed, the companies were tumbling over one another in their haste to shore up their sagging balance sheets by shedding foreign assets. A panel at the Chadbourne conference in June discussed whether US companies made a mistake to beat such a rapid retreat from Europe, Latin America and other overseas markets, whether there are early signs of a revival of interest in foreign markets, and what complications the shrinking dollar and US war on terrorism create abroad.

The speakers are Matthew J. McGrath, vice president and general counsel of PSEG Global, Robert Cushman, vice president - mergers, acquisitions and structured finance for Entergy Corporation, Robert Burke, chief counsel of PPL Global, Juan Fernando Paez, vice president of Conduit Capital Partners, Jacob J. Worenklein, president and CEO of US Power Generating Co., and Merrick Kerr, chief financial officer of PPM Energy. Keith Martin acted as moderator.

MR. MARTIN: Matthew McGrath, has there been a renewed interest by US power companies in investing in other countries?

MR. MCGRATH: I would say not much from our company. US companies are cautious about what their next moves will be. Many companies are still dealing with fallout from the entry into the merchant power market at home. For our own part, even if there were some boy genius developer who wanted to go abroad and make a new investment and had a good opportunity that was in fact real, Wall Street is simply not ready to listen to it.

MR. MARTIN: Bob Burke, do you see any interest in doing new things abroad at PPL Global?

MR. BURKE: Perhaps to the extent that any acquisitions or developments complement the assets that we already hold abroad. However, I agree with Matthew McGrath about the reaction from Wall Street. There is a feeling that revenues generated abroad are not worth as much as domestic

revenues. Perhaps it is because foreign revenues are viewed as inherently more risky.

MR. MARTIN: Bob Cushman, any interest by Entergy in going back overseas?

MR. CUSHMAN: I look at it in the long run like my golf game. After nine holes yesterday, I knew where the day was headed, but I didn't quit and I will be back at it again today even though I know what the end result will be. However, in the short term, the story is different. Entergy was rewarded for shedding its overseas operations and returning to basics in the US. If anyone said today, "Gee, I think we should go around the world and start spending money again," he would have a short career — very short.

MR. MARTIN: You have a new CEO as a result of the last money spending spree.

MR. CUSHMAN: That's right.

Crowded Sandbox

MR. MARTIN: We heard from the last panel made up of European companies that they see opportunities in the US market. US companies are also focused on the market at home, notwithstanding how weak it is. Isn't the US market starting to sound like a small sandbox with too few toys in it for everyone who wants to play, and isn't there something wrong with this picture?

MR. CUSHMAN: It is a tough picture, but one marked by caution on both sides. US companies are cautious about returning abroad. European companies are cautious about the investments they make in the US.

One of the problems the last time is that US companies underestimated how badly their offshore investments could do. We had worst-case scenarios, but they misjudged the bottom of the market. Entergy tried in the 1990's to do business in 15 countries and, out of those 15, we built or acquired electric distribution companies or power plants in seven and, out of those seven, we made money in four. When you look at such a hit rate and how much effort was required, it is easy to understand the reluctance to try it again.

MR. MARTIN: Bob Burke, do you agree the bottom of the market is a lot farther down than anybody realized? Was that your experience at PPL?

MR. BURKE: Basically. We have had some successes overseas and some misadventures, and I think the successes can be attributed to basic business fundamentals like understanding the market, understanding the regulatory system,

and having a capable local management team.

MR. MARTIN: Is there anyone here from a private equity fund that is looking to make investments in the power sector overseas?

MR. PAEZ: Yes, my name is Juan Fernando Paez. I work with Conduit Capital. We are a company that was recently spun off from Deutsche Bank, and we run Latin American investment funds.

MR. MARTIN: Do you sense any growing interest among US private equity funds in putting money into the power sector overseas?

MR. PAEZ: We obviously have an interest, but the conditions are not ideal. We tried raising more money for such investments, and it is a very difficult market. The mere mention of Latin America turns off some investors.

MR. BURKE: People frequently talk about overseas as one homogenous market. There are a thousand different markets overseas. People talk about Latin American risks. There is a big difference between doing business in Guatemala and doing business in Chile. One of the problems with the current attitude on Wall Street is that offshore investments are viewed as inherently more risky than investments in the US without stopping to evaluate them market by market. I have heard countless times during visits to Wall Street about Latin American risk, and yet I cannot tell you what Latin American risk is. I can talk to you about Chilean risk, or Brazilian risk, or Guatemalan risk. They are distinct markets.

MR. WORENKLEIN: The comments so far reflect the current reality in the market, but there is something happening now that is very interesting to me. I have this perspective from being a board member of CDC Globaleq, which is a company owned by the Commonwealth Development Corporation in the United Kingdom that is, in turn, owned by the British government. It was set up to serve as kind of a private sector money entity, and it has new money coming in from private sector entities.

CDC Globaleq bid in the auction for the Edison Mission Energy Asian assets and lost with a bid that we thought was highly credible. There was significant interest in the assets by bidders most of whom were outside the US. Some of them were Asian entities. Some were other companies based in the UK.

What the auction showed is that rates are being bid down below the mid-teens.

The point is there is something / continued page 36

that construct plants for producing biodiesel fuel or ethanol in the state. The credit will apply during the period 2005 through 2007. The credit must be claimed ratably over three years (rather than all at once in the year the plant is put into service). There is also a separate "production tax credit" for 25% of the cost of the output from such plants during the same period. This credit must be spread over seven years Kansas is looking at taking away a controversial property tax exemption for wind farms. A commission appointed by the governor has recommended three options. One is to limit the exemption to 10 years. Another is to deny wind farms the exemption, but preserve it for other renewable energy projects. The last is to require wind developers to pay an excise or other tax in lieu of property taxes. The governor is expected to make a recommendation to the legislature next year.

— contributed by Keith Martin and Samuel R. Kwon.

Foreign Markets

continued from page 35

happening in the market, and it may be that with the large flow of money into hedge funds and perhaps insufficient opportunity elsewhere, we are starting to see a significant flow of capital into emerging markets. It is not what was expected even a year ago.

Misjudging the Worst Case

MR. MARTIN: Entergy had a mixed experience with its overseas investments. Matthew McGrath, what has been the experience at PSEG Global?

American companies go into foreign markets with long-term projections and short-term expectations. They want healthy returns by the next quarter.

