

# Guide Note: Price Quality Method for evaluating tenders



Queensland  
Government

# Price Quality Method Application

## What is the Price Quality Method?

The Price Quality Method (PQM) of evaluating tenders for building contracts aims to establish value for money in the tender assessment process. It provides a method to evaluate tenders where the design is not fully documented based on the price and the non-price aspects of the tender and seeks to identify the tender representing the best value for money.

The PQM is best applied where the tender evaluation includes carefully planned project specific non-price criteria to determine the technical quality of the tenderers to deliver the specific project, and a quality premium can be derived from the tenderer submission.

The PQM establishes in monetary terms the 'quality premium' or notional value assigned to each tender compared to the tender with the lowest non-price criteria score (note, not the lowest tender price). This is achieved by:

- first scoring the tendered project specific non-price criteria and calculating a dollar value for the non-price criteria to establish the 'quality premium',
- then apportioning the quality premium to each of the tenders according to the project specific non-price criteria scores and, for the purpose of tender evaluation only, the apportioned value is deducted from each of the tender sums.
- The tenderer with the lowest score for project specific non-price criteria gets no quality premium deduction, the other tenderers receive quality premium deductions relative to the score for project specific non-price criteria below

The PQM attempts to quantify how much one might pay for potentially 'better quality' over 'adequate quality' represented by the tenderer with the lowest project specific non-price criteria score.

## How does PQM work?

The PQM calculates a dollar value for the non-price criteria score of each tenderer, which is deducted from each tenderer's tender price to establish a final ranking of the tenders.

Out of a total possible amount of 100 points, the non-price criteria are recommended to be assigned a score ranging between 10 and 40 points (see PQM weightings below).

The Tender Evaluation Panel's initial task is to score each tenderer's non-price criteria submission. The tenderers' tender sums are not disclosed to the Panel at this time. Each price criteria are scored out of 5 (or any usual scale, e.g. could be out of 100) as per the normal tender evaluation process. For example, a tenderer's score for say a criterion such as 'organisational performance' may be 4 out of a possible 5 points. Each tenderer's non-price score is entered into the evaluation spreadsheet and is totalled. Once this has been completed, each tenderer's tender sum can be revealed to the Tender Evaluation Panel and entered into the spreadsheet.

The difference is calculated between the tenderer with the lowest total non-price criteria score and all other tenderers' non-price criteria scores. This difference is used to establish the quality premium advantage in dollar terms that each tenderer gets over the tenderer with the lowest non-price criteria score.

The PQM tender evaluation methodology uses non-price criteria recommended to be a total of between 10 to 40 points. It is important to note that this does not mean for example in the case of 40 points non-price, that the tender evaluation is 40 percent non-price and 60 percent price. It is not a percentage-based assessment. Rather, the PQM uses a formula to calculate the quality premium, which is then used as a basis to establish a final ranking of the tenders.

The quality premium calculation is:

$$\frac{\text{Tender Estimate} \times \text{Weighted Sum Margin}}{\text{Price Weight}}$$

Where:

<b>Tender Estimate</b>	is the tender estimate determined prior to the opening of tenders.
<b>Weighted Sum Margin</b>	is the total of the scores for each tenderer's response to the non-price criteria, less the lowest non-price criteria score (i.e. the amount above the lowest tenderer's total score for non-price criteria). The Weighted Sum Margin for each tenderer is calculated as follows:
Weighted Sum Margin	= Weighted Sum minus the lowest Weighted Sum score of the tenderers
Weighted Sum	= the sum of the Index values
Index value	= $\frac{\text{Grade} \times \text{Weight}}{5}$ (score range)
Grade	= score
Weight	= points for the non-price criterion
<b>Price Weight</b>	is calculated by deducting from 100 the total of the non-price criteria points. For example, if the non-price criteria are given a total weighting of 30 points, then the Price Weight (the denominator in the formula) in the calculation will be 70.

The higher the price weight, the lower the quality premium; the greater the difference in non-price criteria scores, the higher the quality premium.

Each tenderer's quality premium is calculated and then deducted from that tenderer's tendered price for the purposes of ranking the tenders. The lowest tender amount after adjustment for the quality premium becomes the highest ranked or preferred tenderer.

## PQM Weightings

As stated above, the use of the PQM tender evaluation methodology should only be applied when evaluating a tender for contracts where the design is not fully documented.

The scoring of non-price criteria is recommended to be out of 5 to ensure consistency in application (refer to the 'Scale of Scores' in Appendix 1). Any score lower than 2.5 (i.e. 50% of the total score of any criterion) may result in the tenderer not being considered further, provided that the conditions of tender give this discretion to the Principal.

