BEFORE THE
MARYLAND STATE BOARD OF CONTRACT APPEALS

Appeal of NEOPLAN USA CORPORATION	)	
	)	Docket No. MSBCA 1186
Under MTA Contract No. MTA 3-32-1	)	

June 25, 1984

Multi-Step Procurement - A solicitation which requested both a Technical and Price Proposal and contemplated a non-public review of the Technical Proposal for acceptability followed by a public opening of the Price Proposal with award to the low evaluated bidder was determined to be a multi-step procurement under COMAR 21.05.02.17.

Multi-Step Procurement - Responsiveness - The concept of strict responsiveness is not present in step one of a multi-step procurement. To be acceptable, a Technical Proposal need only comply with the basic or essential requirements of the specifications.

Multi-Step Procurement - Step One -A step one Technical Proposal which was determined to be susceptible of being made acceptable properly was permitted to be supplemented by clarification and additional supporting data.

Multi-Step Procurement - Step One - Whether a step one Technical Proposal is acceptable is a matter entirely within the discretion of the State's procurement officer.

Multi-Step Procurement - Step One - An MTA procurement officer reasonably determined that a contractor's Technical Proposal was acceptable despite the fact that a lighter bus was being offered than the contractor ever had produced before.

Multi-Step Procurement - Step Two - Consideration of bids submitted under step two of a multi-step procedure is done in accordance with competitive sealed bid principles.

Bids - Evaluation - Standardization and life cycle costs properly were found to be includable as factors to be weighted in evaluating bids.

Bids - Evaluation - Under Maryland law, a bid may not be evaluated for any requirement or criterion that is not disclosed in the invitation for bids. Only objectively measurable criteria may be applied.

Bids - Evaluation - Objectively determinable factors are those which can be made known to or which can be ascertained by the bidder at the time his bid is being prepared.

Bids - Evaluation - Where the MTA evaluated bids on a unit cost basis, as opposed to the total cost basis set forth in the solicitation, the method of evaluation was deemed defective. Extension of the unit costs necessarily would not have produced the lowest cost to the State in this instance.

Bids - Evaluation - Although the MTA failed to state the number and manner in which mechanics were to be trained, a post bid evaluation along these lines would not have affected competition. Bidders were told that the MTA would evaluate the labor cost it would incur in sending its mechanics to class. Bidders submitted a cost per mechanic based on their understanding as to the type and length of special training required by mechanics to service their buses. The number of mechanics who would be trained was not relevant to this formulation of a training plan.

APPEARANCES FOR APPELLANT:

Robert L. Flanagan, Esq.
Weinberg and Green
Baltimore, MD

Anthony F. Renzo
General Counsel
Neoplan USA Sales
Boulder, Colorado

APPEARANCE FOR INTERESTED PARTY:
THE FLXIBLE CORPORATION

Robert M. Wright, Esq.
Gerard P. Sunderland, Esq.
Whiteford, Taylor, Preston,
Trimble & Johnston
Baltimore, MD

APPEARANCES FOR RESPONDENT:

Stephen H. Sachs
Attorney General

Robert B. Harrison, III
Assistant Attorney General and
Counsel to the Department of
Transportation

William B. Tittsworth, Jr.
Assistant Attorney General
Baltimore, MD

OPINION BY CHAIRMAN BAKER

This appeal arises out of a final decision issued by a Maryland Mass Transit Administration (MTA) procurement officer denying Appellant's protest of a proposed award to The Flxible Corporation for delivery of a minimum of 80 buses. Award was to be made to the responsive and responsible bidder who submitted the lowest evaluated bid. The evaluation criteria set forth in the solicitation were intended to measure acquisition costs and projected ownership costs over the life of the bus. In other words, the MTA was seeking to award a contract to the manufacturer whose bus was least

expensive to purchase, own and operate over a projected span of 12 years or 500,000 miles. Although Appellant submitted the lowest acquisition price to the MTA, consideration of projected ownership costs resulted in its evaluated bid being adjudged higher than that submitted by The Flxible Corporation. Appellant protests the MTA's application of the evaluation criteria to its bid and contends that under the required evaluation process outlined in the solicitation, it should have been determined to be the low bidder. The MTA contends that its procurement officer reasonably applied the evaluation criteria and erred only in failing to declare Appellant's bid nonresponsive. Accordingly, counsel for MTA now asks that we deny the protest on the latter ground as well.

Finally, Appellant contends that even if it was not the low bidder, the bid submitted by The Flxible Corporation was nonresponsive because it offered to provide a bus which was incapable of satisfying the contract gradability standards. Both The Flxible Corporation and the MTA deny this assertion.

Findings of Fact

1. On or about December 12, 1983, the Mass Transit Administration (MTA) issued an invitation for bids (solicitation) for the manufacture and supply of 80 "Advance Design Transit Coaches" (buses) with options for wheel chair passenger accommodations, spare equipment, and additional quantities of buses.[1]

2. Funding of these buses, in large part, is to be provided through a Federal grant administered by the Urban Mass Transit Administration (UMTA). In purchasing buses under an UMTA grant, grantee transit agencies are permitted to include life cycle cost factors for evaluation under a competitive bid or a competitive negotiation procedure. The use of life cycle costing, however, is not mandatory.

3. The method selected by the MTA for procuring these buses was described as competitive sealed bids. Under the procedure chosen, however, bidders were instructed to submit both a Technical and Price Proposal. Although the procedure, at first glance, appears similar to a two step formally advertised procedure,[2] both the Technical and Price Proposals here were to be submitted simultaneously in separate, clearly marked envelopes. Additionally, as discussed hereafter, pricing elements were to be contained in each of the two proposals.

---

[1]As many as 160 additional buses could be purchased by the MTA in 80 bus increments.

[2]Two step formally advertised bidding is called "multi-step sealed bidding" in Maryland. It is defined under COMAR 21.05.02.17 as " . . . a two-phase process in which bidders submit unpriced technical offers or samples, or both, to be evaluated by the State and a second phase in which those bidders whose technical offers or samples, or both, have been found to be acceptable during the first phase have their price bids considered." Price bids are submitted in response to the accepted technical proposal and thus are received after the evaluation procedure is complete.

4. The Price Proposal Package specifically was to contain the following documents:

Each Bidder must complete, including execution as may be required thereon, and enclose as his Price Proposal Package the following documents, which shall constitute part of such proposal:

(1) Bidders Affidavit (included herewith)
(2) Procurement Affirmation (included herewith)
(3) Certification of Contractors. See Special Requirements Attachment Form, Part I, Page 5 of 17.
(4) Certification of Non-Maryland Corporation (Foreign Corporation). See Special Requirements Attachment Form, Part I, page 6 of 17.
(5) Buy America Certification. See Part I, page I-12, Section 1.1.21(1).
(6) The information and certification specified in connection with the Maryland "Buy American Steel" Act, if required. See Part I, page I-12, Section 1.1.21(2).
(7) Disadvantaged Business Certification. See Part I, page I-17A, Section 2.1.8.
(8) Service and Parts. See Part I, page I-6, Section 1.1.8.
(9) Amendments, See Part I, page I-11, Section 1.1.19.
(10) Offer. See Part I, page I-13, Section 1.2 (2 originally executed copies).
(11) Addendum 1, Pricing of Contract Items.

In addition to the above documents, the Price Proposal Package will also include the Bid Guarantee. In this connection see Special Requirements Attachment, Part I, page 2 of 17.

(Contract, Special Requirements, §1.1.4(a)(Part I).