MR. MCGRATH: What we got wrong in the main were the macro-economic assumptions. We have done a very careful self-evaluation over the past couple years of what we got wrong and what we got right, and where we underestimated was in the macro-economic stuff. A case in point is Argentina. The entire economy collapsed. When we got down to the operating stuff, we did okay. When you look at the regulatory stuff, we did okay, and we are still doing okay.

Basic business fundamentals are important. A US utility should ask itself: what does it mean to be local? We are in New Jersey. We have been there for a hundred years. Why is it working? Is it possible to replicate those things once you unpack in a target market, and if the answer is no, then you should not go. If you think there might be a chance, then maybe you should go.

MR. CUSHMAN: Operating plants or electric distribution systems in foreign countries has never been a problem. The problem has been the macro-economic issues. It is understanding the market. It is understanding the regulatory environment in which you are playing and what can go wrong. Tax law changes are a problem. Within months after

Entergy acquired London Electricity, the UK government enacted a windfall profits tax that cost us a hundred million dollars.

Too Hasty a Retreat?

MR. MARTIN: Let me switch gears. Many US power companies were so eager at the end of the 1990's to retreat to the US that they practically dumped their assets abroad and ran home. This was particularly true in the UK market. Was it a mistake to have acted with such haste?

MR. CUSHMAN: No. Entergy was fortunate to have been ahead of the curve. We got out before the true exodus. Look, once a company concludes that it cannot earn its hurdle rate

of return, it should get out. Internal debates take up a tremendous amount of management time, and Wall Street does not reward anyone for indecision.

MR. MARTIN: But it seemed like everybody decided at once "we can't make it" and everybody left, leaving the assets behind.

MR. CUSHMAN: There is a herd mentality. Once some companies exit, it raises questions at board meetings. No one wants to be the last to exit.

MR. MARTIN: Matthew McGrath, did US companies make a mistake? They were practically tumbling over each other in their haste to exit.

MR. MCGRATH: The answer is different for each company. That may have been absolutely the right thing to do for Entergy shareholders. I am sure it was. For us, abandoning the assets in Argentina was the right answer, but we made the judgment that our shareholders were not interested in our selling other assets in a down market. We told the shareholders that new investments were on hold and we planned to manage what we had. Every company must make its own choices.

MR. MARTIN: Bob Burke, I believe PPL Global decided it was better off staying in most of the markets in which it was invested, but not putting in more money?

MR. BURKE: Internationally, we focus on electric distribution. We have about three and a half million customers internationally. We reassessed our markets one at a time. In Brazil,

we got out because we did not think it had a future. In Chile, the question was, “If you divest those assets, how are you going to replace the earnings?” We had no ready answer, so we kept the assets that were performing. We kept our investment in the UK.

MR. MARTIN: Will you be making additional investments in the countries where you remained?

MR. BURKE: We might consider it to the extent that it made sense with our existing asset base, but that is tough story to sell on Wall Street.

MR. MCGRATH: What Wall Street requires may change over time. I can only speak from the perspective of a traditional utility-based company, but if you look at what the growth opportunities are in the US, they are not huge. One must ask: if it is a requirement that one grow, where will one grow?

In time, companies may start looking abroad again, but they will go abroad in a much more sensible way. Rather than putting together serendipitous portfolios and approaching things opportunistically, they will ask what is making them successful in their home markets and how they can replicate that success in target markets.

MR. CUSHMAN: Life does not change. That is no different than what we heard from almost everybody venturing abroad in the 1990’s. It was, “I have a certain skill set that I have used to good effect in the US, and now I am going to replicate that success overseas.” Boards of directors have long memories. It will be a while before they allow their managements to pursue a growth strategy overseas.

MR. MCGRATH: But that story could have been true in the 1990’s and, in some places, it was true. There is nothing particularly wrong with the story.

MR. BURKE: The irony is during the rush to invest overseas in the 1990’s, many people overpaid badly for assets. Now that such investment is no longer in vogue, the prices are reasonable.

MR. MARTIN: Do American companies approach markets differently than European ones?

MR. MCGRATH: I think yes. American companies carefully construct *pro formas* that go out for 20 or 30 years — and then they consider it extremely important to have a return by the next quarter after the acquisition. My guess is European companies do not look at things the same way. We go in with long-term projections and short-term expectations. Americans want very healthy returns by the next quarter.

MR. MARTIN: Merrick Kerr, your parent company is Scottish Power. Are European shareholders more patient in the sense that they allow more than one quarter to earn a return?

MR. KERR: No. [Laughter.]

Collapsing Dollar

MR. MARTIN: Let me ask a few other questions quickly. Has the collapsing dollar affected how any of you US companies do business abroad?

MR. BURKE: It has helped boost earnings from our UK operations since the same number of British pounds translate into more dollars.

MR. CUSHMAN: It also helps US companies that are still in the process of selling their overseas assets. You can sell for a lower price and still show a profit when the amounts are translated into dollars.

MR. MCGRATH: We have had the same experience. We sold a project in Tunisia and the weak dollar helped grease the negotiations.

MR. MARTIN: Has the war on terrorism affected how any of you do business abroad?

MR. MCGRATH: We have assets in Oman, for instance, and it translates into a basic security issue, but nothing more than that.

Flawed Models

MR. MARTIN: None of you is experiencing any anti-American sentiment in France, Tunisia or anywhere else abroad?

Okay. Matthew McGrath, you told me before this session that the privatization model has not worked, and that it is one of the reasons US companies soured on doing business abroad. What is wrong with the privatization model, and what would a country like Russia be wise to do with UES when it privatizes.

MR. MCGRATH: PSEG Global has a lot of experience with privatization in Latin America where the model was simply sell the nationalized assets, get a lot of money into the treasury, and then proceed with a regulated environment and give the investors a regulated return. What many participants in these privatizations have come to realize is that the governments have an inflation knob that lets them adjust the price of electricity.

Once they sell the assets and get the / continued page 38

Foreign Markets

continued from page 37

money in the treasury, they reach for the knob. I am not sure that the populations in these countries were very happy about having to pay more for electricity. You can make all the sensible arguments, but you cannot get between the people and what they want, which is cheap power.

Everyone may be once bitten and twice shy, and there may be a reluctance for some time to put new capital into markets that are just sorting out what return will be allowed on capital. Russia is pretty funky by most people's standards. If Russia needs expertise in the power sector and wants to develop long-term credibility in the market, it should consider having companies bid on operating contracts rather than the assets themselves. That will give Russia the knowledge transfer it requires without requiring companies to put a tremendous amount of capital in the ground.

