# REVISED GUIDELINES FOR CONTRACT PRICE ESCALATION

## 1. SCOPE AND APPLICATION

1.1. These Guidelines shall govern requests for price escalation during implementation of contracts for the procurement of goods and infrastructure projects under extraordinary circumstances pursuant to and in accordance with Section 61 of Republic Act No. 9184 (R.A. 9184), otherwise known as "Government Procurement Reform Act" and its Implementing Rules and Regulations Part A (IRR-A). No contract price escalation for consulting services shall be allowed.

1.2. These Guidelines shall apply to all branches, constitutional commissions and offices, agencies, departments, bureaus, offices and instrumentalities of the Government, including government-owned and/or controlled corporations (GOCCs), government financial institutions (GFIs), state universities and colleges (SUCs), and local government units (LGUs).

## 2. PURPOSE

These Guidelines are being formulated to meet the following objectives:

2.1. To prescribe the rules and procedures in the approval by the Government Procurement Policy Board (GPPB) of requests for price escalation;

2.2. To ensure that the task mandated by Section 61 of R.A. 9184 shall be undertaken competently, objectively and expeditiously by the GPPB and the National Economic and Development Authority (NEDA); and

2.3. To establish the legal and technical parameters for an objective determination of events that will result to extraordinary circumstances in accordance with the Civil Code of the Philippines.

## 3. DEFINITION OF TERMS

3.1. ***Price Escalation***. Refers to an increase in the contract price during contract implementation on the basis of the existence of "extraordinary circumstances" as determined by the NEDA and upon prior approval of the GPPB.

3.2. ***Extraordinary Circumstances***. Refers to an event or occurrence, or series of events or occurrences during contract implementation which give/s rise to price escalation as may be determined by the NEDA, in accordance with the provisions of the Civil Code of the Philippines, as enumerated in Section 4 hereof.

3.3. ***Extraordinary Inflation or Deflation***. Refers to the decrease or increase of the purchasing power of the Philippine currency which is unusual or beyond

the common fluctuation in the value of said currency, in accordance with the two (2) standard deviation rule computed under Section 5.2.2 of these Guidelines, and such decrease or increase could not have been reasonably foreseen or was manifestly beyond the contemplation of the parties at the time of the establishment of the obligation.

3.4. ***Fortuitous Event.*** Refers to an occurrence or happening which could not be foreseen, or even if foreseen, is inevitable. It is necessary that the contractor or supplier is free from negligence. Fortuitous events may be produced by two (2) general causes: (1) by nature, such as but not limited to, earthquakes, storms, floods, epidemics, fires, and (2) by acts of men, such as but not limited to, armed invasion, attack by bandits, governmental prohibitions, robbery, provided that they have the force of an imposition which the contractor or supplier could not have resisted.

3.5. ***WPI.*** Refers to the Wholesale Price Index, which measures the monthly changes in the general price level of commodities, usually in large quantities, that flow into the wholesale trading system.

3.6. ***CPI.*** Refers to the Consumer Price Index, which measures the monthly changes in the average retail prices of goods and services commonly purchased by a particular group of people in a particular area.

3.7. ***PPI.*** Refers to the Producer Price Index, which measures the average change in the unit price of a commodity as it leaves the establishment of the producer.

## 4. EXTRAORDINARY CIRCUMSTANCES

For purposes of these Guidelines, the term "extraordinary circumstances" shall refer to the following articles of the Civil Code of the Philippines:

4.1. Article 1174, as it pertains to Ordinary Fortuitous Events or those events which ordinarily happen or which could be reasonably foreseen but are inevitable, such as, but not limited to the following:

a. Typhoons;
b. Thunderstorms;
c. Flooding of lowly areas; and
d. Vehicular accidents;

Provided that the following requisites are present:

(i) The cause of the extraordinary circumstance must be independent of the will of the parties;
(ii) The event must be either unforeseeable or unavoidable;
(iii) The event must be such as to render it difficult but not impossible for the supplier or contractor to fulfill his obligation in a normal manner or within the contemplation of the parties;
(iv) The supplier or contractor must be free from any participation in or

aggravation of the injury to the procuring entity; and

(v) The allowance for price escalation should an ordinary fortuitous event occur is stipulated by the parties or the nature of the obligation requires the assumption of risk.

4.2. Article 1250, as it pertains to Extraordinary Inflation or Deflation, as defined in Section 3.3 hereof.

4.3. Article 1680, as it enumerates Extraordinary Fortuitous Events or those events which do not usually happen, such as, but not limited to the following:

a. Fire;
b. War;
c. Pestilence;
d. Unusual flood;
e. Locusts; and
f. Earthquake;

Provided that the circumstances before, during and after the event shall be taken into consideration.

## 5. REVIEW AND APPROVAL PROCESS

In the review and approval of a request for price escalation, the requesting procuring entity shall comply with the following conditions before the same can be acted upon:

5.1. Endorsement. The head of the procuring entity concerned shall endorse the request for price escalation to the NEDA, through its Director-General, accompanied by the following documents:

a. A certification from the head of the procuring entity stating that the request for price escalation is justified in accordance with R.A. 9184, its IRR, and these Guidelines;

b. A description of the nature of the requested price escalation as well as the identification of the specific legal and technical parameters stated in these Guidelines that have been complied with by the request. For the technical requirements, supporting documents shall contain information/data in accordance with Section 5.2.2 hereof;

c. Certified copy of the original contract including the original scope of work and the original contract price, as awarded;

d. Original cost estimates and/or bill of materials of the items, goods or components affected by the request for price escalation and the proposed escalated prices thereof, as applicable to the type of contract, including a summary computation by the requesting entity of the proposed escalated prices in accordance with Sections 5.2.2 or 5.3, as deemed applicable;

Provided, however, that the procuring entity shall maintain a detailed computation of the proposed price escalation;

e. Original and, if applicable, revised schedule of contract implementation;

f. Original request for price escalation submitted by the contractor/supplier to the procuring entity, including information on the quantity of materials/components and/or scope of work being proposed for price escalation;

g. Data on the price indices of the materials or goods, including the source of data used in the detailed computation of the proposed price escalation as referred to in item (d) above, covering a historical thirty (30)-month period reckoned from the date of bid opening; and

h. Other information/documents as may be required by NEDA/GPPB.