5. The technical proposal package was to be prepared as follows:

The Technical Proposal Package will consist of completed Exhibits, information and data specified in the Special Requirements Attachment Form, Section No. 1.1.10, Qualification for Award. The Technical Proposal will be submitted by the Bidder under cover of a letter signed by an Authorized Signee as defined in Section 1.1.3(4), Part I.

Contract, Special Requirements, §1.1.4(b)(Part I). Specific data required under the referenced Exhibits to the Special Requirements Attachment Form include:

Exhibit A - Manufacturer's estimate of fuel cost over life of vehicle.

This figure was to be developed by dividing the expected vehicle life of 500,000 miles by the anticipated miles per gallon attainable by the bidder's bus and multiplying the result by a fuel cost of $1.50/gallon. The anticipated miles per gallon figure was required to be based on the results of independent third-party testing ". . . using the SAE J 1321 Type II procedures with the following exceptions and clarifications:

"A. Testing shall be conducted using the gravimetric method to determine fuel usage.

"B. The provision for a control vehicle shall be waived for this procurement.

"C. The duty cycle specified for this procurement shall be the 15 mile ADB variant utilized by Battelle Laboratories for their 1982 testing.

"D. The fuel grade to be used for testing shall be a #2D grade and the specific density (lbs. per gallon) of the test fuel, taken at 60 F, shall be fully documented.

"E. The nominal passenger load factor to be used shall be 30 passengers plus driver at 150 pounds each, for a total ballast of 4,650 pounds.

"F. All testing shall be conducted with the air conditioning compressor disconnected, and the evaporator blower and condensor motors locked on their normal A/C-on mode.

"G. Buses shall be equipped with an axle ratio adequate to to [sic] reach a minimum top speed of 60 MPH with all accessories operating on a level grade, with a full seated load at maximum governed engine speed.

"H. Test vehicle shall be equipped and configured in full conformance to the Administration's specifications with the exception of minor variations which have a negligible effect on fuel consumption. The curb weight estimate utilized for the test vehicle shall be fully documented with the rationale for same included in the technical proposal.

* * *

"J. The vehicle and test data indicated on pages 4 & 5[3] of this Exhibit A shall be provided in the bidders technical proposal and shall be certified as accurate by the authorized representative of the independent, third-party which conducted the testing."

See Special Requirements Attachment Form, Section 1.1.10 Exhibit A, pp. 2 and 3 of 5.

---

[3]Pages 4 and 5 of Exhibit A to the Special Requirements form required specific data concerning the vehicle itself, the driving schedule and coach performance. Additionally, information as to the maximum gradability at 44 mph and 7 mph was to be listed.

Exhibit B - Performance Evaluation

1. Compliance with Technical Specifications - Bidders were required to provide all descriptions, drawings, installation plans and data necessary to demonstrate that the proposed coach complies with the Technical Specifications. A sample bus also was to be made available.

2. Availability of Service and Engineering Support - Bidder was to provide detailed descriptions of its proposed arrangements for providing service, engineering and parts support including:

(a) Organizational Structure
(b) Contract Persons
(c) Policies and Procedures

3. Technical Training Availability - Bidders were to provide detailed information concerning their available Technical Training Program including:

(a) Training Organizational Structure
(b) Training Personnel
(c) Course Outlines
(d) Training Aids such as Audio-Visual Materials

4. Technical Publication Comprehensiveness - Bidders were to provide sample copies of available maintenance and service manuals, parts publications and state how they intended to update this technical information during the vehicles' anticipated life span.

Exhibit C - Standardization

Bidders were to submit: (1) a list of special tools required to service buses which may not be in the MTA present tool inventory[4] and the total cost thereof; (2) a list of mechanical components unique to the vehicle offered, information regarding the training time, and an estimate of training costs at $20.00 per man-hour;[5] and (3) length of time and total cost measured at $15 per hour to train bus operators.

6. Bidders expressly were informed that all life cycle, performance and standardization elements required to be set forth in the Technical Proposal had to be addressed. Failure to do so would result in their bids being declared nonresponsive.

---

[4]The solicitation did not contain a listing of the existing MTA tool inventory.
[5]The solicitation Special Requirements Form Section 1.1.10, p. 9 of 17 indicated that this was "Repairman [mechanics] Training."

7. The MTA appointed a Procurement Evaluation Committee to evaluate the proposals and recommend an award. The Committee consisted of representatives from the MTA maintenance, operations, and contract administration departments.

8. The evaluation process was set forth in the solicitation, in pertinent part, as follows:

> C. Evaluation Process:
>
> * * *
>
> 2. The Technical Proposals of all bidders shall be opened and evaluated first. All Price Proposals shall be retained and secured unopened by the Procuring Agency until the specific time set for price proposal opening.
>
> 3. The Procurement Evaluation Committee will proceed with the evaluation of each Technical Proposal received, in accordance with the evaluation criteria specified below, including the determination of the appropriate dollar value adjustments to be applied in the evaluation of each Price Proposal. In no event shall Price Proposals be opened prior to the completion of evaluation of Technical Proposals nor the specific time set for Price Proposal opening.
>
> 4. At the public opening of Price Proposals, the Price Proposal of any bidder whose Technical Proposal was determined to be non-responsive [sic] will not be opened. Subsequent to the openings of Price Proposals, the Procurement Evaluation Committee will reconvene to review the Price Proposals and apply the dollar value adjustments resulting from the evaluation of the Technical Proposals.
>
> 5. On the basis of the Technical Proposal Evaluation and Price Proposal Evaluation the Procurement Evaluation Committee will make a determination as to the responsible and responsive bidder whose proposals result in the lowest total evaluated cost to the MTA for Contract Item Nos. 1 and 2.[6] The forms in Exhibit D [See Appendix 1] are for the Committee's use in making this determination. Based on this determination the Committee will make a recommendation for award to the [MTA] Administrator.

Specific Requirements Attachment Form, §1.1.10 (Part I), p. 10 of 17.

---

[6]Contract items 1 and 2 respectively were the unit price and delivery price for each bus.

9. In particular, the procedure for Technical Proposal evaluation specifically was described in the solicitation as follows:

> The committee shall complete its evaluations based on the experience and best judgment of each member. As an aid to evaluation of the validity of the bidder's estimates, the committee may compare the estimates of expected cost and supportive materials, as submitted by the bidders, with any appropriate financial or maintenance records available to the Procuring Agency.
>
> Except as indicated above, each bidder's coach will be compared with the coaches offered by other bidders and not to the Procuring Agency's existing fleet.
>
> The Procuring Agency shall have the right to determine the validity of all data submitted and to either accept, reject or interpret such data as the members of the committee may deem appropriate. However, if in the judgment of the committee any estimated expected cost does not appear to be justified by the supportive materials or is not in keeping with the Procuring Agency's documented experience, or the intended meaning of any supportive material is in doubt; the bidder shall be requested by telephone and confirming written request to provide additional supportive materials and/or clarifications. The bidder shall have five (5) full working days subsequent to his receipt of the confirming written request to submit a reply. In no case will any estimated expected cost be changed during the evaluation process. (EXCEPTION: Estimates are erroneous due to simple arithmetic error, unit conversions (e.g., gallons, to quarts) or similar obvious mistakes. However, the Procuring Agency assumes no responsibility or obligation to identify or correct such errors.)
>
> If, after the bidder submits his reply, an item of interpretation is still in doubt, the committee shall exercise its best judgment. If the bidders reply to a request for additional supportive material is inadequate, the bidders estimated expected cost for the entire cost element shall be raised to the highest value (worst case) submitted by any bidder or other appropriate adjusted value as determined by the evaluation committee. In either event, the committee action shall be documented in the evaluation rationale. (Underscoring added)

Special Requirements Attachment Form, §1.1.10 (Part I), p. 11 of 17.