Look at what happened in India where you put \$300 million in the ground, and you have a power purchase agreement, but then the local government says it no longer likes the price at which it agreed to buy electricity. We can talk about political risk; the same thing happened to us in California. I never know whether I am in Tamil Nadu or San Diego. [Laughter.]

Unless the industry gets collective amnesia, I would think governments would do better in the near term to offer operating contracts rather than adopt an approach that requires bidders to throw in big wads of cash.

MR. MARTIN: Is the choice for the government between maximizing the cash today it can get from the asset or taking out a return gradually over time?

MR. MCGRATH: It may not be prepared to make such a choice. Maybe if it offers the assets for sale, people will come clamoring to buy them, but perhaps not.

MR. MARTIN: Bob Cushman, what would Entergy do differently the next time it goes overseas?

MR. CUSHMAN: It was not a good idea to try to plant the flag in 15 different countries with a limited amount of resources — limited not just in the number of people but also the capital that you can invest in any one country. If we did it again, we would focus on one or two regions. We made money overall, but it was a tough way to make a buck.

MR. MARTIN: Matthew McGrath, do you have to be overseas to figure out where is the best place to focus?

MR. MCGRATH: No, I think the decisions about which markets to target should be made from home. You do not need to establish a foreign office and start spending G&A costs in order to figure out where to focus your efforts. Europe is perfectly observable from New Jersey. The last time round, we wound up with a large office in London but no investments in the UK. It was an unnecessary cost. ☺

Renewables: Best Bet For Growth

The Global Windpower 2004 conference this year in Chicago attracted 3,000 people. However, the wind market has remained slow this year because a production tax credit of 1.8¢ a kilowatt hour that the US government offers as an inducement to build new wind farms expired last December. Congress is expected to renew it, but has been unable, because of partisan bickering, to pass any tax or energy legislation. Meanwhile, many institutional equity investors have been teeing up wind projects as a possible area for investment when the market revives. A number of European wind companies have moved into the US market. Other renewable projects — for example, ethanol facilities and geothermal and biomass power plants — are also attracting interest.

A panel at the Chadbourne conference in June talked about opportunities in the renewables market. The speakers are James J. Moore, Jr., president and CEO of Catamount Energy Corporation, Jerome J. Peters, Jr., senior vice president and group director for project finance at United Capital, Ciaran O'Brien, chief financial officer of Irish wind developer Airtricity, and Michael O'Friel, vice president and general counsel of Wheelabrator Technologies, Inc. The moderator is Todd Alexander from the Chadbourne office in Houston.

MR. ALEXANDER: It might be useful to start with a few facts, especially about wind farms and ethanol.

There are 6,400 megawatts of installed wind capacity in the United States. Of that amount, 1,700 megawatts of capacity was installed in 2003. During the past five years, wind capacity in the US has been growing at an annual rate of 28%. The industry has been largely on hold this year while

waiting for Congress to extend a production tax credit for wind farms. The United States rewards wind developers with a tax credit of 1.8¢ a kilowatt hour on their electricity output.

Turning to ethanol, the interest in ethanol is being driven by high oil prices and the bans in California, New York and other states on a gasoline additive that competes with ethanol called MTBE. In 2003, the United States produced 2.81 billion gallons of ethanol. That was a 32% increase over the output in 2002. During the last three years, ethanol production capacity in the US has increased by one billion gallons. This year alone, \$1.5 billion has been committed to the construction of new ethanol plants.

With that background, let me start by asking James Moore: Are wind projects economic without the production tax credit?

MR. MOORE: Production tax credits are necessary in the short term because most existing power contracts for wind projects are based on PTC economics. As long as they are the short-term driver, the industry will go up and down with PTCs.

If the PTC went away, I think the wind industry would be viable, albeit at a slower pace, and it would take a few years to adjust. Remember that you have renewable portfolio standards that will drive demand regardless of PTCs. I spent my career in gas and moved to the wind side three years ago. As part of my due diligence, I looked at the economics. Many wind proponents argue that wind is cheaper than gas today. That is not entirely true when one takes into account the intermittent nature of wind. But in Texas, we are doing deals today with costs of production of \$40 a megawatt hour. We are selling the power net of the PTCs to utilities for plus or minus \$24 a megawatt hour. If the renewable energy credits, or RECs, are worth \$8 or so, then the utilities are getting windpower for \$16 a megawatt hour. To compare that to gas, even if you have a 7,000 heat-rate plant and \$5 gas, you're at \$35 a megawatt hour.

The bottom line is the cost of wind is competitive with gas if wind is considered part of a mix of electricity sources. It cannot compete as a standalone solution. Add the environmental and national security benefits, and it is clear we will have an increasing installed capacity in wind for the next 10 or 20 years.

MR. ALEXANDER: Jerry Peters, do you share that view? I think I have heard you say some wind projects could go forward regardless of what happens with the PTC.

MR. PETERS: The key is the renewable portfolio standard. We have no federal RPS currently, but many states have RPS's that force the utilities in those states into the competitive market and to find renewable resources. For example, in California, a number of existing power projects are being repowered to run on renewable fuels. This is occurring without the PTC. You have four or five states concentrated in the mid-Atlantic and northeast with renewable portfolio standards and where there is a market for renewable power at rates of between 5¢ and 6¢ a kilowatt hour, which makes wind viable without the PTC.

MR. ALEXANDER: Do you share that view, Ciaran O'Brien?

MR. O'BRIEN: Yes, based on our experience in Ireland where we have managed to build a retail supply business based on wind, although our wind speeds are higher than they would be in some parts of the US. The other point I would make is that climate change initiatives are potentially very significant to this business. The RPS in the UK has had a massive impact on development of the wind business there. Last year, the UK government awarded 7,200 megawatts of wind offshore alone for developers.

In Ireland, we don't have an RPS. We have had to build a retail supply business ourselves to show that wind can be competitive with other fuel sources. We see northeastern states like New York with high retail prices. That type of opportunity may exist here as well.

MR. ALEXANDER: Michael O'Friel, want to add anything?