5.2. Two-Stage Review Process. The review process shall commence only after the NEDA has acknowledged the completeness of the request in accordance with this Section. A request for price escalation shall only be granted if it satisfies both the First and Second Stage reviews.

5.2.1. First Stage: Legal Parameters. This stage shall establish the legal basis for extraordinary circumstances that will allow contract price escalation. The determination shall strictly be in accordance with any of the extraordinary circumstances mentioned in Section 4 of these Guidelines.

5.2.2. Second Stage: Technical Parameters. After establishing the legal basis under the First Stage review, the request for price escalation shall be further reviewed in accordance with the technical parameters stipulated herein.

a. Standard Deviation. The escalation in the price of an item, good, or component, as requested, should at least be two (2) standard deviations from the mean calculated based on the historical trend of applicable price indices covering a historical data of thirty (30)-months reckoned from the date of bid opening. In computing for the standard deviation, the following shall be observed:

(i) The prevailing monthly price index to be used in computing the mean shall be determined based on the volatility of the price concerned. Data for a locally available good, item, or component shall be those issued/published by the appropriate entity.

(ii) In case of an international good, item, or component wherein appropriate data is not available from domestic sources, data shall be those issued/published by the appropriate foreign entity.

(iii) In case of variation orders involving work items exactly the same or similar to those in the original contract, the applicable price indices for said work items prevailing on the date of bid opening of the original contract shall be used.

(iv) In case of variation orders involving new work items, the applicable price indices for said new work items prevailing on the date the variation order was approved shall be used.

b. Ten Percent (10%) Increase. If there are no available historical data for the appropriate price indices such that Section 5.2.2.a above becomes inapplicable, the request for price escalation of an item, good or component shall be reviewed pursuant to this section wherein the subject applicable price index of a request should have registered an increase of more than ten percent (10%), as determined from the prevailing price index on the date of bid opening.

In case there are no applicable price indices for the item, good, or component, the applicable general wholesale price index shall be used.

5.2.3. Detailed Technical Parameters/Applicable Price Indices for Goods. The detailed computation and validation of price escalation for goods as described in Section 5.2.2 above shall use the most appropriate price index of the commodity group under the three types of price indices, WPI, CPI, and PPI; Provided that, based on availability and applicability, the WPI for the commodity group shall first be utilized, followed by the CPI, and lastly the PPI. The indices for commodity groups shall be those presented under Annex A, as classified and issued by the National Statistics Office (NSO). For an item, good or component wherein the prevailing price index cannot be established, the review shall be conducted utilizing the most relevant and applicable index.

5.2.4. Detailed Technical Parameters/Applicable Price Indices for Infrastructure Projects. The detailed computation and validation of price escalation for infrastructure projects as described in Section 5.2.2 above shall use the fluctuation factor K representing the increase or decrease of the value of an item as a result of price fluctuation.

a. The value K varies for each item of work and is represented by the following:

$$K = a + b\,(X_i/X_o) + c\,(Y_i/Y_o) + d\,(Z_i/Z_o) + \ldots n\,(N_i/N_o)$$

Where:

a = is a 0.15 fixed coefficient representing

contractor's profit, and other non-adjustable items.

$b, c, d, \ldots n$ = are the coefficients representing the proportionate value of each pay item to the total. $b + c + d \ldots + n = 0.85$.

$X_i, Y_i, Z_i, \ldots N_i$ = are variables representing the current price indices of the cost of labor, materials and other components of the contract during the period under consideration at the time of the request for price escalation, based on the original or duly approved revised schedule of contract implementation, subject to Section 8 hereof.

$X_o, Y_o, Z_o, \ldots N_o$ = are variables representing the current price indices of the cost of labor, materials and other components of the contract on the date of bid opening or approval of variation order.

The sum of $a + b + x + \ldots n$ must be equal to 1 (100%)

b. The fluctuation factor and its application in the parametric formula shall include, among others, those listed in Annex B.

5.3. Amount of Price Escalation to be Granted. After this determination, the amount of escalation to be granted in the case of goods should only be the remaining amount over and above the thresholds as computed under Sections 5.2.2.a or 5.2.2.b hereof. In the case of infrastructure projects, the amount to be granted shall be determined based on the following:

| | | |
|---|---|---|
| Where | $K > 1.05$, | $P = P_o (K - 0.05)$ |
| Where | $0.95 \leq K \leq 1.05$, | $P = P_o$ |
| Where | $K < 0.95$, | $P = P_o (K + 0.05)$ |

Where P - escalated bid/unit price
$P_o$ - original bid/unit price
K - fluctuation factor

5.4. Period and Frequency of Requests for Price Escalation. Requests for price escalation shall only be made for cost items already incurred by the contractor/supplier, as supported by official receipts, sales invoices, or other documentary evidence. No request for price escalation shall be made for prospective application. Further, price escalation shall only be granted to those items included in a specific request; Provided further, that requests for price escalation shall be made not less than six (6) months reckoned from the

date of the effectivity of the contract, and not less than six (6)-month period thereafter, except for price escalation being requested at the completion of the contract.

