

Hunter River Salinity Trading Scheme Credit Auction

2004 Auction Report



**Department of
Environment and
Conservation (NSW)**

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Published by:

Department of Environment and Conservation (NSW)

59–61 Goulburn Street Sydney

PO Box A290

Sydney South 1232

Phone: (02) 9995 5000 (switchboard)

Phone: 131 555 (information & publications requests)

Fax: (02) 9995 5999

TTY: (02) 9211 4723

Email: info@epa.nsw.gov.au

Web: www.environment.nsw.gov.au

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ISBN 1 74137 080 9

September 2004

DEC 2004/91

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On 7 April 2004, the NSW Department of Environment and Conservation (NSW) held the first auction of 200 credits under the Hunter River Salinity Trading Scheme (HRSTS)¹. The credits have a 10-year life. They started on 1 July 2004 and will expire on 30 June 2014. These credits replaced the 200 credits that expired on 30 June 2004. The next auction will be held in 2006.

The auction was successful with all 200 credits distributed across the bidders that valued them the most. Bidders and observers alike were satisfied with the process. Therefore, the 2006 auction will use the same rules and set-up as the 2004 auction, with the exception of one additional rule – a starting price (explained below).

The following describes the 2004 auction and its results in more detail.

Where and who

The auction was held at Harbourview on Queens Wharf, Wharf Road, Newcastle. Slattery Auctions Australia conducted the auction in accordance with the auction rules as detailed in *Hunter River Salinity Trading Scheme Credit Auction – Process and Rules (as at 31 March 2004)*. These rules were developed in consultation with the HRSTS Operations Committee, scheme participants and other stakeholders.

Ten bidders representing 11 licensed facilities competed for credits. All bidders represented organisations that were already participating in the HRSTS. There were no registrations from non-industrial bidders. More than 30 observers watched the auction.

Results

The auction continued until the 3-hour time limit. Nineteen rounds were completed.

All 200 credits were allocated at the auction. The credits were distributed between 8 companies (9 facilities). In the last round, only one organisation that still wanted credits was not allocated any. Another had one of its bids partially filled in the last round.

The auction raised \$101,467. Bidders paid on average \$507 for a credit. The maximum and minimum credit prices were \$551 and \$478, respectively. The credit allocation and the cost to each organisation is shown in the table below.

¹ For a detailed explanation of how the scheme works and its requirements, see *Hunter River Salinity Trading Scheme – Working together to protect river quality and sustain economic development* (EPA, 2003), which can be found on the HRSTS website at www.environment.nsw.gov.au/resources/hrsts.pdf

Organisation	Credits allocated	Total cost
Bulga Coal Management P/L	7	\$3,657
Coal and Allied Industries	30	\$15,780
Liddell Coal Operations P/L	14	\$6,874
Macquarie Generation	50	\$24,300
Ravensworth Operations P/L	20	\$10,170
Redbank Power	47	\$23,666
Wambol Coal	12	\$6,000
Warkworth Mining Limited	20	\$11,020
Total	200	\$101,467

Revenue and costs

The auction raised \$84,939 in revenue, excluding Goods and Services Tax (GST) and auction costs. The Department has forwarded \$9224 in GST to the Australian Taxation Office. The auction costs were \$7304 and are detailed in the table below. The net auction revenue will be placed in the scheme fund and used to reduce HRSTS participants' scheme contributions for the 2004/05 year².

Detail of cost	Cost	Comment
Auctioneer and venue hire	\$3300	This cost includes the trial auction held on 24 March 2004 (requested by a number of participants) and the actual auction held on 7 April 2004.
Advertising	\$1053	Advertisements were placed in the Sydney Morning Herald and the Newcastle Herald to ensure that all potential stakeholders were aware of the auction date and the requirement to register.
Equipment hire	\$184	Fast laser printer and time stamper, including delivery and pickup.
Stationery and sundries	\$50	Including overheads, paper, pens etc.
Staff salaries and on-cost	\$2717	This includes: <ul style="list-style-type: none"> • Commissioning and briefing the auctioneer • Preparing and sending out letters (to distribute the information kits) • Registering bidders and observers • Organising equipment for the auction • Overseeing the actual auction and trial auction • Other tasks associated with organising the auction and trial auction.
Total	\$7304	

² This is in accordance with clause 84 of the *Protection of the Environment Operations (Hunter River Salinity Trading Scheme) Regulation*.