MR. O'FRIEL: There are some issues with the RPS programs that are currently in place. One issue that we fight constantly is what is considered a renewable. Some states try to distinguish between good and bad renewables. As a waste energy company, we are always fighting the battle with environmentalists over whether municipal solid waste should be included in the RPS requirements. For example, New York just proposed that MSW not be counted as a renewable.

The other issue with the existing RPS programs is the purchase requirements for utilities are still fairly low. They are significantly lower than what is required in Europe. I do not think you will see a lot of renewables being developed outside the wind industry the way RPS's are structured today.

Unlevel Playing Field

MR. ALEXANDER: Jerry Peters, how are PTCs viewed by lenders?

/ continued page 40

Renewables

continued from page 39

MR. PETERS: Is there a better way to encourage renewables?

MR. ALEXANDER: Yes.

MR. PETERS: I have a problem with the PTC for two reasons. First, it really only applies to one renewable technology and that is wind. There are many others. The second problem is it creates a situation where you don't have a level playing field due to the fact that on a standalone project basis, you generate more tax shelter with the PTC and the ability to depreciate the cost of the project over five years

In Ireland, where there is no legal requirement to use renewables, wind developers have managed to build a retail supply business that competes directly with electricity from other sources.

than the project can use. The only companies that can benefit from the tax subsidy are a few large corporate developers with lots of other income. The greatest incentives go to the very largest taxpayers — Shell, Florida Power & Light — because they are the only ones in a position to receive the full benefit.

On the other hand, an RPS — at least as they are currently structured — is not much better. As was already mentioned, in some states hydroelectric power is not a renewable and in other states it is. I have a project in Connecticut that does not qualify as a renewable in Connecticut but does in Massachusetts. Therefore, I sell my renewable energy credits in Massachusetts. At the same time, I have two projects in Massachusetts that don't qualify as renewables in Massachusetts, but they do in Connecticut, and I sell my rights in Connecticut. I think the best solution would be a federal RPS that would create a market for renewables nationwide.

MR. MOORE: Two Saturdays ago in *Barrons*, the second article in the on-line version was about wind energy and GE

was quoted as saying it thought it could get the 4¢ wind cost down to 3¢ over the next decade or so. That's really the long-term answer.

MR. O'BRIEN: We talked yesterday about who is best equipped to do development. It is hard for a small developer without a tax base — whether he be US or he be European — to start in this space. The other point to make is the successive short extensions of the PTC do not give the right market signal for this industry. A longer extension, perhaps with a lower value, would probably suit the industry better.

MR. ALEXANDER: All of that said, should we expect a frenzy of activity as soon as the PTC is renewed by Congress?

MR. O'BRIEN: Absolutely.

MR. MOORE: Let me interject two things. Many companies in this business lay off developers and slow down or stop spending money whenever the PTCs are suspended. Our view is that the PTC will be renewed. It enjoys a lot of political support on both sides of the aisle in Congress. Consequently, Catamount keeps plowing ahead with the expectation that the credit will be renewed.

Two big things have happened to the wind industry in my short three years. One is GE entered the business in a fairly big way and even ran television ads based on its corporate view that renewables and wind technology are one of the best growth bets GE has as a company. GE brought a lot of credibility to the industry. Some of the lenders were still thinking Kenetech and 8¢ power. Those days are gone. GE has given a veneer of respectability to the business. You have several other big players also moving into the industry.

The other big thing is what Jerry Peters mentioned: the ability to use the entire tax benefits within a project. Babcock & Brown worked with us on our first project in Texas that closed last year and did a phenomenal job of structuring the deal so that the tax credits could be used by third parties. The Chadbourne paper in the conference booklet explains how this is done, so it is not a secret how to do it. Bank One and Key Bank invested in Sweetwater last year down in Texas and they took the PTCs, depreciation and depreciation bonus, and Catamount and Babcock

invested their own money as cash flow investors and received cash-on-cash returns.

What has happened is a lot of liquidity has come into the wind industry because there is not a lot going on in other sectors. This year, we have four lenders or after-tax institutions that will invest in the second phase of Sweetwater. Last year, we were over subscribed. The ability to offload the tax benefits to an institutional investor is a major breakthrough for this industry, and goes a long way to solving the problem that only the balance-sheet guys could invest. Now you are seeing the Catamounts and the Babcocks being able to play alongside the Shells and FP&Ls. That is a major breakthrough in my view in terms of driving the size of this industry the next few years.

MR. O'BRIEN: My observation before even having moved here is a lot of equity is available in the US market. Recent transactions have been significantly over subscribed. I am very, very enthusiastic by the response that we get from our European lenders who have operations over here and from new US lenders who are very, very keen to get into the space. There are a lot of people chasing the same type of structure and getting good results with the PTC.

MR. ALEXANDER: Jerry Peters, is there too much competition on the bank side for these deals?

MR. PETERS: From a debt side, the main lenders continue to be the European banks. It seems like the US banks left the industry 15 years ago and never came back. I see a lot of banks hoping to play as tax equity investors as well. But I return to my earlier comment about an RPS. In this country — and it is not true in Europe — the wind industry is driven by how cheaply you can produce a kilowatt hour, and if you are bidding to supply power to a utility in a public auction where the sole criteria for being awarded the transaction is the lowest cost per kilowatt hour and you are a developer who must bring in a tax equity to compete and pay the equity part of your return in exchange for using its tax base, you are giving away part of your profitability. The person who has to put a tax deal together with Key Bank or Bank One is not going to be as competitive as FB&L who can take full advantage of the tax subsidy. That's an unfair playing field. That's why an RPS would be better.

Ethanol

MR. ALEXANDER: Let's move to another topic — ethanol. It is another growth area, but one that does not seem to rise

and fall whatever is happening in Congress.

MR. PETERS: Ethanol is a very hot market right now. A billion and a half dollars will be spent this year by the ethanol industry, and it is driven primarily by the replacement of MTBE as a winter oxygenate in about seven states. The removal of MTBE from gasoline will create a demand of about 5 billion gallons a year and that will cause the industry to have to grow by about 70% from where it is today at about 3.7 billion gallons.

MR. ALEXANDER: That is 70% growth over what time period?

MR. PETERS: Five years. It has the potential to require a lot of investment. Historically, that money has come from agricultural banks because corn is the basic feedstock and farm-state banks feel they know the grain business. There has not been a lot of interest yet by other banks to enter the market, but, project lenders have never exhibited much discipline in resisting the herd mentality. When there is the potential to put a lot of money into a given industry — and the barriers to entry into the ethanol market are not huge — this leads naturally to fears that the same thing that happened the merchant power market could happen in ethanol.

