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Search

LATEST ISSUE - May 2008

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[Search](#)
[Supplements](#)
[Jobs](#)

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[People & Places](#)
[League Tables](#)
[Bond & Loan Data](#)

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[Transport](#)
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[Water/Utilities](#)
[Telecoms](#)
[Renewables](#)
[Petrochems](#)
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Supplements

<< September 2003



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Happy returns

How was it for you? Tom Nelthorpe looks back at the 25 years of the private power business.

The Public Utility Regulatory Policy Act (PURPA) became law 25 years ago, creating the private power industry as we know it both in the US and worldwide. Since then developers, banks and, more rarely, law firms, have come and gone from the segment. But PURPA was based around a concept central to project finance, and still relevant in today's merchant meltdown ? the contract is king.

The power purchase agreement (PPA) remains the most central part of getting a solid project financing package together. Many bankers, now sitting on debt positions made shaky by merchant exposure, may now call them the only way. PURPA mandated that utilities strike PPAs at the avoided cost of production, and was designed to favour gas- and renewable-driven power facilities.

PURPA faces a number of criticisms, many of them rooted in current realities, and leaning heavily on the fact that PURPA was a product of its time. The act was explicitly designed to respond to the oil shocks of the early-to-mid 70s, and foster a move away from coal and oil-fired generation. It is no coincidence that it followed the Clean Air Act of 1977.

The early pioneers of private power came from an engineering and natural gas background, and felt that utilities were not running their generating plants as efficiently as they could. PURPA, in effect was an injunction for them to try and operate their plants as efficiently as possible, or cede ground to the independents.

The first PURPA exemption granted, and therefore the first plant to operate outside of utility control (with the exception of inside-the-fence plants) was the Lawrence Hydro project. This plant, now the property of Enel North America, first sprang from Jacek Makowski's J Makowski Company.

Lawrence embodied a conscious strategy for Makowski of looking for hydroelectric plants with low potential overheads that could cut inside the utility cost of generation. In this endeavour, generators would be helped or hindered by the willingness of regulators to countenance new plants, since regulators set the avoided cost at which utilities would compete, California, the regulatory environment favoured new development, its environmental permitting processes notwithstanding, while other areas proved less amenable to letting other generators in.

In time utilities have become much more efficient, but at the time showed scant interest in pursuing the alternative technologies that PURPA was designed to encourage. These largely consisted of small-scale biomass, geothermal, hydro and cogenerations plant. These were the efficient plants that were expected to populate the post-PURPA landscape, but were by and large very small, and would usually have to be smaller than 80MW.

Lawrence was all of 17MW of capacity, and some of the plants built at the time were little larger. One of the first of a rash of wood-fired biomass plants built in California, Ultrasystems' Burney plant, which financed in 1981 was 25MW. California, which, along with the north-east provided the bulk of early opportunities, liked its plants unobtrusive.

For bankers, this was not yet a substantial, or even distinct, product group. Citibank's US power project's group would number roughly seven, and evolved out of existing sector coverage personnel. However, as one, still active, banker put it, ?we were very much regarded as the cowboys of the banking profession.? Nevertheless, at a time of high interest rates, the returns

for banks could be attractive, and solid contracts made high leverage, and therefore impressive sponsor returns, possible.

One participant describes the atmosphere as "very much like the Wild West. There were so many entrepreneurs rushing around doing things that were very close to the line." Several sponsors would buy up substantial wind or geothermal properties, knowing that approval under PURPA would be easy to get, and flip them rapidly.

Some pioneers genuinely believed in the new technology, saying that gas, while it emits carbon dioxide, is vastly preferable to coal. Bob Danziger, founder of Sunlaw Energy, was one of the earliest examples, but Calpine and AES' founders would speak along similar lines. This attitude, which merchant producers in the 90s still held, reflects the earlier preoccupation of politicians and society with acid rain, a phenomenon associated with the sulphur dioxide emissions of coal plants, rather than a general aversion to greenhouse gases.

Geothermal power was one of the early technologies to benefit from IPP finance, and certainly gained a stronger following than wind power in its initial stages. CalEnergy, now part of MidAmerican, Oxbow Group, founded by Bill Koch, and Unocal were the main players. Indeed Calpine's early success rested on its purchase of the Geysers property from Unocal. Bruce Wrobel, formerly of EnCom, and now, as Herakles Capital, pushing a scheme for a Bauxite project in Guinea, did handsomely from selling prospective geothermal resources.

Banks liked the assets, since most of them had the backing of contracts with strong support from regulators. Some of them, particularly the earliest ones, struck power contracts at very advantageous terms. Utilities have struggled mightily to reject many of these Qualifying Facility (QF) contracts.

Sunlaw Cogeneration is for most the first project-financed thermal plant, a 66MW project that signed a power purchase with Southern California Edison, and was the first to avoid using a take-or-pay arrangement. It was also pitched to a financing community that had little idea what to make of a private power plant.