The Department has recouped operational costs for the auction. These exclude the costs that the Department incurred in developing the auction rules and process.

Objectives achieved

The auction process was designed to:

- a) distribute credits to those who valued them the most
- b) provide equal access for all bidders, including new entrants to the market
- c) clear all 200 credits (so the NSW Government was not left with any credits at the end of the auction).

To ensure these objectives were met, the auction process:

- a) allowed bidders to learn about the auction process and the market value of credits as the auction proceeded
- b) ensured bids were genuine and reduced the possibility of bidders defaulting on a winning bid
- c) included safeguards against anti-competitive behaviour.

These objectives were achieved. For example:

1. The credits were distributed fairly – the Department did not receive any complaints from either bidders or observers about how the auction was conducted, bidder behaviour or the auction's outcomes.
2. The Department is not holding any credits – all 200 credits were purchased and paid for (no-one defaulted on a successful bid).
3. There was no apparent collusion or anti-competitive behaviour.
4. The credits appear to have been generally distributed to organisations that valued them the most. All 200 credits were distributed to organisations that were already scheme participants *and* held a discharge licence. This suggests that the credits were generally worth more to these organisations than other HRSTS stakeholders (e.g. water users or participants that did not hold a discharge licence).

Collectively 163 of the successful bidders' credits expired on 30 June 2004. However, the same bidders collectively purchased 200 credits at the auction. This also indicates that the successful bidders valued credits more than those participants that chose not to replace their expired credits.

5. Bidders had 19 rounds to work out the market value of each credit and place competitive bids.

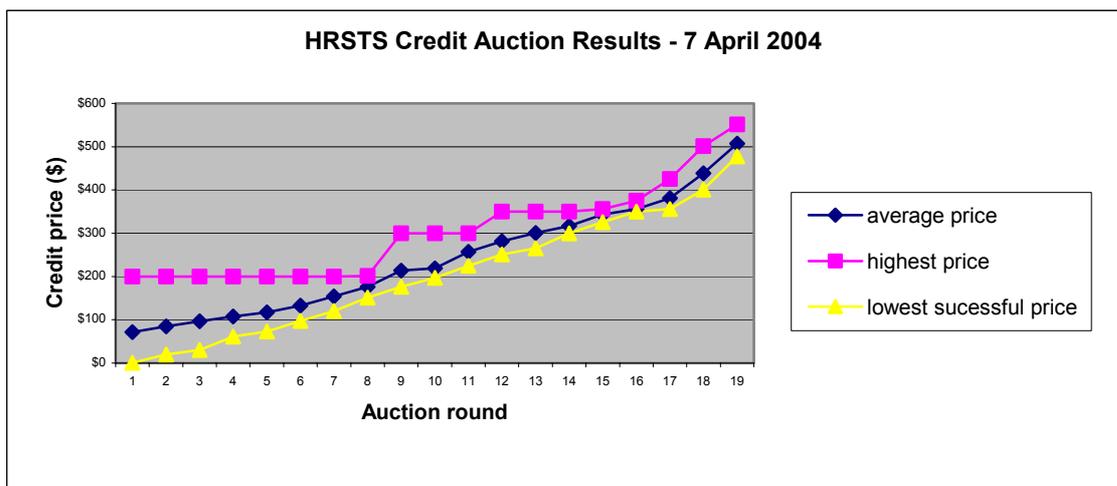
There are still ways to obtain credits

Regardless of the way credits were distributed during the auction:

1. The auction only re-distributed 20% of the credits that were held before the auction.
2. Scheme participants can continue to purchase credits from other credit holders at any time, using the online trading website, which can be found at hrs1.epa.nsw.gov.au/default.html.
3. The Department expects participants to continue to trade credits when there is a discharge opportunity as they did before the auction.
4. There will be another opportunity to secure credits at the 2006 auction.