5.5. Misrepresentation. Any misrepresentation made by the procuring entity or the contractor/supplier in any stage of the processing of a particular request for price escalation shall cause the automatic denial/disapproval of said claim.

5.6. Recommendation/Approval. Pursuant to Section 61.2 of the IRR-A of R.A. 9184, the burden of proving the occurrence of extraordinary circumstances that will allow for price escalation shall rest with the procuring entity requesting for such escalation. NEDA shall only respond to such request after receiving the necessary proof and documentation. Upon completion of its review pursuant to Section 5.2 hereof, NEDA shall submit its recommendations to the GPPB for appropriate action. The GPPB shall then approve/act upon the request for price escalation during one of its meetings, to be attended by the head of the procuring entity concerned or his duly authorized representative/s.

## 6. REVIEW OF CONTRACT PRICES AFTER COMPLETION OF THE CONTRACT

Upon completion of the contract, the procuring entity shall calculate the amount of price escalation supposedly due the contractor/supplier/consultant to consider likewise any downward movement in prices during the entire contract implementation period. If the resulting amount of price escalation is lower than the amount of price escalation already paid, the amount of overpayment shall be deducted by the procuring entity from the retention money, in case of infrastructure projects, or the warranty security, in case of goods, on or before its expiration.

## 7. AUTHORITY TO APPROVE CONTRACT PRICE ESCALATION

7.1. The head of the procuring entity shall not pay any contract price escalation until after the GPPB has approved the claim.

7.2. The approval by the GPPB of the request for contract price escalation shall in no way be construed as an approval or validation of any irregularity committed by the requesting entity during the procurement process.

## 8. OTHER CONDITIONS FOR APPROVAL

8.1. In case the project is behind schedule based on the approved Project Evaluation Review Technique/Critical Path Method (PERT/CPM) network or schedule, price escalation on the portion of work that should have been, but was not, actually accomplished within the period shall be based on the applicable price index for the period in which it should have been accomplished. Payment of the computed amount shall not be made until said

unaccomplished portion of the work is completed and upon prior approval of the GPPB and the head of the procuring entity.

8.2. Where advance payment has been made, no price escalation shall be granted for the following:

a. That portion of work accomplished during the period corresponding to a value equal to the amount of recoupment of advance payment; and

b. The amount of materials for which advance payment was made.

## 9. AMENDMENT AND ADDENDA

The GPPB may amend these Guidelines as may be necessary. Nevertheless, the GPPB may formulate supplemental guidelines in the form of addenda or annexes for the review process as stipulated in Section 5.2 hereof without need of amending these Guidelines.

## 10. TRANSITORY CLAUSE

10.1. Claims for price escalation for contracts completed after the effectivity of these Guidelines shall be filed within two (2) years from completion of the contract concerned.

10.2. Claims for price escalation for contracts the Invitation to Apply for Eligibility and to Bid (IAEB) for which were issued after the effectivity of R.A. 9184 and completed before the effectivity of these Guidelines shall be filed not later than two (2) years from the date of effectivity of these Guidelines.

10.3. The thirty (30) – month historical data prescribed in computing for two (2) standard deviations as provided in Section 5.2.2.a shall apply to price escalation claims for contracts the IAEB for which were issued after the effectivity of these Guidelines.

## 11. EFFECTIVITY CLAUSE

These Guidelines or any amendments thereof shall take effect immediately after publication in the Official Gazette or a newspaper of general nationwide circulation and upon filing with the University of the Philippines Law Center of three (3) certified copies of these Guidelines.

## ANNEX A. PRICE INDICES FOR COMMODITY GROUPS

The indices listed herein shall be used for the detailed computation and validation of price escalation for goods

WPI Commodity Groups:

a.1 food;
a.2 beverages and tobacco;
a.3 crude materials except fuel;
a.4 mineral fuels, lubricants and related materials;
a.5 chemicals including animal and vegetable oils and fats;
a.6 manufactured goods classified chiefly by materials;
a.7 machinery and transport equipment; and
a.8 miscellaneous manufactured articles.

CPI Commodity Groups:

b.1 food, beverages and tobacco;
b.2 clothing;
b.3 housing and repairs;
b.4 fuel, light and water;
b.5 services; and
b.6 miscellaneous.

PPI Commodity Groups.

c.1 beverage;
c.2 tobacco;
c.3 textile;
c.4 leather products;
c.5 footwear and wearing apparel;
c.6 wood and wood products;
c.7 furniture and fixtures;
c.7 paper and paper products;
c.8 publishing and printing;
c.9 chemical products;
c.10 petroleum products;
c.11 rubber products;
c.12 plastic products;
c.13 non-metallic mineral products;
c.14 miscellaneous non-metallic mineral;
c.15 glass and glass products;
c.16 cement;
c.17 basic metals;

c.18 iron and steel;
c.19 non-ferrous metal;
c.20 fabricated metal products;
c.21 machinery;
c.22 electrical machinery;
c.23 transport equipment; and
c.24 other manufacturing industries.

## ANNEX B. PARAMETRIC FORMULA FOR INFRASTRUCTURE PROJECTS

The fluctuation factor and its application in the parametric formula shall include among others, any or combination of the following:

1. Common earthwork fluctuation factor for clearing and grubbing, subgrade preparation, common excavation, common borrow, embankment construction, common fill or backfill and select borrow.