MR. ALEXANDER: There are no long-term offtake contracts.

MR. PETERS: Ethanol has sold in the past for unleaded fuel prices plus 52¢ a gallon, which is the amount of a so-called excise tax benefit. One gallon of ethanol makes 10 gallons of 10% ethanol blend, and for each gallon of ethanol blend you produce you get a break of 5.2¢ on the fuel tax that must be paid to the federal government. Put differently, each gallon of pure ethanol is worth 52¢ of excise tax savings. Today, with unleaded prices being at about \$1.10, by adding 52¢, you have \$1.62 value of ethanol and it currently costs about 85¢ a gallon to make it. So there is huge profitability in this industry.

Roughly 25 to 30 projects are currently under development. All are looking for capital. If all are built, I wonder what the ethanol market will look like.

Europe

MR. ALEXANDER: One last question for Mike O'Friel. Are US renewables companies able to compete in the European market?

MR. O'FRIEL: There is a fairly well */ continued page 42*

Renewables

continued from page 41

developed waste energy market in Europe. For example, Germany has a huge number of waste energy plants. France has a large number, too. There are many big players. The projects tend to be government-sponsored projects where the government will eventually take over the facility and the role for the developer is to build, own and transfer it. That is not really something that my company is interested in doing. It is a fairly competitive market. We have looked in the past at possible projects in Europe, but have no current interest in the European market.

MR. O'BRIEN: We haven't seen any US developers really in Europe. Europe is so much further ahead in relation to its development than the US. James Moore here is active in Scotland. Most of the traffic across the Atlantic has been in the other direction, and most of the lending for US projects is done initially from European headquarters and then localized here. The US accounts for 25% of the global power market over which 1% comes from renewables. We think renewables are an enormous opportunity in the United States, PTC or not. ☺

Building Toll Roads Under Public-Private Partnerships

by Muhammad Bashir Chaudhry, in Karachi

Douglas M. Fried and Jonathan Finklestone wrote in the *NewsWire* in June in "The Route to a Financeable Toll Road" about financing toll roads from the perspective of developers and lenders. This article looks at the same subject from the standpoint of governments when considering whether to finance roads using public-private partnerships, or "PPPs." The author is a former senior officer of a public sector development finance institution.

Fried and Finklestone aptly summarized the spirit of PPPs at the end of their article:

Ultimately, a successfully-structured toll road project can make a significant contribution to

the development of a country and the overall welfare of its citizens. A careful balance must be struck among the competing interests of the developer, the government and the lenders. The challenge is to find an equitable balance where the risks and responsibilities are allocated to the party best able to handle them.

PPPs, as the name suggests, are fixed-term collaborative arrangements that are continuously evolving in different countries. Governments that use them must negotiate an equitable balance in the risks and responsibilities for the financing, construction and operation of toll roads with the concessionaires and their lenders.

PPPs make no sense unless the public sector is prepared to discard the old bureaucratic image and make improvements in governance; such changes will be expected by private investors before they will help build the priority infrastructure for the country. The government must train its officials for the new role and provide them with technical, institutional and legal frameworks for dealing with toll roads under PPPs. It is important that a transparent and fair toll policy framework be in place before any toll road project is given the go ahead.

Here are other suggestions for governments that are considering using PPPs for road projects.

Exhaust Other Options

Typically under PPPs, the private partners claim to assist the governments in the planning and design of the toll roads. Further, they arrange money and use their managerial experience and know how for cost-effective construction. They assume operational responsibility and recover their investments with profit through toll collection over a concession period that might extend up to 20 years. They actually are looking for high profit opportunities. By offering the governments to construct certain highways under build, operate and transfer, or "BOT," financing, they will be spending the money up front, two or more years before toll collection would start. In order to bind the governments to the arrangements, they will require execution of a number of interrelated agreements, and they will want a number of guarantees and concessions. They might attempt to enhance their profits by passing to the governments even those risks that purely belong to them. Unlike the governments, the private investors can hire the best technical and

legal experts, and they might attempt to conclude agreements that are heavily tilted in their favor. This calls for proper vetting of all major parameters of the projects and careful negotiation of the concession agreements by the governments.

A BOT project is generally costlier to finance and difficult to negotiate, and it takes longer to realize than a more traditional public-sector project.

There are other options besides BOT. In the past, governments have usually built roads relying on in-house expertise for supervising private contractors for construction as per approved design and specifications. Roads were financed through budgetary allocations, sometimes mixed with loans from international financing institutions. Governments would normally service the loans from own resources, and road users were not required to pay any tolls. More recently, due to liquidity constraints, countries have started auctioning the rights to toll collection. The private contractors collect tolls from the road users and periodically pay agreed amounts to the government. There is now enough of a track record in many countries to demonstrate that such arrangements work well when they are negotiated properly with credible private parties, and the private parties are monitored to prevent any exploitation by them of the road users.

A government might take measures to mobilize resources locally for financing construction of infrastructure projects before resorting to BOT. Highway bonds issued by the federal or provincial government are one option. A government might allow an income tax exemption for the interest paid on the bonds with a view to making them more attractive to the investors. Local commercial banks and development finance institutions might be attracted to meet part of the capital cost or to fill a financing gap. A government might also explore relatively cheaper credits from the World Bank or Asian Development Bank for financing construction of important highways. Once the highways or related infrastructure projects are operational, toll rights can still be auctioned off in a transparent manner on a yearly basis. Through this approach, the users are expected to pay reasonable tolls, and the government is expected to generate enough cash for debt servicing and maintenance of roads. BOT financing might still be considered after other options have been exhausted.

Governments better keep in view the axiom, "Look before

you leap." There will be pressure to honor contracts, no matter how one-sided or unfavorable, once the contracts have been executed with concessionaires and banks. To avoid unpleasant situations, governments should do their homework properly.

Homework

Do an analysis of existing roads as against present and projected needs. Identify bottlenecks in transportation of import-export goods and costs thereof and investigate the past experience with borrowings for roads from the World Bank and ADB. Look into all of the following: laws and practices for road construction, acquisition of land for roads and compensation to land owners, the quality of local private companies building roads, the capability of the highway department for monitoring construction, the actual cost of construction per kilometer for different terrain and specifications, the existing toll roads in the country and basis for fixing tolls, the projected road traffic for efficient import-export and regional trade, and the debt situation of the government in relation to total annual exports.