The Department of Energy and Public Works is available to provide guidance on appropriate non-price criteria and their weightings for particular projects. Under Policy Requirement 6 of the Building Policy Framework, for Best Practise Principles projects, agencies must consult with the Contracts Committee and supporting advisory groups such as an Industry Reference Group prior to calling tenders on the proposed evaluation criteria and weightings to be used in the selection of suppliers".

The below table sets out the recommended suggested Non-Price Criteria Points for PQM to ensure an appropriate balance between the quality premium and cost factors.

## Suggested Non-Price Criteria Points for PQM

Form of Contract	Total Number of Points
<b>Lump Sum Design and Construct</b>	
Low Complexity (e.g. greenfield basic construction)	10
Higher Complexity (e.g. complex site conditions / very preliminary design)	20
<b>Managing Contractor</b>	
Low complexity and advanced design concept (e.g. greenfield basic construction)	20
High Complexity (e.g. complex site conditions / very preliminary design)	30-40

Consideration should be given to the quality premium that government agencies may be prepared to pay to achieve the better outcomes identified in the non-price criteria. To assist this process, prior to undertaking the tender process, sensitivity analyses can be carried out in conjunction with establishing the appropriate non-price criteria and points, to calculate the likely value of quality premiums and to discuss with the relevant members of the project team and Tender Evaluation Panel prior to going to tender.

As the range of scores will generally be between 2 and 5 out of 5 for each of the criteria, departments should be aware that a 1-point difference in scores across all non-price criteria for a project with 20 points of non-price criteria equates to approximately 5% of the tender estimate. For example, for a \$10m project with 20 points assigned to the non-price criteria, a 1-point difference in an overall non-price criteria score equates to a \$500,000 quality premium. For the same value project with 30 points assigned to the non-price criteria, a 1-point difference equates to approximately 8.5% of the tender estimate, which amounts to an \$850,000 quality premium. These amounts should be used as a guide only as several factors affect the calculation of the quality premium.

Departments should assign the points for each non-price criteria in relation to the importance each criterion has on the project outcome.

For non-price criteria, 40 points should only be assigned for high complexity projects using the Managing Contractor form of contract and where the relevant members of the project team have agreed to such a high allocation of points based on identified project constraints and risks. As a rule, a maximum of 30 points for non-price criteria should be used on most projects.

A spreadsheet is available at [the forgov BCM Templates web page](#) to assist agencies in using this tender evaluation methodology and undertaking sensitivity analyses.

## Quick Steps for using PQM

Using the PQM Spreadsheet:

1. Establish the Project Tender Estimate and input this figure into the spreadsheet. For Managing Contractor tenders also input the project construction cost estimate amount for calculation of Stage 2 Off-site overhead fees.
2. Enter the non-price criteria and applicable points into the spreadsheet (additional columns can be added here to allow for additional criteria).

3. Score the tendered non-price criteria in the usual way and enter scores into the spreadsheet. The index column will automatically update with a weighted non-price score and a total Weighted Sum.
4. Enter the tender sums for each tenderer (including any valued adjustments as advised by the quantity surveyor for alternatives or qualifications).

The PQM spreadsheet will deduct the quality premium calculated for each tenderer from their tender sum and show the ranking of the tenderers, with the lowest adjusted tender amount ranking the highest.

The first ranked tenderer (identified as 1) is the preferred tenderer for the project.

## Further information

Further information can be obtained from:

### **Contract Services**

Building Division  
Department of Energy and Public Works  
GPO Box 2457  
Brisbane QLD 4001

Email [contract.services@hpw.qld.gov.au](mailto:contract.services@hpw.qld.gov.au)

Fax 07 3008 2949

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## Appendix 1: Scoring Non-Price Criteria – Scale of Scores

Score	Description	Criteria
5	Excellent	<p>Compliant.</p> <p>Exceeds specified performance or capability and the additional input adds value.</p> <p>Tenderer has an excellent understanding of the requirement.</p> <p>No weaknesses or deficiencies.</p> <p>Excellent probability of success.</p>
4	Very Good	<p>Compliant.</p> <p>Tenderer's supporting statement indicates a very good understanding of the requirement.</p> <p>No weaknesses or deficiencies.</p> <p>Very good probability of success.</p>
3	Good	<p>Compliant.</p> <p>Tenderer's supporting statement indicates a good understanding of the requirement.</p> <p>No major weaknesses or deficiencies.</p> <p>Good probability of success.</p>
2	Marginally Acceptable	<p>Tenderer's supporting statement indicates a low level of understanding of the requirement.</p> <p>Some major weaknesses or deficiencies requiring further clarification.</p> <p>Low probability of success.</p> <p>Able to be not considered further (if contract provisions provide).</p>
0-1	Unacceptable	<p>Non-compliant, i.e. provides unsatisfactory responses or failed to address the criterion at all.</p> <p>Very Low probability of success.</p>