   K1 = 0.15 + 0.05 (Li/Lo) + 0.60 (Ei/Eo) + 0.20 (Fi/Fo)

2. Rock excavation fluctuation factor

   K2 = 0.15 + 0.08 (Li/Lo) + 0.27 (Zi/Zo) + 0.12 (Fi/Fo) + 0.38 (Ei/Eo)

3. Structural excavation fluctuation factor

   K3 = 0.15 + 0.08 (Li/Lo) + 0.19 (Fi/Fo) + 0.58 (Ei/Eo)

4. Structural backfill fluctuation factor

   K4 = 0.15 + 0.15 (Li/Lo) + 0.17 (Fi/Fo) + 0.53 (Ei/Eo)

5. Daywork fluctuation factor for equipment

   K5 = 0.15 + 0.05 (Li/Lo) + 0.20 (Fi/Fo) + 0.60 (Ei/Eo)

6. Daywork fluctuation factor for labor

   K6 = 0.15 + 0.85 (Li/Lo)

7. Graded subbase or vase course fluctuation factor using screened or processed aggregate, granular materials, crushed adobe or the like

   K7= 0.15 + 0.02 (Li/Lo) + 0.62 (Bi/Bo) + 0.05 (Fi/Fo) + 0.16 (Ei/Eo)

8. Asphaltic materials fluctuation factor for prime or tack coat.

   K8 = 0.15 + 0.01 (Li/Lo) + 0.82(Ai/Ao) + 0.01 (Fi/Fo) + 0.01 (Ei/Eo)

9. Asphaltic concrete fluctuation factor for bituminous wearing or surface course

K9 = 0.15 + 0.01 (Li/Lo) + 0.62 (Ai/Ao) + 0.12 (Bi/Bo) + 0.03 (Fi/Fo) + 0.07 (Ei/Eo)

10. Portland cement concrete pavement (PDCP) fluctuation factor

K10 = 0.15 + 0.02 (Li/Lo) + 0.47 (Ci/Co) + 0.21 (Bi/Bo) + 0.02 (Di/Do) + 0.03 (Fi/Fo) + 0.10 (Ei/Eo)

11. Concrete fluctuation factor for curb, gutter and sidewalk

K11 = 0.15 + 0.06 (Li/Lo) + 0.36 (Ci/Co) + 0.16 (Bi/Bo) + 0.03 (Di/Do) + 0.06 Fi/Fo) + 0.18 (Ei/Eo)

12. Reinforced concrete structures fluctuation factor for bridge, culvert, retaining wall, bulkhead, piles, precast, parapet wall, railing, footing, columns, supporting slab and beam

K12 = 0.15 + 0.03 (Li/Lo) + 0.28 (Ci/Co) + 0.13 (Bi/Bo) + 0.03 (Di/Do) + 0.25 (Ri/Ro) + 0.03 (Fi/Fo) + 0.10 (Ei/Eo)

13. Reinforced concrete structures fluctuation factor for headwall, catch basin, manhole, drop inlet concrete post.

K13 = 0.15 + 0.21 (Li/Lo) + 0.25 (Ci/Co) + 0.03 (Di/Do) + 0.19 (Ri/Ro) + 0.09 (Bi/Bo) + 0.02 (Fi/Fo) + 0.06 (Ei/Eo)

14. Reinforced concrete pipe (RCP) or culvert pipe (RCCP) fluctuation factor

K14 = 0.15 + 0.05 (Li/Lo) + 0.61 (Qi/Qo) + 0.02 (Ci/Co) + 0.01 (Bi/Bo) + 0.04 (Fi/Fo) + 0.12 (Ei/Eo)

15. Non-reinforced concrete pipes fluctuation factor

K15 = 0.15 + 0.13 (Li/Lo) + 0.69 (Qi/Qo) + 0.02 (Ci/Co) + 0.01 (Bi/Bo)

16. Concrete for structure Class A or B fluctuation factor

K16 = 0.15 + 0.03 (Li/Lo) + 0.41 (Ci/Co) + 0.19 (Bi/Bo) + 0.09 (Di/Do) + 0.04 (Fi/Fo) + 0.09 (Ei/Eo)

17. Grouted rip-rap or stone masonry fluctuation factor

K17 = 0.15 + 0.18 (Li/Lo) + 0.27 (Ci/Co) + 0.13 (Bi/Bo) + 0.07 (Fi/Fo) + 0.20 (Ei/Eo)

18. Concrete masonry (CHB) fluctuation factor

K18 = 0.15 + 0.33 (Li/Lo) + 0.30 (Qi/Qo) + 0.13 (Ci/Co) + 0.04 (Bi/Bo) + 0.01 (Fi/Fo) + 0.04 (Ei/Eo)

19. Reinforcing steel bars fluctuation factor

K19 = 0.15 + 0.06 (Li/Lo) + 0.67 (Ri/Ro) + 0.04 (Fi/Fo) + 0.08 (Ei/Eo)

20. Structural steel works fluctuation factor

K20 = 0.15 + 0.03 (Li/Lo) + 0.71 (Si/So) + 0.03 (Fi/Fo) + 0.08 (Ei/Eo)

21. Demolition of concrete structure fluctuation factor

K21 = 0.15 + 0.07 (Li/Lo) + 0.20 (Fi/Fo) + 0.58 (Ei/Eo)

22. Demolition of PCCP strip fluctuation factor

K22 = 0.15 + 0.09 (Li/Lo) + 0.19 (Fi/Fo) + 0.57 (Ei/Eo)

23. Demolition AC pavement strip fluctuation factor

K23 = 0.15 + 0.05 (Li/Lo) + 0.20 (Fi/Fo) + 0.60 (Ei/Eo)

24. Painting fluctuation factor with use of equipment

K24 = 0.15 + 0.28 (Li/Lo) + 0.48 (Ni/No) + 0.02 (Fi/Fo) + 0.07 (Ei/Eo)