Do a critical review of the experience the government had with independent power projects that were built under PPPs, if any. Maybe the government has also had experience with river bridges, light rail, amusement parks, shopping malls and similar projects that were constructed on a BOT basis. Take time to identify any lessons learned from these projects before embarking on a new toll road project using a PPP.

Look at the experience and laws in nearby countries with toll roads built under PPPs. Once documents are reviewed locally, learning visits might also be made to those countries. Seek assistance for know-how, documents and reports from the international financing institutions, particularly the World Bank, which has done tremendous work in this sector.

Establish a special cell in the highway department to concentrate on toll roads under PPPs. The cell should monitor execution of PPP projects. Proper mechanisms should be in place to ensure compliance by the private sector with technical, legal and financial matters as per contracts. The cell should serve as a "one-stop shop" for contacts by the private sector with other departments.

The country will need a separate regulatory authority to work on the level of toll, its rationale and tenure. The regulatory authority cannot operate in a

/ continued page 44

Toll Roads

continued from page 43

vacuum. It must be provided with clear laws, policy guidelines, and general principles of regulation. It should have operational independence once these principles have been established. The regulatory authority should be directed to take into account the impact of exemptions in taxes and issuance of shares to the concessionaire on the level of toll in real terms and the profits that the concessionaires actually make.

Projects undertaken through PPPs may take longer to negotiate and require careful attention to risk allocation, but there is a track record to demonstrate they work.

Any government undertaking a PPP should engage technical, financial and legal experts of international repute to assist it. Otherwise, the government risks being out negotiated by private developers. Institutions like the World Bank and the ADB can be consulted in the selection of advisors and finalization of the policy framework. It is a good idea also to consult local political groups. Strong cross party support at the national and regional levels are essential for any government trying to address the infrastructure backlog using PPPs.

Legislation will be needed to authorize the government to enter into contractual arrangements with the private sector and to provide tax incentives or other benefits, if any. This is probably a good thing, since the process of legislating helps create political support. It will reduce the chances of internal disagreement once actual construction of toll roads has started on a PPP basis. Clear legislation will also help attract more local and foreign private money. The process of writing the legislation will provide rigor for the analysis whether to use PPPs.

Before embarking on a PPP, the government should decide how all of the following issues will be handled. What rights and for how long will private sponsors have for collec-

tion of tolls from road users? What exemptions will sponsors have from import duties and income and other taxes? Will the sponsor be reimbursed for its development costs in the event that the project is cancelled? Will the government guarantee minimum traffic levels or toll revenue? How are upside revenues to be shared between the government and private sponsors? What cure and step-in rights and other protections will be given to lenders?

The government will have to decide on the criteria for pre-qualification of private consortia: technical, managerial and financial strength, creditworthiness, involvement in

litigation and past record of projects completed. A request for proposals will have to be drafted and rules drawn up for open bidding among pre-qualified consortia. The government should propose a fixed-price, lump-sum, date-certain turnkey contract, with liquidated damages and bonus to ensure timely

performance and a completion guarantee by the private sponsors. Thought must be given to whether to allow the concessionaire to generate revenue from other activities along the road.

The request for proposals should also address the road design and specifications, including access to the toll road, number and location of interchanges, and how change orders are to be handled. It should be clear about the role the highway department will play in construction, operation and maintenance, the bases for toll determination and periodic increases, the role of any regulatory authority in toll determination, the method for charging tolls, the government's responsibility for education of drivers about payment of tolls and for tackling opposition from local communities, what happens if archaeological artifacts are discovered requiring route diversions, and what will be expected from the private sponsors in the way of environmental considerations and compliance.

The people displaced by the toll road should be properly rehabilitated. In addition to immediate payment for their land at market prices, the government might give preference for commercial activities along toll roads to people who surrendered their land for toll roads. ☺

Environmental Update

Global Warming

The attorneys general from eight states and New York City filed suit in a federal district court in New York in July against five power companies alleging that their power plants emit large quantities of carbon dioxide, or CO₂, that contributes to global warming. The lawsuit names American Electric Power Company, Inc., Southern Company, the Tennessee Valley Authority, Xcel Energy Inc., and Cinergy Corporation as defendants. The suit is a new twist in the efforts by states to force companies to reduce greenhouse gas emissions in the absence of mandatory, nationwide requirements.

California, Connecticut, Iowa, New Jersey, New York, Rhode Island, Vermont and Wisconsin joined in filing the lawsuit, and two environmental groups — the Audubon Society of New Hampshire and New York-based Open Space Institute — filed a similar lawsuit in the same court in July. The lawsuits may be consolidated. A decision on the merits of the case is not expected until 2005.

The states and environmental groups argue that the companies are the five largest stationary-source CO₂ emitters in the US accounting for about 650 million tons of CO₂. They charge this amounts to about 25% of the US power sector's CO₂ emissions and approximately 10% of all CO₂ emissions from human activities in the US. The companies own or operate 174 fossil-fuel fired power plants in 20 states.

The case is based on a legal theory that has not seen much use in an environmental context over the past 30 years. Prior to the 1970s, a number of common law public nuisance suits were filed to address alleged environmental harms, but as more comprehensive environmental statutes were enacted by Congress, some courts recognized that these statutes created a new regulatory regime that superseded the use of the public nuisance doctrine to address the same type of environmental harms. In general, a public nuisance allegation claims an unreasonable interference with a right common to the general public.

The states are not seeking monetary damages, but have asked instead for an injunction that would require the power companies to cap their CO₂ emissions immediately and then reduce them by a specified percentage each year over the next 10 years. According to trade press reports, the they want a reduction of 3% a year.

The suit faces some significant hurdles. The states will have to demonstrate that the emissions of the particular companies were more than a minor contributing cause of the alleged environmental harm. The court might be reluctant to hold individual companies accountable for a problem that is global in scope. CO₂ emissions from a power plant in China would have the same impact on global warming as CO₂ emitted from a power plant in the US. The court will also have to address whether the Clean Air Act preempts a public nuisance lawsuit against the five companies. The US Environmental Protection Agency has concluded that it has no authority from Congress to force reductions in CO₂ emissions, although the monitoring of CO₂ emissions from certain power plants is required under an acid rain program.

