

#### THE CONSTRUCTION USERS ROUNDTABLE

THE OWNERS VOICE TO THE CONSTRUCTION INDUSTRY'

# Guidelines on the Use of Reverse Auction Technology

WP-1201 Updated August 2004

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## **Notice:**

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The Mission of The Construction Users Roundtable (CURT) is to promote cost effectiveness for owners doing business in the United States by providing aggressive leadership on issues that will significantly improve project engineering, maintenance and construction processes, thereby creating value for the owners.

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CURT does not intend to recommend the exclusive use of Reverse Auctions for every inquiry, but rather seeks to offer points for owners and contractors to consider when using this relatively new technology.

## 1. Purpose

This paper provides guidelines on the appropriate use of Reverse Auction technology. CURT does not intend to recommend the exclusive use of Reverse Auctions for every inquiry, but rather seeks to offer points for owners and contractors to consider when using this relatively new technology.

## 2. Background

Reverse Auction is a recently developed Internet-based method for bidding on construction or project services. The primary benefit of this new e-commerce tool is that it may speed up the inquiry process, making it more efficient than traditional bidding that often includes lengthy, time-consuming negotiations.

Reverse Auction is just one component of e-Sourcing. Other e-Sourcing tools include: use of electronic documents for bidding, including drawings and specifications, and use of online team collaboration tools such as Teamspace.

Reverse Auctions are held online and in real time, with immediate feedback to the bidders. This system can show all bidders the current lowest or best bid attribute, or it can show a bidder's relative ranking as compared to the best current bid.

The primary bid attribute is usually the lowest price, but it may include other critical project objectives as well. Non-price criteria can be evaluated separately or as part of the live auction process.

While there are differences between Reverse Auction and traditional bidding, much of the procurement process is the same. The major difference is that a Reverse Auction uses the Internet in a live auction process. Bidders can see their relative ranking and/or the actual pricing of the lowest bid. They are also permitted to adjust their bids live and online prior to the bid close.

Owners frequently use the Reverse Auction process for procuring manufacturing commodities such as raw materials and packing materials. The Reverse Auction is a relatively new e-Sourcing technology, and is not an industry-wide practice for procuring construction services

The primary bid attribute is usually the lowest price, but it may include other critical project objectives as well.

# 3. Potential Advantages

#### For OWNERS, the use of Reverse Auctions...

- ▲ May lead to more competitive bids from contractors and reduced cost of projects, provided that a sufficient number of qualified bidders participate.
- ▲ May lead to innovative approaches that result in more efficient construction processes or methods. These innovations could lower costs for all projects.
- ▲ May be a more efficient process than traditional bidding and may eliminate the lengthy negotiations that often accompany the traditional process. Such improvements would save time and money.
- ▲ Should provide more quantified supplier bid data for future use in database development.
- ▲ Should provide insight into how competitive each individual bidder is willing to become with a particular owner.

#### For BIDDERS/CONTRACTORS, the use of Reverse Auctions...

- ▲ Will—because of the transparency of the bids—show bidders how their bid compares to their competition. This may enable bidders to become more competitive and improve future bids.
- ▲ May be a more efficient process than traditional bidding with lengthy negotiations, thus saving resource time and money.
- ▲ Should allow the bidder to see the relative price rankings and be in a better position to receive the award.
- ▲ Should provide data that allows the bidders to improve future business planning and become more selective with bidding opportunities and the pursuit of competitiveness.

# 4. Potential Disadvantages

#### For OWNERS, the use of Reverse Auctions...

- ▲ May result in added costs charged by an auction provider.
- ▲ May NOT result in achieving a lower price as compared to a sealed bid process, since the low bidder can see all the competition's bids and is only required to beat the lowest bid, as opposed to submitting their own lowest possible price.
- ▲ May result in a lack of reputable, well-qualified bidders. Contractors may refuse to participate in Reverse Auctions because of a mistrust of the process or a perception of being treated like a "commodity."
- ▲ May increase likelihood of claims, as bidders reduce cost to levels they cannot achieve.
- ▲ May cause bidders to perceive that "low price" alone matters to the owner. This can lead to loss of performance in other areas, as contractors endeavor to be the low cost provider.
- ▲ May require owners to have work systems for several alternate bidding approaches, including one for the Reverse Auction process.

#### For BIDDERS/CONTRACTORS, the use of Reverse Auctions...

- ▲ Could increase likelihood of claims, as bidders reduce cost to levels they cannot achieve. Such reductions may be made purely on emotion created by the intensity of the auction process.
- ▲ May cause bidders to perceive that only low price matters to the owner. This perception could lead to less-than-desirable long-term contractor improvement programs, in an effort to be the low-cost bidder.

The use of Reverse Auctions is not intended to undercut proven procurement processes.

### 5. Guidelines

- ▲ All bidding should be based on sound engineering and procurement processes. The use of Reverse Auctions is not intended to undercut proven procurement processes. The process should include:
  - A traditional inquiry process that appropriately documents and prequalifies bidders before the auction begins.
  - A bid scope that is clearly defined and understood by all bidders.
  - Owner non-price criteria that are clearly defined.
    These include owner expectations for safety, quality,
    training, schedule, and all other performance criteria.
    These areas may be evaluated as part of or separate
    from the actual Reverse Auction process.
  - Owner investigation of any bids that seem unreasonably low compared to the owner's own estimate and/or other bids. The owner must be satisfied that a contractor has a high potential to successfully complete the scope for the given bid price.