25. Painting fluctuation factor using labor only

K25 = 0.15 + 0.19 (Li/Lo) + 0.66 (Ni/No)

26. Wood structure fluctuation factor for falsework, temporary wood bridge, wood guardrail

K26 = 0.15 + 0.06 (Li/Lo) + 0.63 (Di/Do) + 0.04 (Fi/Fo) + 0.12 (Ei/Eo)

27. Carpentry works fluctuation factor

$$K27 = 0.15 + 0.15\ (Li/Lo) + 0.62\ (Di/Do) + 0.02\ (Fi/Fo) + 0.06\ (Ei/Eo)$$

28. Cast and / or galvanized iron pipes fluctuation factor

$$K28 = 0.15 + 0.02\ (Li/Lo) + 0.78\ (Ii/Io) + 0.01\ (Fi/Fo) + 0.04\ (Ei/Eo)$$

29. Steel pipes fluctuation factor

$$K29 = 0.15 + 0.03\ (Li/Lo) + 0\ .69\ (Ii/Io) + 0.03\ (Fi/Fo) + 0.10\ (Ei/Eo)$$

30. Asbestos cement pipes fluctuation factor

$$K30 = 0.15 + 0.02\ (Li/Lo) + 0.77\ (Ki/Ko) + 0.02\ (Fi/Fo) + 0.04\ (Ei/Eo)$$

31. PVC pipes fluctuation factor

$$K31 = 0.15 + 0.07\ (Li/Lo) + 0.69\ (Ji/Jo) + 0.02\ (Fi/Fo) + 0.07\ (Ei/Eo)$$

32. Gate valves and fire hydrants fluctuation factor

$$K32 = 0.15 + 0.04\ (Li/Lo) + 0.77\ (Ii/Io) + 0.01\ (Fi/Fo) + 0.03\ (Ei/Eo)$$

33. Check valves fluctuation factor

$$K33 = 0.15 + 0.03\ (Li/Lo) + 0.79\ (Pi/Po) + 0.01\ (Fi/Fo) + 0.02\ (Ei/Eo)$$

34. Water service connection fluctuation factor

$$K34 = 0.15 + 0.10\ (Li/Lo) + 0.40\ (Pi/Po) + 0.35\ (Ji/Jo)$$

35. Plumbing fixtures fluctuation factor

$$K35 = 0.15 + 0.08\ (Li/Lo) + 0.77\ (Pi/Po)$$

36. Plain and corrugated G.1 sheets fluctuation factor

$$K36 = 0.15 + 0.09\ (Li/Lo) + 0.76\ (Wi/Wo)$$

37. Cement plaster fluctuation factor

$$K37 = 0.15 + 0.38 (Li/Lo) + 0.37 (Ci/Co) + 0.10 (Bi/Bo)$$

38. Marble floor finish fluctuation factor

$$K38 = 0.15 + 0.07 (Li/Lo) + 0.03 (Ci/Co) + 0.01 (Bi/Bo) + 0.65 (Xi/Xo) + 0.03 (Fi/Fo) + 0.06 (Ei/Eo)$$

39. Glazed and ceramic tiles fluctuation factor

$$K39 = 0.15 + 0.12 (Li/Lo) + 0.66 (Xi/Xo) + 0.05 (Ci/Co) + 0.02 (Bi/Bo)$$

40. Window frames and grills fluctuation factor

$$K40 = 0.15 + 0.09 (Li/Lo) + 0.53 (Si/So) + 0.06 (Fi/Fo) + 0.17 (Ei/Eo)$$

41. Glazing fluctuation factor

$$K41 = 0.15 + 0.03 (Li/Lo) + 0.82 (Gi/Go)$$

42. Electrical rough-in fluctuation factor

$$K42 = 0.15 + 0.16 (Li/Lo) + 0.69 (Vi/Vo)$$

43. Lighting fixtures and devices fluctuation factor

$$K43 = 0.15 + 0.13 (Li/Lo) + 0.72 (Ui/Uo)$$

44. PVC waterstop (9") fluctuation factor

$$K44 = 0.15 + 0.03 (Li/Lo) + 0.82 (Ji/Jo)$$

45. Electrical wood pole fluctuation factor

$$K45 = 0.15 + 0.01 (Li/Lo) + 0.73 (Di/Do) + 0.03 (Fi/Fo) + 0.08 (Ei/Eo)$$

46. Wood crossarm fluctuation factor

K46 = 0.15 + 0.11 (Li/Lo) + 0.74 (Di/Do)

47. Lightning arrester (3,000v to 15,000v) fluctuation factor

K47 = 0.15 + 0.09 (Li/Lo) + 0.76 (Ti/To)

48. Transformers (10KVA to 50KVA) fluctuation factor

K48 = 0.15 + 0.01 (Li/Lo) + 0.81 (Ti/To) + 0.01 (Fi/Fo) + 0.02 (Ei/Eo)

49. Bare copper wire fluctuation factor

K49 = 0.15 + 0.04 (Li/Lo) + 0.79 (Ti/To) + 0.01 (Fi/Fo) + 0.01 (Ei/Eo)

50. Bare aluminum wire fluctuation factor

K50 = 0.15 + 0.13 (Li/Lo) + 0.69 (Ti/To) + 0.01 (Fi/Fo) + 0.02 (Ei/Eo)

51. Dredging fluctuation factor

K51 = 0.15 + 0.06 (Li/Lo) + 0.20 (Fi/Fo) + 0.59 (Ei/Eo)

52. General construction fluctuation factor (for others not covered by any or combination of the above 51 fluctuation factors)