In related news, 12 states and 14 environmental groups are arguing in a US appeals court in Washington that the Environmental Protection Agency should set motor vehicle emission standards for CO₂ and other greenhouse gases. EPA has refused. The states and environmental groups argue that CO₂ and other greenhouse gases, including methane, nitrous oxide, and hydrofluorocarbons, emitted by motor vehicles qualify as “air pollutants” that may adversely affect “public health or welfare” under the Clean Air Act. EPA has decided that it lacks authority to address climate change problems under the Clean Air Act and that CO₂ is not an “air pollutant” under the Act. Ten states and several industry groups have intervened on the side of EPA. A decision in this case is expected later this year or early next year.

New Source Review

In response to petitions from several states and environmental groups, the Environmental Protection Agency is reconsidering what types of “routine maintenance, repair, and replacement” of equipment can be done at existing power plants and other major emission sources without having to get a new air permit. The agency issued regulations addressing this issue in October 2003.

The EPA regulations are being challenged in court by 14 states and 29 local jurisdictions, including California, New York, Illinois, Washington, DC and most of the northeastern and mid-Atlantic states. A number of / continued page 46

environmental and public interest groups have also filed suits. The rule was put on hold indefinitely by a US appeals court in Washington last December two days before the rule was scheduled to take effect. Enforcement has been suspended until the court makes a decision later this year or early next year on the merits.

In the meantime, EPA has set a 60-day period for public comment as it reconsiders the rules. The comment period closes on August 30, 2004.

The agency is reconsidering three aspects of the rule. They are the legal basis for the rule, the basis for selecting the 20% cost threshold for determining that the equipment replacement is automatically considered routine, and the procedure for incorporating the rule into state regulations where a state implements the federal rule and has not otherwise adopted its own EPA-approved version of the rule.

EPA had hoped the rule it adopted last year would head off further controversy on the scope of an existing “routine maintenance, repair, and replacement” exemption under its new source review air permit program. Under this exemption, a power plant or other industrial facility does not need to apply for an air permit modification if it is replacing equipment at the plant in the course of “routine maintenance, repair or replacement.” If the replacement does not fit within this definition, then a modified air permit is usually required. Opponents of the definition for routine maintenance that EPA adopted last year charge that the new definition is a radical departure from 25 years of prior agency and judicial interpretations and the agency lacks authority under the Clean Air Act to make the change.

In related news, the National Academy of Sciences is working on a report for release next year on the effects that the EPA new source review rule changes in this area will have on air pollution nationwide. Congress directed it to prepare such a report. The report will address not only the change in what is considered routine equipment replacement, but also the effects of a December 2002 rule that revised the way industrial facilities calculate emission increases under the new source review program. Jeffrey Holmstead, EPA assistant administrator for air, appeared before the academy at the end of May to give the government’s view.

Indiana is on track to be the first state to adopt its own version of the December 2002 new source review rule changes. The Indiana version of the rule is expected to be

approved by the governor later this year. EPA will also need to approve the Indiana rule as part of the state’s implementation plan for regulating air emissions. One environmental group has already indicated that it may challenge Indiana’s new source review rule changes in court.

Cooling Water

A group of six northeastern states and a coalition of 15 environmental groups is challenging another EPA rule that imposes new requirements on cooling water intake structures for large existing power plants. The regulations were published in the *Federal Register* on July 9 and will become effective on September 7, 2004.

Section 316(b) of the Clean Water Act requires EPA to determine the “best technology available” to protect aquatic organisms from being pinned against water intake screens or drawn into cooling water systems. Plants that withdraw 50 million gallons or more of water a day from rivers, streams, lakes, oceans or other waters of the US and that use at least 25% of the water for cooling purposes are potentially affected by the new requirements.

The attorneys general of Connecticut, Delaware, Massachusetts, New Jersey, New York and Rhode Island have asked a US appeals court in New England for a “stay” against enforcement. Environmental groups are seeking the same relief from a US appeals court in New York.

The northeastern states and the environmental groups claim that the rule does not adequately protect the fish population because it fails to require use of the best technology available regardless of cost. The states want closed-cycle cooling systems — such as dry cooling towers that use minimal water — to be used as the “best technology available.” In a similar case involving a section 316(b) rule for new facilities, the US appeals court in New York rejected arguments from environmental groups that the Clean Water Act requires use of closed-cooling systems.

The environmental groups also assert that the rule improperly allows power plants to use voluntary restoration measures, such as restocking fish and creating habitat, as a means to comply with the performance standards in the rule. The US appeals court in New York struck down a similar provision in the section 316(b) rule for new facilities, concluding that the provision was inconsistent with the Clean Water Act.

EPA estimates that more than 550 existing power plants

are subject to the rule and many plants will have to make significant upgrades to existing cooling water intake systems, particularly plants that draw water from water bodies with sensitive aquatic habitats and species.

Particulate Matter

EPA has identified all or part of 243 counties in 22 states that fail to meet the fine particulate matter, or PM_{2.5}, national ambient air quality standard. This is almost double the number of counties that had been expected. EPA issued the new PM_{2.5} standard in July 1997, and the agency anticipates that it will issue final PM_{2.5} nonattainment area designations by November 2004.

Particulate matter consists of particles found in the air, including dust, dirt, soot, smoke and liquid droplets. Fine particulates are believed to pose the greatest health risk because of their ability to lodge deeply in the lungs due to their small size (less than one-seventh the average width of a human hair).

Once the PM_{2.5} nonattainment areas are finalized, states will have three years, until February 2008, to propose rules designed to achieve reductions in fine particulates. States with PM_{2.5} nonattainment areas will have until February 2010 to comply, with the possibility of an extension to as late as 2015. EPA is also in the process of developing a menu of "options" from which states can choose for achieving PM_{2.5} emission reductions. In addition to specific emission standards, EPA is expected to encourage states to consider emissions trading and pollution fees as other mechanisms for achieving needed reductions.

Many of these new PM_{2.5} nonattainment areas will face significant PM_{2.5} emission reduction requirements for the first time. States may require existing power plants and industrial facilities to upgrade or install additional pollution control technology to reduce fine particulate emissions.

Ozone

Newly-issued EPA air regulations are once again under fire in the courts. In late June, six northeastern states and the District of Columbia sued to stop enforcement of new rules adopted in April to implement an 8-hour ozone national ambient air quality standard and to designate ozone nonattainment areas. Several environmental groups filed similar lawsuits challenging the two rules. The suits are in the US appeals court in Washington.