More detail on the 2004 auction results

The diagram below shows the highest, average and lowest successful credit prices offered for each of the 19 rounds. In the last round the bid prices were all within \$73 of each other. This relatively small difference between the highest and lowest prices is likely to have contributed to bidders being satisfied with the auction results.



Bid prices may have increased if the auction had gone for longer. However, the average price curve shows a steeper gradient over the last three rounds compared to the general trend in the previous 16 rounds. This suggests that most bidders raised their price increments in these last rounds (possibly to the maximum they were willing to pay) because they knew the auction was drawing to a close.

Changes for the 2006 auction

The Department only received a few comments about the auction and how it might be improved for 2006. A couple of bidders felt that the time limit should be eliminated. A couple of observers noted that the process was slow due to its manual nature.

The fact that no one knew how the market would value the credits is likely to have contributed to the slowness of the 2004 auction. We expect the 2006 auction to be faster than the 2004 auction because a market price has now been established for the credits.

A starting price

Minimum bids started at \$1 during the 2004 auction. It took 8 rounds (40% of the time) for the average credit price to reach more than \$200.

To speed up the 2006 auction, the rules will stipulate that opening bids must be equal to or greater than a specified starting price (e.g. \$250 per credit). A starting price is standard practice for many auctions. The HRSTS Operations Committee supported this change. The actual price will be determined closer to the 2006 auction.

Other changes considered but not adopted

The Department also considered but did not adopt the following changes:

1. using a minimum bid increment
2. removing the 3-hour auction time limit rule
3. using an on-line electronic bidding system.

Justifications for not adopting these changes are detailed below.

Minimum bid increment

To speed up the auction further, we also considered using a minimum bid increment for the 2006 auction. For example all bids must be in whole multiples of \$10 not just whole dollars (e.g. \$310 would be a valid bid but \$311 would not). The HRSTS Operations Committee did not support this option as it limits bidding options. This rule will not be used for the 2006 auction.

No time limit

A few participants felt that the auction results may have been different if bidders had been able to continue bidding until no bidder was prepared to offer a higher bid. The Department considered a suggestion from the HRSTS Operations Committee to remove the time limit. However, since there is now a default price for credits and the auction will start at a reasonable bid price, we believe that the auction is likely to end before the 3-hour time limit. The 3-hour time limit ensures that there is a practical way of ending the auction if bidding is progressing by very small increments for a long time. As such, we have decided to retain the 3-hour time limit for the 2006 auction, on the basis that there is a 'king hit' rule in place to address the perceived problem.

Electronic process

The above concerns might also be addressed by conducting an electronic auction, either online over the internet (e.g. hosted on the credit register) or over networked computers in the same room (a physical venue). This option potentially offers the following benefits:

1. it removes (or reduces) the need for a time-limit
2. it avoids the need for hiring a venue, auctioneer, equipment etc. (if delivered over the internet)
3. it allows online registration
4. it allows remote bidding
5. it may be less susceptible to anti-competitive behaviour.

However, it is estimated that it will cost about \$70,000 to develop and implement the system, which is significantly higher than the cost of the 2004 auction. Therefore this does not appear to be a cost-effective option and is not recommended. The HRSTS Operations Committee supported this recommendation. In addition, they noted that a physical auction is more transparent as observers can easily watch its progress.

Thank you

In conclusion, the Department is satisfied that the 200 available credits were distributed in an equitable way. We would like to thank everyone who participated in the development of the auction rules and in the auction itself for their support, constructive suggestions and most of all their cooperative approach. We appreciate all the assistance received and look forward to working with participants again when the process is repeated in 2006.