10. The foregoing evaluation procedure was reviewed with potential bidders at the pre-bid meeting held on December 21, 1983. Mr. Philip R. Price, Appellant's Eastern Regional Sales Representative, was in attendance. Minutes of this meeting were incorporated into the solicitation by Amendment No. 2 dated January 24, 1984.

11. Neither prior to the receipt of sealed Technical and Price Proposals on February 21, 1984, nor prior to the public opening of Price Proposals on March 29, 1984, did any bidder or prospective bidder file a protest relating to any alleged improprieties in the solicitation.

12. Technical and Price Proposals were received by the MTA on February 21, 1984 from Appellant, The Flxible Corporation and General Motors Truck and Coach Division (GM). GM's Technical Proposal was determined to be nonresponsive and, consequently, its Price Proposal was never opened. The nonresponsiveness of GM's bid is not at issue in these proceedings.

13. The fuel consumption test results appearing in Appellant's Technical Proposal were not certified by an independent, third party as required by the solicitation. Instead the Technical Proposal contained a copy of a telegraphic message received from North American Testing Company summarizing the test results. The message indicated that a typed report was to follow.

14. On February 24, 1984, Mr. Nicholas J. Kiladis, the Director of MTA's Contract Administration Department, a member of the Proposal Evaluation Committee and procurement officer for this purchase, sent a mailgram to Appellant apprising it of certain deficiencies in its Technical Proposal. Specifically, Mr. Kiladis noted the absence of a certified fuel consumption report and requested it within five working days.

15. Appellant's certified fuel test results were received by the MTA on February 29, 1984.

16. With regard to special tools, Appellant represented in its Technical Proposal that the MTA would not incur any special costs. However, Appellant qualified this statement by means of an attachment indicating that its bus would require the use of metric wrenches and/or sockets if a malfunction were to occur either in the independent front suspension or the "A" frame rear suspension. Additionally, it was stated that a "Mig Welder" would be required for body repairs. The cost of these items was set forth in the event they presently were not in the MTA's inventory.

17. With regard to special mechanical training, Appellant indicated that none would be required. Appellant emphasized that it does not supply any components, systems, or controls that are unique to their vehicle. One-half hour of bus operator training was recommended.

18. On March 1, 1984, Mr. Kiladis again wrote Appellant seeking additional clarification of its Technical Proposal. Of greatest significance were the following comments:

* * *

> With reference to Exhibit B of Section 1.1.10 (Part I) of the contract documents, Element 3, Training, the following deficiencies are noted in the information submitted:
>
> * * *
>
> The number of hours of training proposed are in general grossly inadequate in view of the fact that your buses would be completely new to our personnel.
>
> * * *

Reference is made to Exhibit C of Section 1.1.10 (Part I) of the contract documents, Special Tools. In Exhibit C you have inserted "None" after Special Tools, which indicates the MTA would have no requirement to obtain such items. Because we have no Neoplan buses in our inventory, clearly if your coaches are purchased, considerable tools will be necessary over and above the tools the MTA currently owns. For example:

Tools for removing AC [air conditioning] package.

AC tools - a different compressor is included in the test bus description.

Metric tools for measurement as well as for disassembly and assembly.

Transmission tools for the new V 731 [transmission].

"Porta-Power" mentioned in the service bulletin enclosed with your technical proposal is 50 ton capacity. Largest model MTA owns is hand-operated 10 ton.

Because you did not provide the cost data required, the MTA will have to make a judgment on what dollar amount to apply for special tool costs that will be associated with purchasing Neoplan buses.

Reference is made to Exhibit C of Section 1.1.10 (Part I) of the contract documents, Mechanical Training. How can you justify "none" in the space provided, which indicates no mechanical training is necessary. The MTA's experience has been that considerable mechanical training is necessary even with the purchase of later model coaches of the same manufacturer's coaches we already have. In your case, we would have a totally new coach. Your training courses and outlines clearly contradict your indication that there is nothing unique in the Neoplan coach from an MTA standpoint. We will have to develop a dollar cost for mechanical training to insert in Exhibit C.

Reference is made to Exhibit C of Section 1.1.10 (Part I) of the contract documents, Operator Training. Your technical proposal shows one-half hour of such training. More than one-half hour of operator training is needed for new later model buses of the same manufacturer's coaches in the MTA inventory. Again we will have to develop a dollar cost for this item to insert in Exhibit C.

In accordance with the contract documents, Special Requirements Attachment Form, Section 1.1.10 (Part I), page 11 of 17, Subsection D, request your response to the above matters be in our hands within five working days after your receipt of this letter.

19. Following a March 6, 1984 meeting with the MTA, Appellant responded to Mr. Kiladis' letter on March 8, 1984 as summarized below:

a. Training of Mechanics

The training required by Part I, sections 2.7.1/2.7.2[7] of the contract documents was said to be included in the Price Proposal. This involved having a qualified instructor available at the MTA facilities for 35 days over a seven month period, or 280 man-hours. Additionally, a total of 56 hours of classroom training was described in Appellant's proposal as being available to the MTA. The cost of this training likewise was said to be included in the Price Proposal. Appellant concluded that the foregoing total of 336 instructor hours was sufficient to conduct all training based on similar experiences with other systems.

In view of Mr. Kiladis' comments about the inadequacy of training, however, Appellant made a comparison between the equivalent training required by the Port Authority of Alleghany Transit (P.A.T) system in Pittsburgh and that provided in its proposal to the MTA. Appellant concluded that the P.A.T. required 50 more instructor hours of training for mechanics than that being provided in its proposal. Appellant, therefore, offered to increase its special training hours by 50. However, Appellant noted that the P.A.T. had a greater number of mechanics and facilities. Accordingly, by providing the equivalent number of instructor training hours to the MTA, the number of classes would exceed the MTA's needs.

b. Training of Bus Operators

With regard to the training of operators, Appellant noted as follows:

* * *

We have also been advised by our training manager that the driver training for qualified drivers has proved amply adequate. The ease of steering, location of instrumentation, mirrors and clarity of controls as defined in the operator's manual does not pose a problem in driving a Neoplan bus. However, if you feel that your drivers require continuous training, we are unable to recommend more than one hour as a maximum figure.

Maximum Cost Impact Driver Training
1 hr. x $15.00 hr. = $15.00

[7]These contract provisions required the contractor, at its own expense, to have at least one qualified instructor at the MTA's property for five days during the one month prior to acceptance of the first bus and for five days during each of the succeeding six months. The training to be provided was to be determined by the MTA's Maintenance Training Coordinator.

c. Special Tools

Appellant noted its understanding based on discussions with the MTA that metric wrenches and sockets were not standard at the MTA facilities. Accordingly, it offered to amend its Technical Proposal to forecast a special tools cost of five[8] full sets of both the metric wrenches and sockets. Similarly, it was stated for the first time in the letter that the V-731 transmission would require a manufacturer's service kit costing $740, a "D.D.L. scanner" costing $276, and additional 16 hours of training for the MTA mechanics. The rear suspension "A" frame trunnion also was said to require a "Porta Power" for servicing at a cost of $1400.