EPA issued the new 8-hour ozone standard in 1997, but implementation of the rule has been delayed by protracted legal challenges. The new 8-hour standard is 0.08 parts per million averaged over an 8-hour period. The old standard was 0.12 parts per million averaged over one hour. The first EPA rule addresses implementation of the 8-hour standard and identifies various classifications of ozone nonattainment areas based on the severity of the ozone pollution. Areas meeting the old 1-hour ozone standard, but not the new 8-hour standard, are classified as "basic" nonattainment areas, and states have a greater degree of flexibility in determining the reduction measures that will apply in those areas. The second rule identifies all or part of 474 counties in 32 states that currently fail to meet the 8-hour ozone standard.

Ozone, or ground-level smog, is caused by the chemical reaction of NO_x and volatile organic compounds, or VOCs, in the presence of sunlight.

The northeastern states and environmental groups claim that EPA's new 8-hour ozone rules are too weak and fail to comport with a US Supreme Court decision in 1997. Ohio has also filed a separate challenge to the EPA rule. It wants more flexibility in how the 8-hour ozone standard is carried out.

Even though the 8-hour designation rule added 253 new counties into EPA's ozone nonattainment regulatory regime, the northeastern states and environmental groups charge that the rule allows several areas to be reclassified to less stringent ozone classifications. The Washington, DC area, for example, will now be classified as a "moderate" area under the new standard compared to being classified as a "severe" area under the old 1-hour standard. The emission reduction requirements necessary to comply in a moderate nonattainment area are typically not as stringent as those in a severe nonattainment area.

EPA anticipates that its rule will go into effect over the period 2007 to 2021, thereby giving states that have not yet met the 1-hour standard in certain ozone nonattainment areas some more time to achieve compliance. It is unclear whether the court challenge will delay enforcement. The new requirements for 8-hour nonattainment areas may require existing power plants and industrial facilities to install or upgrade pollution control equipment in order to achieve required NO_x and VOC emission reductions.

The cases filed by the northeastern states, Ohio and the environmental groups are expected to be consolidated. A decision is not expected until 2005. / continued page 48

Environmental Update

continued from page 47

Brief Updates

Massachusetts is requiring the four coal-fired plants in the state to reduce mercury emissions in two stages. The plants must achieve an 85% reduction in mercury emissions by January 1, 2008, and a 95% reduction by October 1, 2012.

In June, EPA published a final rule establishing air toxics standards for existing and new stationary reciprocating internal combustion engines. The rule takes effect in mid-August and requires reductions in either carbon monoxide or formaldehyde as surrogates for reducing air toxics.

Approximately 1,800 existing engines used at power plants, pipeline compressor stations, and chemical and other manufacturing facilities will be subject to the new rule.

In late May, a New York state trial court held that the New York State Department of Environmental Conservation failed to comply with procedural requirements when it adopted regulations requiring significant reductions in NO_x and SO₂ emissions from in-state power plants. New York is appealing the decision. The regulations impose a market-based trading program that will require SO₂ emissions to be reduced by 50% below current federal standards. Under the new rules, the current ozone season NO_x reduction requirements will also be imposed year round. The SO₂ regulations were scheduled to take effect on January 1, 2005, and the NO_x reduction were to take effect on October 1, 2004. The timing of the implementation schedule is now in flux.

A decision by the Federal Energy Regulatory Commission concluding that

a power purchase agreement between a qualifying facility, or "QF," and a utility will not convey to the utility any renewable energy certificates or RECs unless the contract specifically says so was appealed to a US appeals court in Washington in June. At issue in *Xcel Energy Services Inc. v. FERC* is whether utilities that buy electricity from QF plants also buy the RECs or whether they have to contract separately for them. A decision is expected next year.

The US Export-Import Bank revised its "environmental procedures and guidelines" on July 1, 2004 to make them conform to principles adopted by the Organization for Economic Cooperation and Development. The Export-Import Bank uses the guidelines in an effort to weigh the environmental consequences of projects it is helping finance. The revised guidelines call for projects to be evaluated against host country laws and international environmental guidelines, including the World Bank standards and environmental standards of regional development banks, such as the Asian Development Bank and Inter-American Development Bank.

The member states of the Ozone Transport Commission, which consists of the northeastern and mid-Atlantic states, agreed in June to impose a regional cap on NO_x, SO₂ and mercury emissions from power plants that would be between a third and two-thirds lower than the limits the federal government is proposing. The commission is working on a memorandum of understanding that will cap NO_x at 1.28 million tons a year, SO₂ at 2 million tons, and mercury at 10 tons from power plants in the OTC states by 2012. The mercury cap would be reduced to 5 tons in 2015. ☺

— contributed by Roy Belden in New York

Project Finance NewsWire

is an information source only. Readers should not act upon information in this publication without consulting counsel. The material in this publication may be reproduced, in whole or in part, with acknowledgment of its source and copyright. For further information, complimentary copies or changes of address, please contact our editor, Keith Martin, in Washington (kmartin@chadbourne.com).

Chadbourne & Parke LLP

30 Rockefeller Plaza
New York, NY 10112
(212) 408-5100

1200 New Hampshire Ave., NW
Washington, DC 20036
(202) 974-5600

1100 Louisiana, Suite 3500
Houston, TX 77002
(713) 571-5900

350 South Grand Ave.
Suite 3300
Los Angeles, CA 90071
(213) 892-1000

Beijing Representative Office
Beijing Kerry Centre
1 Guang Hua Road, Chao Yang District
Beijing 100020, China
+86 (10) 8529-8892

Riverside Towers
52/5 Kosmodamianskaya Nab.
Moscow, Russian Federation 115054
+7 (095) 974-2424
Direct line from outside C.I.S.:
(212) 408-1190

11 Mykhailivska Street, 4th Floor
Kyiv 01001, Ukraine
Telephone +380 (44) 230-2534
Facsimile +380 (44) 230-2535

Chadbourne & Parke
Radzikowski, Szubielska and Partners LLP
ul. Emilii Plater 53
00-113 Warsaw, Poland
Telephone +48 (22) 520-5000
Facsimile +48 (22) 520-5001

Chadbourne & Parke
a multinational partnership
Regis House
45 King William Street
London EC4R 9AN
+44 (20) 7337-8000

© 2004 Chadbourne & Parke LLP