K52 = 0.15 + 0.85 (MI/Mo)

Where:

Mi - current general construction price index figure
Mo - base general construction price index figure

Li - current labor index figure
Lo - base labor index figure

Ei - current equipment index figure
Eo - base equipment index figure

Ai - current asphaltic material price index figure
Ao - base asphaltic material price index figure

| | | |
|---|---|---|
| Bi | - | current aggregates material price index figure |
| Bo | - | base aggregates material price index figure |
| Ci | - | current cement price index figure |
| Co | - | base cement material price index figure |
| Di | - | current lumber material price index figure |
| Do | - | base lumber material price index figure |
| Fi | - | current automotive fuel price index figure |
| Fo | - | base automotive fuel price index figure |
| Gi | - | current glass and glazing material price index figure |
| Go | - | base glass and glazing material price index figure |
| Hi | - | current hardware material price index figure |
| Ho | - | base hardware material price index figure |
| Ii | - | current galvanized and / or cast iron pipe (Plumbing) material price index figure |
| Io | - | base galvanized and / or cast iron pipe (Plumbing) material price index figure |
| Ji | - | current polyvinyl chloride pipe (Plumbing) material price index figure |
| Jo | - | base polyvinyl chloride pipe (Plumbing) material price index figure |
| Ki | - | current asbestos cement pipe (Plumbing) material price index figure |
| Ko | - | base asbestos cement pipe (Plumbing) material price index figure |
| Ni | - | current paint material price index figure |
| No | - | base paint material price index figure |
| Pi | - | current plumbing fixture material price index figure |
| Po | - | base plumbing fixture material price index figure |
| Qi | - | current concrete products material price index figure |
| Qo | - | base concrete products material price index figure |
| Ri | - | current reinforcing steel material price index figure |
| Ro | - | base reinforcing steel material price index figure |
| Si | - | current structural steel material price index figure |
| So | - | base structural steel material price index figure |
| Ti | - | current exterior electrical material price index figure |
| To | - | base exterior electrical material price index figure |
| Ui | - | current electrical fixtures / devices material price index figure |
| Uo | - | base electrical fixtures / devices material price index figure |

Vi - current electrical (rough-in) material price index figure
Vo - base electrical (rough-in) material price index figure

Wi - current metal products material price index figure
Wo - base metal products material price index figure

Xi - current tile work material price index figure
Xo - base tile work material price index figure

Zi - current blasting material price index figure
Zo - base blasting material price index figure

For the preceding formula, the following Price Indices shall be used:

General construction price index as published by the National Statistics Office (NSO) or other appropriate/authorized government agency.

Labor cost index as published by the Department of Labor and Employment. Equipment index as published by the NSO or other appropriate/authorized government agency.

Asphaltic material price index as published by the NSO or other appropriate/authorized government agency.

Aggregates material price index as published by the NSO or other appropriate/authorized government agency.

Cement material price index as published by the NSO or other appropriate/authorized government agency.

Lumber material price index as published by the NSO or other appropriate/authorized government agency.

Automotive fuel price index as published by the NSO or other appropriate/authorized government agency.

Glass and glazing material price index as published by the NSO or other appropriate/authorized government agency

Hardware material price index as published by the NSO or other appropriate/authorized government agency.

Galvanized and/or cast iron pipe (Plumbing) material price index as published by the NSO or other appropriate/authorized government agency.

Polyvinyl chloride pipe (Plumbing) material price index as published by the NSO or other appropriate/authorized government agency.

Asbestos cement (Plumbing) material price index as published by the NSO or other

appropriate/authorized government agency.

Paint material price index as published by the NSO or other appropriate/authorized government agency.

Plumbing fixture material price index as published by the NSO or other appropriate/authorized government agency.

Concrete products material price index as published by the NSO or other appropriate/authorized government agency.

Reinforcing steel material price index as published by the NSO or other appropriate/authorized government agency.

Structural steel material price index as published by the NSO or other appropriate/authorized government agency.

Exterior electrical material price index as published by the NSO or other appropriate/authorized government agency.

Electrical (rough-in) material price index as published by the NSO or other appropriate/authorized government agency.

Electrical fixtures / devices material price index as published by the NSO or other appropriate/authorized government agency.

Metal product material price index as published by the NSO or other appropriate/authorized government agency.

Tile work material price index as published by the NSO or other appropriate/authorized government agency.

Blasting material price index as published by the NSO or other appropriate/authorized government agency.

In the absence of any price index for a specified adjustable item, the price index of the nearest related item shall be used.

## ANNEX C. SAMPLE COMPUTATION FOR CONTRACT PRICE ESCALATION

## I. FACTS

1. There is legal basis to claim for price escalation in accordance with Section 4 of these Guidelines.
2. The work item identified to have been affected by the extraordinary circumstance is Reinforcing Steel Bars or K19 of Annex B of these Guidelines.

$$K19 = 0.15 + 0.06\,(L_i/L_o) + 0.67\,(R_i/R_o) + 0.04\,(F_i/F_o) + 0.08\,(E_i/E_o)$$

Where L ~ refers to labor index
R ~ refers to reinforcing steel bars wholesale price index
F ~ refers to automotive fuel price index
E ~ refers to equipment price index
i ~ refers to the value of the index for the month under consideration
o ~ refers to the value of the index during opening of bid

3. The date of bid opening for the subject contract was December 2007 and the contract was implemented starting January 2008.
4. The six (6) – month period under consideration for contract price escalation is from January to June 2008.
5. The thirty (30) – month historical data for the components of K19 necessary for testing compliance with the Technical Parameters under Section 5.2.2 of these Guidelines is from July 2005 to December 2007 *(Please refer to Table 1 of this Annex for the relevant price indices provided under Annex B of these Guidelines).*

## II. COMPUTATION FOR GRANT OF PRICE ESCALATION

The following steps illustrate how to determine whether request for price escalation may be granted using the 2 Standard Deviation (STDEV) rule under Section 5.2.2.a:

1. Compute the Mean for each component of K19 using the data in Table 1 for the entire thirty (30) month period (July 2005 to December 2007).