Bob Danziger, whose past occupations included law student, avant-garde jazz musician and researcher at the Jet Propulsion Laboratory, had even less money than Makowski to play with. He ended up having \$10,000 in compensation to work with, and owed lawyers and engineers about \$2 million by the time he closed Sunlaw's financing.

Nevertheless, after fruitless conversations regarding a leveraged lease financing, including a pitch to first Chicago, Sunlaw managed to place debt with the assistance of Bank of America's Ron Spoehele, \$60 million in all. Other debt investors included SFG and NatWest (now Royal Bank of Scotland), Lloyd's, Irving Trust and Bank of New England, while the \$21.5 million equity was placed through AG Becker (sold to Merrill Lynch in 1984) and Smith Barney (now part of Citigroup). John Hancock, also an equity investor, as well as Aetna and United of Omaha, provided the takeout of the construction financing.

At the time, bankers were usually the place to find construction finance, while the institutions provided takeout finance. This delineation continued until European and Japanese banks became more willing to lend long-term "the US aversion to long-term lending is not necessarily a recent phenomenon. Where they were able to help was in understanding, and therefore trying to eliminate, construction risk. After all the contracts had been signed, and insurance procured through Lloyds, there was little left to chance.

Equity returns could be high "Sunlaw's partnership meant that the limited partners made 325% before the general partner, Danziger's Sunlaw, saw more than 1%. Sunlaw has now been liquidated, since it experienced difficulties in gaining approvals for new emissions reduction authorities (interested bidders should go to www.dovebid.com).

Banks did not come to this contract-based financing entirely as ingénues "natural resources deals had used the non recourse template before. According to Roger Feldman, a former deputy administrator of FERC, and now co-chair of Bingham McCutchen's project finance group, who worked on Sunlaw, the precedents in the coal industry were instructive. "Several coal mining projects used a contract with a utility to raise finance, and there were several nuclear core leases done by utilities, so the concept was out there."

Bankers were able to be choosy about the projects that they backed, since that their clients, while usually better-backed than Makowski or Danziger, tended to be fairly short of equity. If the contracts were good enough, the banks could take the leverage fairly high, although on more than one occasion they were known to come in on the equity side. This was a tactic that Chase's project finance group, headed by Bill Rockford and his deputy Dick Grant, were known to use from time to time.

Drexel, Burnham, Lambert also played in the independent power sphere. Don Kendall, formerly of Morgan Stanley, Credit Suisse First Boston, Kendall Capital, Cogen Technologies and now at Carlson Capital, established a private equity business at Drexel for the power industry. Some developers have suggested that Michael Milken's junk bond antics brought about the first stirrings of greed in an industry that prided itself on its good citizenship. Calling him "the

spiritual godfather of Enron,? would not be unfair, one developer suggested.

The early private pioneers tended to be those attracted to technologies such as wind, biomass, cogen, and even solar power. Pennsylvania attracted interest from developers of waste coal plants, but by and large California was the nest from which many developers sprang, and power industry people often lived up to the progressive image of Californians.

This began to change as PURPA bit, and private equity returns became more noticeable. Activity took off in earnest following the Supreme Court ruling of 1983 that overturned a DC court ruling that avoided cost rules were illegal. Bob Shaprio, now a partner at Chadbourne & Parke, but then a litigator at FERC, notes that ?PURPA was not self-implementing. It said that FERC provided the principles, while it was up to state Public Utility Commissions to implement it. It created a unique regulatory structure. Indeed one of the challenges to the Supreme Court, which was rejected, said that the Federal government could not behave this way.?

Utilities, however, soon started to move into the generation business, as well as more than a few contractors. PG&E's National Energy Group started out as US Generating, a joint venture with Bechtel, a bought out the J Makowski assets. Sempra Energy was formed from the merger of Enova, parent of San Diego Gas & electric, and Pacific Enterprises, a gas player with IPP interests. The experience was useful ? Sempra sponsored the El Dorado project, widely believed to be the first 100% merchant power plant, in 1998.

Qualifying Facility status originally held that utilities could not own more than 50% of a plant designated such,, and PUHCA contained similar restrictions. The ruling made pure finance houses such as GE and CIT a fair amount of money, but the rules relaxed gradually, with Enron, formed from two gas companies, at the fore of efforts to promote deregulation.

The 1992 Energy Policy Act was the creator of a merchant market in the United States, by requiring open access to transmission systems and establishing a market for wholesale power sales. Before that Makowski's first next generation plant, Ocean State, had used a cost of service tariff. The 560MW Burrillville, Rhode Island, plant sold power to Boston Edison under a cost-based tariff, and used cheap gas from Canada. TransCanada is now the plant's owner. Selkirk Cogen and the 220MW MassPower plant followed.

Other honourable mentions should go to Calpine's Pasadena plant, probably the first to include an element of merchant risk when it was financed in the mid-1990s, and Mitsubishi's (now FPL's) Doswell project, which was the first to gain an exemption from QF status, after it was able to convince FERC that it did not exercise market power in Virginia. Sithe Independence demonstrated that the capital markets could accommodate construction risk, and USGen's Indiantown project that mini-perm structures could survive the transition from the real estate to the power industry.