20. During the hearing, Appellant's Mr. Bridgens testified that, in fact, only a single metric tool was needed to service the bus to be provided. Further, this metric tool was interchangeable with the SAE type tools found in MTA's inventory.

21. Appellant's Mr. Bridgens, in writing the March 8, 1984 letter to Mr. Kiladis, addressed only the number of instructor hours believed necessary to train the MTA mechanics. Mr. Kiladis, however, testified that Mr. Bridgens was made aware during their March 6, 1984 meeting that the MTA was seeking to determine the number of training hours which its mechanics would require. (Tr. 216). Mr. Bridgens, in fact, testified that he understood this to be the case. (Tr. 42). The wage costs incurred by the MTA as each mechanic attended training were the costs being measured.

22. Appellant's fuel consumption test was performed by North American Testing Company in Daytona Beach, Florida. Page 2 of the test report indicates that the bus tested weighed 30,710 pounds when ballasted with loads representative of the driver and passengers. (App. Exh. 3). Appellant's Technical Proposal indicated that the curb weight[9] of the bus tested was 26,000 pounds. When ballasted with the required 4,650 pounds (30 passengers and 1 driver at 150 pounds each), the test weight was shown in the Technical Proposal to be 30,650 pounds. Although there thus was a discrepancy between the Technical Proposal and certified test report, the actual test weight shown in the certified test report was sufficient to meet the requirements of the SAE test procedure assuming that the curb weight was as stated in the Technical Proposal.

The curb weight of Appellant's bus was not set forth in the certified test report submitted by North American Testing Company. Further, the MTA knew that Neoplan had never produced a bus weighing as little as 26,000 pounds. Accordingly, the MTA questioned the test results during the March 6, 1984 meeting with Appellant's representatives.

---

[8]The MTA has five repair facilities. Hence it was expected that the MTA would have to buy one set per facility.

[9]Curb weight is the weight of the bus without driver or passengers and with a full tank of fuel.

In its March 8, 1984 letter to the procurement officer, Appellant responded to the MTA's concerns by stating that it had used a bus previously furnished to the Milwaukee transportation system in order to test for fuel consumption. This bus was the only one available to it. The curb weight of the Milwaukee bus was 27,800 pounds. For purposes of testing, it apparently was ballasted with only 2,910 pounds in order to achieve the target test weight of 30,710 pounds.

Appellant contended that the Milwaukee bus was much heavier than its current production models recently sold to the greater Los Angeles area. It further stated that the planned production models for the MTA would be 2,000 pounds lighter than what recently was furnished to Los Angeles. For this reason, a 26,000 pound theoretical curb weight was set forth in the Technical Proposal.

In support of the foregoing, Appellant provided information demonstrating that the curb weight of the buses recently furnished by it to Los Angeles, if configured in accordance with the MTA specifications, would be 26,640 pounds. Hence, it only would have had to achieve 32% of its weight reduction program (i.e., 640/2000 x 100) in order to attain the 26,000 pound curb weight represented in the Technical Proposal.

The MTA's Mr. Wagner[10] testified that it was not intended that bidders would build a production bus to MTA specifications in order to test for fuel consumption. Further, it was expected that bidders would use an existing model and adjust it by ballast for weight variations attributable to configuration differences. Although he and his colleagues on the Procurement Evaluation Committee were concerned about Appellant's ability to produce this lighter bus, it ultimately was concluded that the 640 pound weight reduction was feasible and that the test results obtained with the bus utilized were acceptable.

23. Appellant's certified fuel test results showed an average usage over varying conditions of 4.31452 miles per gallon. In computing fuel costs for the projected 500,000 mile useful life of its bus, Appellant mathematically corrected the miles per gallon obtained by field testing to reflect the impact of a further weight reduction of 650 pounds in the production bus it would provide under the contract. In other words, the production bus to be supplied to the MTA would have a curb weight which would be at least 1,290 pounds below that of the vehicle recently furnished to Los Angeles. Based on published data, Appellant computed a percentage gain in miles per gallon of 0.0576923%. Increasing the 4.31452 miles per gallon obtained with its heavier test bus by the foregoing factor produces a 4.3394 miles per gallon estimate of fuel consumption for the lighter bus. This improvement in fuel efficiency would reduce life cycle costs by approximately $997 per bus.

The MTA questioned the weight reduction figure during the meeting conducted on March 6, 1984. In its March 8, 1984 letter to Mr. Kiladis, Appellant responded to these concerns by setting forth the information

---

[10]Mr. Norbert Wagner is the MTA's General Superintendent for Quality Assurance and was a member of the Procurement Evaluation Committee.

contained in the previous finding. The anticipated weight reduction of 1,290 pounds further was said to be conservative in view of Appellant's target weight reduction of 2,000 pounds.

24. Appellant's test vehicle was equipped with a Detroit Diesel Allison (DDA) V-730 transmission rather than the V-731 transmission required by the specifications.[11] Appellant's witnesses testified that the amendment to the solicitation requiring the newer transmission came too late to enable it to equip its test bus with this item. However, in view of the beneficial effects of the newer transmission on fuel consumption, Appellant's witnesses stated that the fuel test results obtained with the V-730 transmission were conservative.

25. The MTA's Procurement Evaluation Committee met to finalize its rating of the Technical Proposals on March 23, 1984. With regard to Appellant's proposal, the Committee concluded that:

a. The overall fuel rating determined by the independent testing agency would be accepted. No corrections based on published results for weight reduction would be permitted.

b. The cost of special tools would be as follows:

1.	Metric Tools (5 sets)	$ 908.75
2.	Transmission Tools	1,016.00
3.	Porta-Power Tool	1,400.00
	Total	$3,324.75

c. Mechanical Training

1.	Basic Course	56 hours
2.	Transmission Training	16 hours
	Total	72 hours

72 hours at $20.00/hour = $1,440.00

d. Operator Training

1 hour at $15.00/hour = $15.00

With regard to The Flxible Corporation proposal, the MTA accepted all of its projected ownership costs except those suggested for transmission training which contained an arithmetical error. The cost of training mechanics for the Flxible bus was determined to be:

---

[11]The V-731 transmission replaces the V-730 transmission produced by DDA. The MTA was apprised of this fact after the solicitation had been issued and, accordingly, issued solicitation Amendment No. 3 on January 26, 1984 to require the new transmission.

Basic Course	$400.00[12] (20 hours x $20.00/hr.)
Transmission Training	160.00 (8 hours x $20.00/hr.)
Total	$560.00 per mechanic

Although the buses offered by the foregoing competitors each used a V-731 transmission manufactured by DDA, the MTA inexplicably recognized different transmission training costs under the competing proposals despite the fact that factory training was represented. The MTA did not inquire of the bidders or the manufacturer as to whether a disparity in training hours would be reasonable.

26. During its March 23, 1984 meeting, the Procurement Evaluation Committee further decided that: (1) the Price Proposals would be opened publicly on March 29, 1984; and (2) the lowest evaluated bidder would be determined based on the lowest evaluated unit price for each bus.

27. Shortly before the bid opening on March 29, 1984, Appellant and The Flxible Corporation each had a private meeting with the Procurement Evaluation Committee. At this time, the results of the evaluation procedure as to their respective Technical Proposals were disclosed. Additionally, they were informed at this time that the low evaluated bidder would be determined on a per bus basis.