*Table 1: Computation for the Mean*

| K19 Component | Formula for Mean | Mean |
|---|---|---|
| **Labor (L)** | $\frac{\sum L \text{ from Jul05 to Dec07}}{30}$ | 343.7 |
| **Reinforcing Steel (R)** | $\frac{\sum R \text{ from Jul05 to Dec07}}{30}$ | 524.7 |
| **Automotive Fuel (F)** | $\frac{\sum F \text{ from Jul05 to Dec07}}{30}$ | 536.9 |
| **Equipment (E)** | $\frac{\sum E \text{ from Jul05 to Dec07}}{30}$ | 321.4 |

2. Compute the 2 STDEV above Mean ($2s+\mu$) of each K19 component by adding the Mean computed under Step 1 to the 2 STDEV. The 2 STDEV is computed by getting the STDEV of the thirty (30) – month historical data of each K19 component and multiplying it by 2.[1]

*Table 2: Computation for the 2 STDEV above Mean*

| K19 Component | STDEV [STDEV (Jul05 to Dec07)] | 2 STDEV [(STDEV) * 2] | $2s+\mu$ [2 STDEV + Mean] |
|---|---|---|---|
| **Labor (L)** | 14.1 | 28.2 | ***371.87*** |
| **Reinforcing Steel (R)** | 19.2 | 38.4 | ***563.02*** |
| **Automotive Fuel (F)** | 32.3 | 64.6 | ***501.50*** |
| **Equipment (E)** | 10.5 | 20.9 | ***342.31*** |

3. Establish the K19 Threshold by substituting the values of the 2 STDEV above Mean computed in Step 2 into the K19 work item formula as follows:

$$\text{K19 Threshold} = 0.15 + 0.06\,(2s+\mu)_L + 0.67\,(2s+\mu)_R + 0.04\,(2s+\mu)_F + 0.08\,(2s+\mu)_E$$
$$= 0.15 + 0.06\,(\mathbf{371.87}) + 0.67\,(\mathbf{563.02}) + 0.04\,(501.50) + 0.08\,(342.31)$$
$$= \mathbf{447.13}$$

4. Compute the Average Value of each price index for the six (6) – month period (January to June 2008) under consideration for contract price escalation. *(Please refer to Table 1 of this Annex)*

*Table 3: Computation for Average Value of Price Index (Jan to Jun 2008)*

| K19 Component | Average Value |
|---|---|
| **Labor (L)** | ***364.8*** |
| **Reinforcing Steel (R)** | ***625.1*** |
| **Automotive Fuel (F)** | ***542.1*** |
| **Equipment (E)** | ***328.7*** |

5. Establish K19 Average by computing the six (6) – month Average Value of the work item for the period under consideration for price escalation (January to June 2008) as follows:

[1] Computation of the STDEV is easily done using spreadsheet applications such as Apple Numbers, Microsoft Excel, and OpenOffice.org Calc.

K19 Average = $0.15 + 0.06\ (\text{Ave. Value})_L + 0.67\ (\text{Ave. Value})_R + 0.04\ (\text{Ave. Value})_F + 0.08\ (\text{Ave. Value})_E$

$= 0.15 + 0.06\ (\textbf{\textit{364.8}}) + 0.67\ (\textbf{\textit{625.1}}) + 0.04\ (\textbf{\textit{542.1}}) + 0.08\ (\textbf{\textit{328.7}})$

$= \mathbf{488.8}$

6. To determine whether request for price escalation may be granted, the K19 Average should be compared to the K19 Threshold. If K19 Average is greater than K19 Threshold, price escalation may be granted; otherwise, the request for price escalation should be denied.

7. In the above example, K19 Average is greater than K19 Threshold. Therefore, price escalation may be granted for the period of January to June 2008.

## III. COMPUTATION FOR AMOUNT OF PRICE ESCALATION

After determining that price escalation may be granted for the period under consideration, the computation for the amount to be granted is done for each month of said period.

1. Compute the Monthly Rates of Increase for the period under consideration (January to June 2008) in accordance with Section 5.2.4.a of these Guidelines as follows:

K19 June $= 0.15 + 0.06\ (L_i/L_o) + 0.67\ (R_i/R_o) + 0.04\ (F_i/F_o) + 0.08\ (E_i/E_o)$

$= 0.15 + 0.06\ (1.05) + 0.67\ (1.31) + 0.04\ (1.25) + 0.08\ (1.12)$

$= \mathbf{1.23}$

K19 May $= 0.15 + 0.06\ (L_i/L_o) + 0.67\ (R_i/R_o) + 0.04\ (F_i/F_o) + 0.08\ (E_i/E_o)$

$= 0.15 + 0.06\ (1.00) + 0.67\ (1.16) + 0.04\ (1.11) + 0.08\ (1.12)$

$= \mathbf{1.12}$

K19 April $= 0.15 + 0.06\ (L_i/L_o) + 0.67\ (R_i/R_o) + 0.04\ (F_i/F_o) + 0.08\ (E_i/E_o)$