In each situation, owners must judge whether Reverse Auction is appropriate before deciding to use it.

- ▲ The Reverse Auction process is not necessarily suited for every procurement situation. In each situation, owners must judge whether Reverse Auction is appropriate before deciding to use it. The following guidelines should be considered in making that judgment:
  - Reverse Auction may be a good tool to use on construction projects that are based on firm, detailed design drawings and specifications.
  - Reverse Auction may be suitable for commodity-type purchases such as pipe, conduit, wire, and standard equipment such as pumps.
  - The use of Reverse Auctions for design/construct or other complex approaches should be used with caution, because scope is often partially determined by the bidders during the bid process. If the bids reflect different scopes of work, they cannot be directly compared. Therefore, to use Reverse Auction effectively, the owner must accurately define the scope of work prior to the auction.
  - For reimbursable bids, more emphasis should be given to the non-priced criteria. These criteria should be able to demonstrate a contractor's proven capability to control cost, schedule, safety, quality and to provide skilled craft labor (including craft training programs).

- ▲ The inquiry process must be conducted with the utmost integrity and with honesty and fairness to all bidders.
  - Integrity of the Reverse Auction process can be enhanced by announcing the names of all participating bidders prior to the start of the auction. However, the confidentiality and identity of each bidder must be protected once the auction begins.
  - Divulging the names of competitors may be awkward for some owners. However, the very concept of an auction is entirely different from the traditional, sealed bid process, and these differences should be understood, appreciated, and recognized.
- ▲ All bidders must be authentic competitors. There should be no "phantom bidders" involved in the bidding process.
- ▲ All bidders must submit real and genuine bids and commit to honor them after the auction concludes. Bid retractions should be discouraged and may result in disqualifying bidders from future inquiries.
- ▲ Bidder meetings should be held as they would be with any other bidding process. These meetings can be used to assure bidders that a fair process is being used.

- ▲ The objectives of the auction must be clear to all the bidders before the bids are submitted. Possible objectives of the Reverse Auction could be:
  - To award to the lowest bidder
  - To award to the best overall value bid
  - To develop a short list of bidders for final negotiations

All pertinent auction information, including its objectives, must be made available to the bidders and clearly understood before the bids are submitted.

- ▲ The owner may establish a "reserve price," a threshold above which there would be no award. While that price may not be announced, the bidders should be told that a reserve-price approach is being used.
- ▲ The rules of the Reverse Auction must be clear to the bidders before the auction begins. Examples include:
  - Establishing minimum increments for bidding (the smallest amount by which a new bid can undercut the previous lowest bid), either by dollar amount or percent.
  - Specifying whether a new bid can have a higher bid price than the current lowest price.
  - Prohibiting bidders from increasing a bid price during the auction, so only reduced bids are permissible.

There are other important rules that may be developed and all rules must be clearly understood by all participating bidders prior to the auction.

- ▲ Prior to the Reverse Auction, owners should verify that all participating bidders have been trained and are familiar with the owner's Reverse Auction process and tools. Prior to the auction, the owner should conduct a practice event with any bidders that do not have previous experience with the Reverse Auction process.
- ▲ Owners should encourage bidders to establish the lowest bid price that they can support. This should be done before the auction begins, and bidders should not bid beyond their means to deliver. (It is easy during the auction process to become "caught up" in the emotion and excitement of the process and submit a bid that is beyond the bidders capability to deliver.)
- ▲ Owners should only use Reverse Auctions when the tool can provide an advantage or benefit over traditional inquiry processes.

Owners should only use Reverse Auctions when the tool can provide an advantage or benefit over traditional inquiry processes.

# 6. Acknowledgement

CURT wishes to thank Associated Builders and Contractors (ABC) for its input in developing this document. In no way does this white paper represent the position of ABC in the use of reverse auctions.

#### **Construction User Roundtable Publications**

The purpose of developing Construction User Roundtable (CURT) publications is to disseminate recommendations, guidelines, and reports developed by the Construction Users Roundtable. CURT is focused on improving the cost effectiveness of the U.S. construction industry. These publications have been developed from the point of view of owners or users of construction services. Efforts by all segments of the industry, however, are vital if major improvement is to be the result.

This publication is one of a series from committees or study teams addressing a problem area.

Findings and recommendations of The Construction Users Roundtable are included in publication series classified as White Papers (WP), Reports (R), or User Practices (UP). In addition to these classifications, CURT publications are numbered based on the category of the topic:

Category	Number Code
Constructability	001 to 099
Contractor Management	101 to 199
Cost	201 to 299
Interface Management	301 to 399
Workforce/Industrial Relations	401 to 499
Material Control	501 to 599
Purchasing	601 to 699
Quality	701 to 799
Safety	801 to 899
Security	901 to 999
Strategy	1001 to 1009
Work Planning and Scheduling	1101 to 1199
Technology/E-Sourcing	1201 to 1299
Special Projects	2001 to 2099

#### **Examples:**

WP-1201: A CURT White Paper on Reverse Auction

R-402: A CURT Report on Tripartite Initiatives

UP –801: A CURT User Practice on Construction Safety in Contractor

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"THE OWNERS VOICE TO THE CONSTRUCTION INDUSTRY"

4100 Executive Park Drive, Suite 210 Cincinnati, OH 45241-4023 Phone (513) 563-4131 Fax (513) 733-9551 www.CURT.org