28. Mr. Philip Price, Appellant's local representative, testified that when he orally was told by the Procurement Evaluation Committee that prices would be evaluated on a per bus basis, he received assurances that the life cycle and standardization costs would not be handled in this manner. He further testified that he informed the Committee that Appellant's price per bus for training and tools would be one eightieth of the total amount accepted by the Committee as the reasonable costs for obtaining each item. The MTA's Messrs. Kiladis and Wagner, however, denied that Mr. Price made this statement.

29. The MTA employs 289 mechanics in its five operating divisions. These mechanics were said to be generalists by the MTA's Mr. Norbert Wagner. Each mechanic, therefore, purportedly was capable of servicing any part or component of a bus.

30. The solicitation does not indicate how the training program was to be conducted by the MTA. Accordingly, bidders did not know how many mechanics were to be trained or in what specific areas.

31. At the hearing, the MTA's Mr. Wagner testified that each mechanic the MTA hires is expected to have certain specified tools in his possession when he comes to work. Thereafter, mechanics are given a yearly

---

[12]This was stated in the proposal to be "per person" with the total cost being dependent upon the number of people trained. Similarly, the transmission training also was stated on a per person basis.

tool allowance to replace lost tools and/or buy new ones. Where the MTA purchases buses requiring special tooling, however, the MTA would expect to purchase such tools and provide them to each mechanic.

Expensive tools which are used for unscheduled maintenance repairs are purchased on a divisional basis. Since the MTA has five operating divisions, each having repair facilities, five such tools would need to be purchased. An example of this type of tool is said by the MTA to be the "porta-power" required to remove trunnion bearings on the Appellant's bus.

32. The Procurement Evaluation Committee concluded that the purchase of Appellant's buses would require the following special tools:

metric tools (five sets at $181.75)	$ 908.75
transmission tools (one set)	1,016.00
porta-power tool (one)	1,400.00
	$3,324.75

This calculation, however, was premised upon the purchase of a single bus and no attempt was made to ascertain the total number of tools required.

33. With regard to mechanical training, the Procurement Evaluation Committee concluded that 72 hours would be necessary to train an MTA mechanic on the Appellant's bus. Only 28 hours per mechanic would be necessary for the Flxible bus. The dollar value equivalent to such training was $1,440 per mechanic for Appellant and $560 per mechanic for Flxible.

34. The respective training programs were as follows:

APPELLANT

Subject	Hours
Supervisors Orientation	4.0
Mechanics Orientation	4.0
Air Conditioning	4.0
Steering Systems	4.0
Axles and Brake System	4.0
Door Systems	4.0
Destination Signs	8.0
Electrical Systems	8.0
Air Systems	8.0
Body Repair	4.0
Subtotal	56.0
Transmission (V-731 DDA transmission)	16.0
Total	72.0

FLXIBLE

Subject	Hours
Construction and Assembly	1.5
Coach Operation	0.5
Use of Manuals	0.5
Engine and Transmission Accessories	1.5
Power Steering	1.0
Suspension and Kneeling System	2.0
Brake and Air System	2.0
Major Component Removal	1.0
Doors and Controls	1.5
Electrical System	3.5
Climate Control System	5.0
Subtotal	20.0
Transmission (V-731 DDA transmission)	8.0
Total	28.0

35. The air conditioning, steering system, door system and destination signs being offered by Appellant in its Technical Proposal all were to be furnished by suppliers whose components were not part of the existing MTA fleet. It further was uncertain as to whether the axle and brake system components to be manufactured by the Rockwell Corporation were identical to

those incorporated in previous buses purchased by the MTA. Flxible buses, on the other hand, were part of the MTA inventory and thus the degree of training required would have been less. For this reason, the Procurement Evaluation Committee concluded that the disparity in training hours referenced in Appellant's and Flxible's Technical Proposals was reasonable.

36. Price Proposals publicly were opened on March 29, 1984 with the following results:

		APPELLANT		THE FLXIBLE CORP.	
Item No.	Description	Unit Price	Total Price	Unit Price	Total Price
1	Coaches	$142,360.00	$11,388,800.00	$149,562.00	$11,964,960.00
2	Delivery	1,640.00	131,200.00	512.00	40,960.00
	Total	144,000.00	11,520,000.00	150,074.00	12,005,920.00

The acquisition cost of Appellant's buses thus totalled $485,920 less than the cost of Flxible's.

37. At the public opening of Price Proposals, copies of Exhibit D to the solicitation Special Attachments Form were handed to those present, including Appellant's representative. Using this form, the low evaluated bidder was determined as follows:

	Appellant	Flxible
Life Cycle Cost (fuel)	$173,812.28	$168,086.06
Standardization	4,779.75	1,575.00
Subtotal	$178,592.03	$169,661.06
Unit Bid Price For Each Bus	142,360.00	149,562.00
Delivery (Unit items 1 and 2)	1,640.00	512.00
Total	$322,592.03/bus	$319,735.06/bus

38. Appellant forwarded a letter to Mr. Kiladis on March 30, 1984 seeking reevaluation of the proposals. A similar letter was mailed to the Mass Transit Administrator on April 4, 1984. These letters objected to the "per bus" evaluation of standardization costs and further contended that the Flxible fuel consumption test was invalid because an improper drive ratio was used on the test bus.

39. The foregoing two letters were treated as bid protest letters by the MTA. Appellant's protest thereafter was denied on April 16, 1984 based on Mr. Kiladis' conclusion that the review process was in accordance with the solicitation and was not erroneous.

40. Appellant received Mr. Kiladis' final decision on April 23, 1984 and a timely appeal was taken on May 8, 1984.

41. During the hearing, Appellant elaborated on its claim that the Flxible fuel consumption results were invalid. In this regard, Appellant presented uncontroverted testimony that a decrease in rear axle drive ratio from the 5.125:1 utilized by Appellant to the 4.56:1 used by Flxible would

result in a 3% increase in fuel economy. (Tr. 114). Using this lower rear axle drive ratio, however, Flxible allegedly would not have been able to satisfy the specification requirement as to gradability.

42. The specification requirement as to gradability appears under technical specification section 3.1.1.3 and provides, in pertinent part, that:

> Gradability requirements shall be met on grades with a surface friction coefficient of 0.3 and above at SLW[13] with all accessories operating. The standard configuration power plant shall enable the coach to maintain a speed of 44 mph on a 2 1/2 percent grade and 7 mph on a 16 percent grade. . . .

43. Flxible represented in its Technical Proposal that its bus would meet the gradability standard set forth in the solicitation. Data pertaining to gradability performance was included in Flxible's Technical Proposal on Exhibit A to the Special Requirements Form, page 4 of 5 as follows:

> 4. Coach Performance Date (to be completed by bidder)
>
> * * *
>
> Max. Gradeability [sic] at 44 MPH - 2.50%
> Max. Gradeability [sic] at 7 MPH - 16.00%

As testified to by Flxible's Mr. Edward Kravitz,[14] the foregoing data was based upon actual road testing done pursuant to UMTA specifications and computer simulations. The computer program utilized by Flxible is known as the Hevsim program and was developed for the U. S. Department of Transportation. Flxible's gradability tests, however, were not conducted by an independent third party.

44. There is no indication in Appellant's fuel consumption test report that North American Testing Company performed any test for gradability. Gradability results, however, were set forth in the report submitted. (App. Exh. 3, p. 3).

45. Methods of road testing buses for gradability are well recognized in the industry. These tests are not part of the specified SAE J 1321, Type II fuel consumption procedure nor were they separately mandated under the solicitation.