$= 0.15 + 0.06\ (1.00) + 0.67\ (1.10) + 0.04\ (1.04) + 0.08\ (1.12)$

$= \mathbf{1.08}$

K19 Mar $= 0.15 + 0.06\ (L_i/L_o) + 0.67\ (R_i/R_o) + 0.04\ (F_i/F_o) + 0.08\ (E_i/E_o)$

$= 0.15 + 0.06\ (1.00) + 0.67\ (1.05) + 0.04\ (1.01) + 0.08\ (1.12)$

$= \mathbf{1.04}$

K19 Feb $= 0.15 + 0.06\ (L_i/L_o) + 0.67\ (R_i/R_o) + 0.04\ (F_i/F_o) + 0.08\ (E_i/E_o)$

$= 0.15 + 0.06\ (1.00) + 0.67\ (1.03) + 0.04\ (0.98) + 0.08\ (1.12)$

$= \mathbf{1.03}$

K19 Jan $= 0.15 + 0.06\ (L_i/L_o) + 0.67\ (R_i/R_o) + 0.04\ (F_i/F_o) + 0.08\ (E_i/E_o)$

$= 0.15 + 0.06\ (1.00) + 0.67\ (1.03) + 0.04\ (1.00) + 0.08\ (1.12)$

$= \mathbf{1.03}$

2. Compute the Percentage Rate of Increase for the work item for each month of the period under consideration in accordance with Section 5.3 as follows:

$P_{June} = P_o (1.23 - 0.05)$

$= \mathbf{P_o (1.18)}$

$P_{May} = P_o (1.12 - 0.05)$

$= \mathbf{P_o (1.07)}$

$P_{April} = P_o (1.08 - 0.05)$

$= \mathbf{P_o (1.03)}$

$P_{Mar} = \mathbf{P_o}$

$P_{Feb} = \mathbf{P_o}$

$P_{Jan} = \mathbf{P_o}$

This shows that the Escalated Value of the work item for the months of June, May, and April is 18%, 7%, and 3%, respectively, higher than the original value of the work item.

3. Compute the Escalated Value to be granted for the work item by applying the Percentage Rate of Increase for each month to the monthly billing, which should be supported by official receipts, sales invoices, and other acceptable documentary evidence, as follows:

*Table 4: Computation for the Escalated Value*

| Month | Percentage Rate of Increase | Monthly Billing | Escalated Value |
|---|---|---|---|
| January | 0 | P1 Million | 0 |
| February | 0 | P1 Million | 0 |
| March | 0 | P1 Million | 0 |
| April | 3 | P1 Million | P30,000 |
| May | 7 | P1 Million | P70,000 |
| June | 18 | P1 Million | P180,000 |

**Table 1: Sample Price Indices of Variables Relevant to Work Item K19**

| Period | | Labor (L) | Reinforcing Steel (R) | Automotive Fuel (F) | Equipment (E) |
|---|---|---|---|---|---|
| Year | Month | Labor Cost | Indices | Indices | Indices |
| | Jun | 379.0 | 736.5 | 636.6 | 328.7 |
| | May | 362.0 | 652.3 | 565.4 | 328.7 |
| | Apr | 362.0 | 616.7 | 529.8 | 328.7 |
| | Mar | 362.0 | 587.6 | 511.0 | 328.7 |
| | Feb | 362.0 | 578.6 | 500.3 | 328.7 |
| 2008 | Jan | 362.0 | 578.6 | 509.3 | 328.7 |
| | Dec | 362.0 | 561.9 | 508.0 | 293.6 |
| | Nov | 362.0 | 561.9 | 497.4 | 299.3 |
| | Oct | 362.0 | 560.4 | 477.6 | 303.7 |
| | Sep | 362.0 | 560.4 | 463.5 | 310.4 |
| | Aug | 362.0 | 549.3 | 459.4 | 310.1 |
| | Jul | 350.0 | 549.3 | 451.2 | 308.4 |
| | Jun | 350.0 | 549.3 | 449.8 | 310.5 |
| | May | 350.0 | 535.1 | 440.0 | 313.0 |
| | Apr | 350.0 | 535.1 | 429.1 | 316.8 |
| | Mar | 350.0 | 529.5 | 414.4 | 319.5 |
| | Feb | 350.0 | 526.7 | 408.5 | 319.0 |
| 2007 | Jan | 350.0 | 525.3 | 427.1 | 321.0 |
| | Dec | 350.0 | 524.5 | 425.2 | 328.7 |
| | Nov | 350.0 | 526.3 | 426.4 | 328.7 |
| | Oct | 350.0 | 522.4 | 435.2 | 328.7 |
| | Sep | 350.0 | 522.6 | 455.2 | 328.7 |
| | Aug | 350.0 | 522.6 | 475.9 | 328.7 |
| | Jul | 350.0 | 530.4 | 471.3 | 328.7 |
| | Jun | 350.0 | 520.4 | 465.1 | 328.7 |
| | May | 325.0 | 513.0 | 455.2 | 328.7 |
| | Apr | 325.0 | 513.0 | 434.4 | 328.7 |
| | Mar | 325.0 | 504.3 | 426.3 | 328.7 |
| | Feb | 325.0 | 502.1 | 423.5 | 328.7 |
| 2006 | Jan | 325.0 | 497.8 | 406.2 | 328.7 |
| | Dec | 350.0 | 509.5 | 405.1 | 328.7 |
| | Nov | 325.0 | 509.5 | 416.3 | 328.7 |
| | Oct | 325.0 | 511.8 | 409.9 | 328.7 |
| | Sep | 325.0 | 487.7 | 395.4 | 328.7 |
| | Aug | 325.0 | 487.7 | 381.5 | 328.7 |
| 2005 | Jul | 325.0 | 489.8 | 371.8 | 328.7 |