Examining Enron’s SO$_2$ emission trades

Jeremy Weinstein reports on recent revelations about a controversial Enron trade in sulphur dioxide allowances

Last May, the judge presiding over Enron’s bankruptcy estate appointed a special examiner, Neal Batson, to look into the company’s off-balance-sheet transactions and other trades, and see which could be unwound or otherwise recharacterised in such a way as to bring money or assets into the Enron estate, for eventual distribution to creditors.

Batson issued three omnibus subpoenas, seeking millions of records from more than 150 banks and brokerage firms, and over 50 law and accounting firms, on at least 80 off-balance-sheet and structured transactions. Beyond Enron’s creditors, lawyers in civil lawsuits against Enron’s banks, accountants and law firms are also keenly awaiting Batson’s findings.

The examiner filed his first interim report with the court on 21 September 2002.1 Pages 135–146 cover a transaction among Enron entities, Barclays Bank Plc and a mysterious Guernsey company called Colonnade Ltd. Batson believes Colonnade is a creature of Barclays. Batson filed a follow-up report on 21 January, under seal, giving Enron and its creditors a chance to review it and ask the judge to redact passages, under claim of privilege, from the public version. It is expected to be released shortly, although it has already been delayed twice.

The Barclays transaction involves sulphur dioxide (SO$_2$) emissions allowances (which Batson mislabels “credits”). Under the US Environmental Protection Agency’s acid rain cap-and-trade programme, power plants are assigned SO$_2$ emissions allowances nationally aggregating to about one-half 1980 levels, or 8.95 million tons a year. A small percentage of these are auctioned by the EPA every spring on the Chicago Board of Trade. A company that brings its emissions below its cap can sell its excess allowances to others, which can use them instead of reducing their own emissions or against emissions from new power plants.

Allowances have vintage years in which they may first be used, but are bankable for later use. Allowance transfers must be registered on an EPA database, so transactions can be tracked.

Enron started 2001 with about 720,000 allowances, held by its Enron North America (ENA) subsidiary. ENA swept the 2001 EPA auction with a dramatic quarter-million-dollar outbid of American Electric Power, the traditional auction winner, for all 125,000 of the EPA-offered spot vintage allowances, at $175 each.2 ENA eventually held more than 1 million allowances with vintages spanning 1995–2010. By the time of its bankruptcy filing, ENA had less than 32,000 left. By then, market participants knew of ENA’s transfer to Colonnade, and believed it was tied to Barclays.3

As Enron was circling the drain, ENA sold 924,582 allowances to Colonnade for $167.6 million in two tranches closing 28 September and 30 October 2001. Newly formed Enron subsidiaries Herzalezaide and Grampian simultaneously entered into put and call options with Colonnade, matching the terms of the ENA sale, with exercise prices tied to market prices at the time of exercise. Enron guaranteed up to $100 million, and deposited $59.5 million with Barclays, as surety for the obligations of Enron and its subsidiaries to Barclays “and any entity in which Barclays has an interest”.

ENA also agreed to help Colonnade resell the allowances at the end of the option terms. ENA received $93.4 million and retained control over the allowances through the new Enron subsidiaries’ call options from Colonnade. Colonnade could get the loan repaid by exercising the Enron-guaranteed put rights against the subsidiaries.

ENA and Barclays also entered into a swap agreement by which ENA would pay the fixed price — exactly equal to what Colonnade paid — and Barclays would pay the floating market price, on allowances of the same vintages and in the same amounts as those sold by ENA to Colonnade. Any change in the exposure of Enron’s new subsidiaries under the put options caused by market price changes would be offset by the floating amount payable by Barclays. Enron had thus hedged its market risk and effectively substituted Barclays’ for Colonnade’s performance risk on the options.

The call option premiums provided rebates on early exercise which, when translated into Libor, priced the whole transaction as if it were a loan with an interest rate of 65 basis points over Libor. Batson recites in footnote 436 of his interim report a series of ‘smoking gun’ documents by Enron insiders, including a 7 November 2001 e-mail summarising the transaction as a “true sale at par”, worth $1.57 million over Libor, and references to “collateral” and “derecognition of the SO$_2$ inventory on the balance sheet” to show that, although Enron booked the transaction as a true sale, it was intended as a financing with indicia of true sale. ENA even paid the legal fees of Barclays and Colonnade; typical with lenders, but rare for the buyers of one’s assets.

In addition to the transaction itself only making sense with Colonnade as a Barclays entity, Batson ties Colonnade to Barclays with several incriminating documents, including a Barclays term sheet describing the formation of such an entity, e-mails cautioning against creating paperwork linking between Barclays and Colonnade, documents signed by Barclays on Colonnade’s behalf, Barclays’ receipt of Colonnade mail, and a 30 October agreement by which ENA paid Barclays $850,000 for “restatement of the transactions under which ENA has sold certain SO$_2$ Allowances to Colonnade”. Finally, Colonnade sold all the allowances to Barclays Metals by 22 February 2002. Batson could also presumably track down and interview the designated representatives on the Barclays and Colonnade EPA accounts.

He concludes that the SO$_2$ allowance transactions are capable of recharacterisation as a loan. The ENA-to-Colonnade sale documents provide that if the transaction was later found not to be a true sale, there was a grant of a security interest in the allowances to Colonnade. As the examiner ominously states, “in the event of such a recharacterisation, the Court will then be required to determine whether Colonnade holds a valid security interest ... and if so, whether [it] could be effectively challenged. If no valid security interest exists or if ... it can be defeated, the [allowances] would be ... unencumbered property of the Debtors’ estates.”

The next step in this drama will be litigation by Enron’s creditors against a number of financial institutions named in Batson’s report, to recover the assets allegedly not really ever transferred. Some of these firms may choose to settle quietly, rather than face open inquiry into how often, and to whom, they provided similar financial services.

2 EPA, 2001 EPA allowance auction results and allowance tracking system.
3 Pira Energy Group, Enron’s problems and the SO$_2$ credit market, December 2001.
Environmental commodities, such as emissions allowances, were especially useful for Enron when structuring transactions for ‘revenue’ enhancement. Their exotic nature gave Enron substantial flexibility in assigning valuations. Using mark-to-market accounting, Enron boosted revenue by assigning aggressively favourable valuations, and the more exotic the commodity or instrument, the more flexibility for Enron in justifying aggressive values to its accountants and others on acquisition and “disposition”.

Note, for example, this transaction. Allowances have forward curves that are determined by the cost of carry for the first few years out, but then deeply discounted thereafter. In the 2001 auction, for example, the clearing price for the forward 2008 vintage allowances offered by the EPA was $67.86 less than that for the spot price. In the Colonnade sale, nearly a sixth of the allowances were of that vintage or later, yet all these were sold to Colonnade at spot market prices. This is not only a further indication that this was not a true sale (since it took place substantially above market prices), but also illustrates Enron’s aggressiveness when pricing environmental commodities.


The most shocking aspect of the Colonnade transaction is that it ultimately closed on 30 October 2001, after the 22 October announcement of the Securities and Exchange Commission inquiry into Enron’s off-balance-sheet transactions, and after Andrew Fastow, the company’s chief financial officer most notorious for using off-balance sheet financings, was replaced on 24 October.1

If it occurred to anyone in authority at Enron to ask, after Fastow was fired, “Should we stop these fake loans?” apparently none thought to answer affirmatively. The Colonnade transaction is good evidence that, over time, hiding debt and obfuscating the truth of its financial dealings grew hard-wired into Enron’s head, thorax and exoskeleton. Jeremy Weinstein is an attorney in Walnut Creek, California. E-mail: jweinstein@prodigy.net.