46. Appellant's Mr. Alan Hosie[15] requested that DDA, the manufacturer of both the engine and transmission specified under the solicitation, perform a computer simulation to ascertain whether the Flxible bus used in the fuel consumption test could meet the contract gradability standards. The

---

[13]SLW means seated load weight and refers to the curb weight of the bus with a driver and each seat filled with a passenger.
[14]Mr. Kravitz is Vice President of Sales and Marketing for The Flxible Corporation.
[15]Mr. Hosie is the Director of Appellant's Marketing and Engineering Department.

computer program utilized was the DDA "System For Computerized Application Analysis" (SCAAN). Among the assumptions DDA was asked to input in its program were that (1) a DDA 730D transmission was used, (2) the height and width of the vehicle was 11.00 x 8.00 feet, (3) certain deductions for horsepower had to be made due to the operation of accessories including air conditioning, and (4) the points at which the shifting of gears would occur. The SCAAN predicted that Flxible's bus would have achieved an acceptable speed of 44.86 mph on a 2.50% grade but only 5.87 mph on a 16% grade. The SCAAN was submitted to Mr. Hosie sometime after April 16, 1984 with the following disclaimer statement:

> The vehicle performance data is an estimate for the specified vehicle and power train based on the simulation of vehicle and power train components for certain conditions. Since vehicle or power train performance variations and operating conditions can cause actual vehicle performance to vary, General Motors Corporation (Detroit Diesel Allison Division) does not represent and hereby disclaims that, under all conditions, the actual vehicle will achieve the indicated performance.

See App. Exh. 2 and Flxible Exh. 1.

47. In a separate letter to Mr. Hosie dated April 24, 1984, Mr. C. J. Henderson, a Zone Sales Manager for DDA, apprised Mr. Hosie that the DDA V-730 and V-731 transmissions had the same basic configurations and the substitution of one for the other would not affect gradability.

48. Flxible's Mr. Kravitz testified that the bus dimensions and shift points assumed by DDA were incorrect. Mr. Hosie, however, testified that the correct dimensions would not significantly alter the results. Further, since the bus would always be in first gear under the gradability test, the shift points were irrelevant.

Decision

While the MTA advertised the instant procurement as a competitive sealed bid, it more closely resembled a multi-step sealed bid. The latter procurement procedure combines the benefits of competitive sealed bidding with the flexibility of negotiation. Hyster Company, 55 Comp. Gen. 267, 278 (1975), 75-2 CPD ¶176. Under step one of a multi-step procedure, a request for Technical Proposals (RFTP) is issued. The procurement officer then reviews proposals submitted in response thereto in order to ascertain whether they are acceptable, reasonably susceptible of being made acceptable, or unacceptable. Wood, Two Step Formal Advertising, George Washington University Government Contracts Monograph No. 12 (1979); compare COMAR 21.05.03.03B. Where a Technical Proposal is reasonably susceptible of being made acceptable, additional clarification and supporting data may be sought by the procurement officer. Thereafter, all offerors whose Technical Proposals have been deemed acceptable are issued invitations to bid the work described in their accepted proposals. This constitutes the second step of the procedure.

Here the MTA did not follow all procedures appropriate to a multi-step bid. The Technical and Price Proposals were required to be submitted simultaneously. Further, certain price elements were to be set forth in the

Technical Proposal. Nevertheless, the procurement procedure outlined did contemplate an initial non-public review of Technical Proposals prior to the public opening of sealed Price Proposals. Additionally, bidders were apprised in the solicitation that clarification or additional supporting data may be sought with regard to the Technical Proposal and that some subjective evaluation would occur. The procedure outlined, therefore, was what a bidder would expect under step one of a multi-step sealed bid procedure and, accordingly, our analysis hereafter is premised upon this being a multi-step rather than a competitive bid procedure.[16]

The concept of strict responsiveness is not present in step one of a multi-step procurement. To be acceptable, a Technical Proposal need only comply with the basic or essential requirements of the specifications rather than all specification details as in a competitive sealed bid. Page Airways, Inc., Comp. Gen. Dec. B-185166, 76-2 CPD ¶95 (1976), p. 4. Whether a proposal is acceptable is a matter entirely within the procurement officer's discretion and his determination cannot be overturned absent a showing that it was arbitrary, capricious or not made in good faith. Compare Struthers Electronics Corp., Comp. Gen. Dec. B-186002, 76-2 CPD ¶231 (1976); Columbus McKinnon Corporation, 46 Comp. Gen. 34, 41 (1966).

The MTA procurement officer here determined that Appellant's Technical Proposal potentially was acceptable. In so doing, he was aware that Appellant's Technical Proposal had omitted: (1) the proper certification of the fuel test report by an independent third party; (2) the fuel test report itself; (3) the maintenance manuals and parts publications; (4) a full description of the bus tested for fuel consumption; and (5) complete data to assess fully the tooling and training costs to be incurred by the MTA. However, it equally was plain to the MTA procurement officer that Appellant was offering to provide a bus which fully met the configuration and operational requirements set forth in the technical specifications. For this reason, he permitted supplementation of the Technical Proposal to cure the foregoing omissions. In view of the fact that Appellant had no knowledge of the contents of Flxible's Technical Proposal, we see nothing unreasonable in the MTA procurement officer's actions. The actions taken were intended to achieve full and fair competition. This is what was obtained.

Regardless of whether it was appropriate to seek clarification and additional supporting information in order to cure the foregoing deficiencies recognized in Appellant's Technical Proposal, the MTA and Flxible further contend that Appellant's Technical Proposal had to be rejected because Appellant's fuel consumption test was conducted in a manner not in accordance with the solicitation. This deviation allegedly resulted in a significant price advantage to Appellant and thus was said to be impermissible.

---

[16]Because the procurement procedure outlined in the solicitation contemplated post-bid discussions, it could not have been a competitive bid as stated by the MTA. Under competitive bid principles, a bidder cannot clarify his bid after opening. See Union Carbide Corporation, 56 Comp. Gen. 487 (1977), 77-1 CPD ¶243 (1977).

The primary deficiency in Appellant's test procedure revolved around its assumption that it could produce a bus under the MTA contract with a curb weight of 26,000 pounds. The validity of its fuel consumption test was dependent upon this being achieved.

The MTA recognized that potential bidders necessarily may not be able to test the identical bus which was to be provided under the MTA contract. In other words, unless a bidder previously had produced a bus identical to what was being asked for here, they would have to utilize a bus with a different configuration. Accordingly, bidders were told that:

> Test vehicles shall be equipped and configured in full conformance to the Administration's specifications with the exception of minor variations which have a negligible effect on fuel consumption. The curb weight estimate utilized for the test vehicle shall be fully documented with the rationale for same included in the Technical Proposal. (Underscoring added).

As explained by the MTA's Mr. Norbert Wagner, the foregoing meant that the curb weight of the bus used in the test was to be ballasted to approximate the curb weight of the bus to be furnished under the contract. (Tr. 226-227). Since the only bus available to Appellant for testing had a higher curb weight than 26,000 pounds, Appellant reduced the ballast required to approximate the loads produced by 30 passengers and a driver to obtain a test weight equal to the curb weight of the bus it would provide plus 4,650 pounds. This was found to be satisfactory to the MTA technical personnel and in compliance with the solicitation requirements.

The only question remaining is whether Appellant's target curb weight of 26,000 pounds properly was accepted. After reviewing data relating to the weight of buses recently provided by Appellant to the Los Angeles area, the MTA procurement officer determined that a reduction in curb weight of only 650 pounds would have to be achieved by Appellant in order to meet its test curb weight of 26,000 pounds. This was deemed feasible and the test results were accepted by the MTA procurement officer and his technical experts.