The smaller developers such as Sithe Energies, Cogentrix, Tenaska, LS Power, SkyGen and Indeck came under pressure to join with the larger merchant energy groups. SkyGen succumbed to Calpine's charms, Mike Segal's LS Power became part of NRG Energy, and Cogentrix flirted with Aquila before Aquila's financial difficulties ended the romance. Tenaska and Panda Energy were among the few remaining smaller players in the market before merchant meltdown brought some old faces back into the market as distressed asset shops.

While Tenaska, in conjunction with Bain, and Panda, in alliance with Carl Icahn, have used the opportunity to refocus, Noble Power assets has built up a team around former USGen and GE executives, SkyGen's Michael Polsky has set up Invenegy with money from GTCR, LS Power is believed to be on the lookout for opportunities, and Doug Kimmelman, formerly of El Paso, now runs Goldman Sachs' power business.

One of the few to make it out of the business entirely is Bob McNair, owner of Cogen Technologies and former colleague of Kendall's. Cogen Technologies was briefly the largest cogen developer in the world, and McNair sold it to Enron in 1999. among its prized assets were the East Coast power plants, that Enron sold to El Paso, before El Paso sold them to former employee Doug Kimmelman, now at Goldman Sachs. McNair used the proceeds of the sale to bring a National Football League team to Houston, the Texans, and is therefore one of the few former power executives in the city still to be treated like a living god.

Other Houston players have not been so lucky. Aside from Enron, whose desire to go beyond project finance brought it straight into accounting fraud, Dyengy, Reliant and El Paso have all had recent difficulties. Many project finance bankers, who never felt the same affinity for the Houston-based wizards, were glad to see the end of Texan dominance until the red ink started to leak onto their books.

Few bankers would admit publicly that there has been a change in lending culture since the early deals, still fewer that it got very reckless. Perhaps one indication of a change in standards would be the cult of the ?strong sponsor? towards the end of the nineties. This went from being an affirmation that the sponsor was experienced in operations and management to the assumption that a sponsor would not walk away, and had the resources to prop up a project. Plants were largely assessed on their potential competitive position. As Citibank's Robert Welford put it (in these pages) in 1998, ?Merchant power deals are generally higher-risk, but

transactions but if the project with its chosen feedstock, equipment and financing are competitive, then why not??

The other key driver in the change of climate in power lending was the re-emergence of relationships in power lending. At least one reason that developers will give for the slow pace of development was the existing network of relationships between consulting firms, vendors and banks with utilities. Several would not be able to work for developers because of the appearance of conflicts of interest.

As developers looked to take out construction financing, or cash out their equity in an initial public offering, banks became more friendly, to producers and more likely to appraise the face behind the asset. Calpine, for instance, has maintained a loyal list of those bankers that backed it at the start, but its relationship with Chase, which had its own way of financing projects, was rather frosty.

PURPA's adherents believe that, as an attempt to stimulate new technology and capacity, it had many benefits. The Californian standard power contract, which encouraged a rash of new plants without heed to capacity needs, led to an oversupply situation in the late 80s, one which had famously reversed a decade later. By then, QF plants, many of which ran up arrears with the utilities, were the ones that staved off collapse.

It is telling that, incremental improvements in turbine efficiency aside, there have been few great leaps forward in power technology. Microgeneration and fuel cell technology may change the landscape of the power industry dramatically. If coal-fired plants in utility hands can stay online indefinitely, then this looks less likely, even in the medium term. A renewables act with PURPA-like teeth may be what the wind developers are waiting for.

In the short term, power finance bankers will have to perform an intricate balancing act, attempting to preserve their teams, pitching competitively for mandates that come up, and working out which of the distressed asset buyers will be good plays. Leveraged finance groups will provide a great deal of competition unless bankers can make a good case that their skills are essential to a transaction. If transmission deals become a large part of power finance in the coming years, such conflicts will be addressed rapidly.

Few expect the Energy Bill in conference committee to produce any major advances along the lines of the 1992 act. It looks set to use the tax system, rather than regulatory fiat, as the major driver of new initiatives. This will probably shake out some of the fuel issues dogging energy markets, but will dodge the major issues of market structure that made the 1978 and 1992 acts so important. And while investor-owned utilities and state commissioners hold some influence in policy debate, the horizon of the power finance market is hazy at best.

It would be worth, however, putting the current meltdown in perspective. The nuclear industry, in a sense, the eminence gris behind the power finance story, has caused its own share of problems. As Jay Worenklein, formerly of Milbank Tweed, Lehmans, SG, and now his own distressed asset shop, points out, cost overruns and the inability to put completed nuclear plants in service, almost bankrupted several utilities, and drove Public Service of New Hampshire over the edge. ?There was a huge amount of financial distress back then, so this situation is not unprecedented,? he says.

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