The overall determination of the relative desirability and technical adequacy of proposals is primarily a function of the procuring agency and it enjoys a reasonable range of discretion in the evaluation of proposals and in the determination of which proposal is technically acceptable. Compare RCA Corporation, Comp. Gen. Dec. B-183101, 75-2 CPD ¶302 (1975), p. 4. This function, after all, involves the exercise of judgment by the procuring agency's specialists and technicians. A technical determination of this type cannot be ignored by this Board in the absence of a clear showing of unreasonableness. Beilers Crop Service, MSBCA 1066 (September 16, 1982), p. 6.

Neither the MTA nor Flxible have offered any evidence to challenge the conclusion of the MTA procurement officer that a weight reduction of 650 pounds was feasible. The fact that it ultimately might not be achieved does not preclude acceptance of the Technical Proposal so long as there is a reasonable basis to now believe that the condition will be met. RCA Corporation, supra at p. 4. Accordingly, acceptance of Appellant's proposal was proper.

We turn next to a companion issue relating to the acceptability of the Flxible proposal which likewise was said to be based on an improper fuel consumption test. The alleged defect here was the use of a 4.56:1 rear axle ratio which purportedly increased fuel economy at the expense of gradability. Flxible represented in its Technical Proposal that its bus met the gradability requirements set forth in the solicitation when configured with a 4.56:1 rear axle ratio.

Two issues are presented. First there is a question as to whether Flxible was required to have its gradability test results certified by an independent third party. Second, there is a question as to whether the MTA procurement officer acted reasonably in accepting the Flxible gradability results and hence its fuel consumption test report.

With regard to the first issue, Exhibit A to the solicitation Special Requirements Form describes how the MTA planned to evaluate life cycle costs. The description mandates that each bidder order the performance of SAE J 1321 Type II test procedures to ascertain the fuel consumption of its bus. Exceptions and clarifications to the specified test procedure thereafter were listed. One of these clarifications (paragraph J) required all bidder data to be filled in on pages 4 and 5 of Exhibit A to be certified as accurate by the independent third party conducting the fuel consumption testing. Gradability results were to be listed by bidders on page 4 of Exhibit A. Such results, however, were not attainable from the SAE test specified. Additionally, no test for gradability was set forth in the solicitation. Flxible, therefore, construed the foregoing certification requirements as pertaining only to the fuel consumption test.

Although Appellant's test report contains the gradability data called for on page 4 of Exhibit A, there is no indication that any test was performed in this regard. Further, its certification is directed only to the SAE fuel consumption report mandated by the solicitation.

We conclude, therefore, that Flxible reasonably construed the solicitation as requiring a certification only with regard to the data used to perform the fuel consumption test. This was what would be utilized in evaluating bid prices and it was important, for this reason, that there be independent verification. Gradability was not to be evaluated in determining the low bidder. As long as each bidder offered to meet the minimum gradability requirements set forth in the solicitation, it seems unimportant as to what the precise data would indicate under certified testing.

This brings us to the second issue concerning whether the MTA procurement officer reasonably accepted the gradability results submitted by Flxible. We conclude that he did. Flxible represented that its gradability results were based both on road testing and computer simulation. While Appellant did present a computer simulation showing a failure to achieve specified gradability, this was not conclusive. The DDA SCAAN, submitted by Appellant, is only one of a number of tests for gradability. Further, there was no testimony that this computer program represented the standard industry test for gradability. The MTA's uncontroverted evidence was that a number of recognized road tests exist to measure gradability. Flxible's Mr. Kravitz confirmed this testimony and stated that other computer programs existed as well. The Hevsim program, for example, was developed for the Department of Transportation and was utilized by Flxible in determining its

gradability figures. Appellant's Mr. Hosie admitted that the Hevsim program would give higher readings for gradability than the DDA SCAAN. On the basis of the foregoing testimony, therefore, and in view of the fact that Flxible legally obligated itself to meet the gradability requirement at the rear axle ratio shown, we cannot say that the MTA procurement officer was unreasonable in accepting the gradability data submitted by Flxible.

Having determined that the Technical Proposals submitted by Appellant and Flxible reasonably were determined to be acceptable, we turn our attention to the evaluation of Price Proposals under step two[17] of the multi-step process. Initially, our concern is whether the evaluation factors appropriately were set forth in the solicitation.

COMAR 21.05.02.13 provides, in pertinent part, as follows:

> A. General. The contract is to be awarded to the responsible and responsive bidder whose bid meets the requirements and evaluation criteria set forth in the invitation for bids, and is either the lowest bid price or lowest evaluated bid price. The bid may not be evaluated for any requirement or criterion that is not disclosed in the invitation for bids.
>
> B. Determination of Lowest Bidder. Bids shall be evaluated to determine which bidder offers the lowest cost to the State in accordance with the evaluation criteria set forth in the invitation for bids. Only objectively measurable criteria which are set forth in the invitation for bids shall be applied in determining the lowest bidder. The State reserves the right to make the award by item, or groups of items, or total bid if it is in the best interest of the State to do so unless the bidder specifies in his bid that a partial or progressive award is not acceptable. (Underscoring added).

In applying comparable Federal regulations, the Comptroller General of the United States has stated the following:

> The "basis" of evaluation which must be made known in advance to the bidders should be as clear, precise and exact as possible. Ideally, it should be capable of being stated as a mathematical equation. In many cases, however, that is not possible. At the minimum, the "basis" must be stated with sufficient clarity and exactness to inform each bidder prior to bid opening, no matter how varied the acceptable responses, of objectively determinable factors from which the bidder may estimate within reasonable limits the effect of the application of such evaluation factor on his bid in relation to other possible bids. By the term "objectively determinable factors" we mean factors which are made known to or which can be ascertained by the bidder at the time his bid is being prepared. Factors which are based entirely or largely on a subjective determination to be announced by representatives of the

---

[17]The consideration of bids under step two of a multi-step procedure is done in accordance with competitive sealed bid principles. Hyster Company, supra. at p. 278.

contracting agency at the time of or subsequent to the opening of bids violate the principle for the reason that they are not determinable by the bidder at the time his bid is being prepared.

36 Comp. Gen. 380, 385 (1956).

Maintenance, standardization and life cycle costs all have been found to be properly includable as factors to be weighed in determining the low evaluated bidder. Eastman Kodak Company, Comp. Gen. Dec. B-194584, 79-2 CPD ¶105 (1979); Hasko-Air, Inc., Comp. Gen. Dec. B-192488, 79-1 CPD ¶190 (1979); 14 Comp. Gen. 268 (1934); 10 Comp. Gen. 261 (1930). Where these cost factors have not been described and evaluated with reasonable certainty, however, the procurement has been deemed defective. 33 Comp. Gen. 108 (1953), but see Remington Rand Corporation, et. al., Comp. Gen. Dec. B-204084.

Here bidders were told that the low evaluated bidder would be determined based on (1) the cost to the MTA for acquiring the buses, (2) fuel costs over 15 years or 500,000 miles, (3) tooling costs and (4) training costs. The method of determining fuel costs previously has been described. Special tooling costs represented the cost to the MTA of providing tools to its service facilities and mechanics which were unique to the buses to be purchased. Training costs represented the wage cost to the MTA involved in sending its operators and mechanics to class. No bidder has timely objected to the propriety of these factors as evaluation criteria. Further, both Appellant and Flxible were given the results of the Technical Proposal evaluation prior to the public opening of bids and neither objected to the MTA's determination of the number of hours of training required or the types and unit costs of special tools to be purchased for their buses. Accordingly, we conclude that bidders had a sufficient basis upon which to prepare their bids.

This leaves for determination the question of whether the MTA properly evaluated all bids in accordance with the objective criteria set forth in the solicitation. It is at this point where Appellant believes it truly was prejudiced.

First, Appellant objects to the MTA's refusal to permit an adjustment to its certified fuel test results based on published test results relating to weight reduction and its effect on fuel consumption. We conclude, however, that the MTA procurement officer acted properly. The solicitation made it clear that life cycle costs would be determined based on a specific certified road test for fuel consumption, an assumption of 500,000 miles useful life per bus and an average fuel cost of $1.50 per gallon. Since the numerical adjustments offered by Appellant were not contemplated by the SAE test procedure described in the solicitation, they properly were disregarded.

Second, Appellant takes exception to the evaluation of bids on a "per bus" basis. This evaluation procedure was not set forth in the solicitation and Appellant was not made aware of it until one hour prior to the public opening of Price Proposals. Further, Appellant contends that it was prejudiced by the application of the new evaluation procedure to its bid.

It is fundamental that the State may not evaluate bids on any basis not set forth in the solicitation. Further, notification to all bidders one hour before bid that the method of evaluation is to be changed is insufficient to constitute a binding amendment to the solicitation. See COMAR 21.05.02.08C; compare Jacobs Transfer, Inc; Kane Transfer Company, 53 Comp. Gen. 797, 74-1 CPD ¶213 (1974). Accordingly, we must focus solely on what the original solicitation prescribed as to the evaluation of bids.

Exhibit D to the solicitation Special Requirements Form (Appendix 1) was to be used to record all cost factors and ascertain the low evaluated bidder. This form clearly contemplated the evaluation of bids based on the total cost to the MTA associated with the purchase of 80 buses. The MTA, therefore, had no right to analyze bids on a unit cost basis.

Both the MTA and Flxible argue, however, that the unit cost approach is no different than a total cost approach. All that changes, we are told, is that the numbers get larger by a factor of 80. We disagree.

In this instance, the MTA has not derived a true unit cost of each bus. The number and value of tools determined during step one proceedings is not related to the number of buses ordered. Instead, it is a function of the number of repair facilities and mechanics. Similarly, the number of mechanics and operators to be trained is a function of existing manpower and expertise rather than the number of buses ordered. Unless a total cost for tools and training is first derived and then divided by 80, the MTA's unit price analysis is not equivalent to what the solicitation called for.

Even if it somehow could be argued that the solicitation contemplated a unit price evaluation, the procedure chosen by the MTA still would have been improper. The lowest evaluated bid must be measured by the total work required under the contract. Unit prices cannot be used in an evaluation where the extension thereof would not produce the lowest cost to the State. Compare Square Deal Trucking Co., Inc., Comp. Gen. Dec. B-183695, 75-2 CPD ¶206 (1975), Aff'd on Recon., 75-2 CPD ¶303 (1975); 50 Comp. Gen. 583 (1971). Since the number of tools to be purchased per mechanic or division and the training costs per mechanic have no directly measurable relationship to the number of buses being purchased, it was wrong to add the cost thereof to the unit price for bus acquisition and fuel. Multiplying the unit cost obtained in this manner by a factor of 80 would not be an accurate measure of the true costs to be incurred by the MTA in purchasing and operating the 80 or more buses to be received under this contract.

In rejecting the method of evaluation used by the MTA, we now must determine the status of the procurement. We cannot simply apply the total cost evaluation formula set forth in the solicitation because there is no basis for measuring how many hours each mechanic is to be trained.[18] The record shows only that there are 289 mechanics and that Appellant's training program is more extensive than Flxible's. Whether each mechanic requires all of the training outlined is not a matter of record and was not determined by the

---

[18]The training cost for bus operators is irrelevant in that each bidder has proposed 1 hour of training per operator at $15/hour. This item will not affect the relative position of the bidders.

MTA procurement officer. Similarly, we are unable to determine whether all mechanics will work on the suspension system and thus require a set of metric tools.

For these reasons, we remand this appeal to the MTA procurement officer to ascertain the total training and tool costs which reasonably are to be incurred by the MTA as a result of purchasing each competitor's bus. If the standardization costs for Appellant are higher than those for Flxible by a factor of $27,818,[19] award properly may be made to Flxible provided that it is adjudged to be responsible. In making this evaluation, there is no basis to assume different cost factors for transmission training and tools.

The fact that the number and manner in which mechanics were to be trained was not evident in the solicitation is not fatal to the procurement. While the MTA approach to training mechanics appropriately should have been stated specifically in the solicitation since it does involve a degree of subjectivity, we conclude that it would not have affected the submissions of the bidders. The respective bidders here provided a training program setting forth various classes for mechanics and the number of hours required for each. The total number of hours of training then was multiplied by $20 to get a training cost per mechanic. If the MTA instead had stated that all 289 mechanics were to receive the full training, bidders simply would have multiplied the training costs per person by this figure. If the mechanics were broken down in the solicitation by specialty, an appropriate calculation likewise would have been made by bidders based on the detailed training program set forth in their respective Technical Proposals. The constant, therefore, is the training program, i.e., the hours of training needed by mechanics as to each system in the bus. This is what ultimately will determine standardization costs. For purposes of the foregoing determination, bidders were to rely on their experience with other bus systems and their specialized knowledge as to the complexity of the bus to be provided. Since the number of mechanics to be trained was irrelevant to this determination, award under the basis outlined above will not violate the free and full competition requirement implicit in Maryland's procurement laws and regulations. Compare 36 Comp. Gen. 380 (1956); Remington Rand Corporation, supra.

---

[19] A comparison of the bids without inclusion of standardization costs appears as follows:

	Appellant		Flxible	
	Unit Price	Total	Unit Price	Total
Buses	$142,350	$11,388,800	$149,562	$11,964,960
Delivery	1,640	131,200	512	40,960
LCC Fuel	173,812	13,904,982	168,086	13,446,880
Total	$317,812	$25,424,982	$318,160	$25,452,800

Appellant, at this point, is low bidder by $27,818 or $348 per bus.

For the foregoing reasons, the appeal is sustained in part and remanded to the MTA procurement officer for further deliberations consistent with this decision.

APPENDIX 1

Exhibit D to the Special Attachments Form consisted of three pages. Page 1 was as follows:

LIFE CYCLE COST EVALUATION

		Manufacturer A	Manufacturer B
1. Fuel Economy	Est. Fuel Cost	$_____	$_____
	TOTAL EXPECTED COST: LIFE CYCLE COST ELEMENT	$_____	$_____

Page 2 addressed standardization costs as follows:

	Manufacturer A	Manufacturer B
1. Special Tools Required	$_____	$_____
2. Mechanical Training	_____	_____
3. Driver Training	_____	_____
TOTAL EXPECTED COST: STANDARDIZATION ELEMENT	$_____	$_____

Page 3 summarized the cost elements as follows:

SUMMARY OF CALCULATIONS

	Manufacturer A	Manufacturer B
Life Cycle Cost	$_____	$_____
Standardization	$_____	$_____
Total	$_____	$_____
Total Bid Price for Contract Item Nos. 1 and 2	$_____	$_____
Adjustments from Summary	$_____	$_____
Net	$_____	$_____