BANGLADESH RURAL ELECTRIFICATION BOARD

PBS INSTRUCTION 100-69 BREB INSTRUCTION 500-27

PENALIZATION FORMULA FOR DEVIATIONS DETECTED DURING DESTINATION (POST-LANDING) INSPECTION IN WOOD POLES, ANCHOR LOGS AND CROSSARMS OF BREB/PBS

BANGLADESH RURAL ELECTRIFICATION BOARD PBS INSTRUCTION 100-69/ BREB INSTRUCTION 500-27

Approval: 22/02/2000 Revision: 19/02/2020

SUBJECT: PENALIZATION FORMULA FOR DEVIATIONS DETECTED **DURING DESTINATION (POST-LANDING) INSPECTION IN** WOOD POLES, ANCHOR LOGS AND CROSSARMS OF BREB/PBS

1. PURPOSE

To establish and set forth a uniform policy guideline for the purpose of imposing penalty/compensation against deviation to wood poles, anchor logs and crossarms during destination (Post-Landing) inspection.

2. SCOPE

The provisions as stipulated in this policy instruction shall be applicable for the proper evaluation of deviations detected during destination inspection in wood poles, anchor logs, and crossarms to be used in the RE (Rural Electric) system.

3. GENERAL

3.1 Inspection:

The penalization/ compensation formula prescribed in this policy instruction shall apply to all supplied wood poles, anchor logs and cross arms for any/all deviations detected after proper destination inspection. The inspection shall be jointly conducted by the

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Timber Product personnel of the office of Superintending Engineer, Environment and Social Management of BREB along with the personnel of respective warehouse/ Store of BREB / PBS as per provision as contained in the respective bid document. Each deviation shall have to be certified by the Superintending Engineer, Environment and Social Management of BREB.

3.2 Inspection of Wooden poles, Cross-arms & Anchor Logs will be completed after acceptance/approval of pre-shipment & destination (post landing) inspection reports by the competent authority.

4. POLICY

4.1 Evaluation of Penalty:

The estimated amount of compensation or penalty to be calculated based on the joint inspection report as per section 3.1 hereinabove shall be submitted to the BREB Board for approval or by its delegated person/committee (if any) and shall be implemented through the PE(Procuring Entity) forthwith.

4.2 Sample Test for Determining Deviation:

The amount of total/average deviations shall be determined based on random samples /data taken from total supply of goods. The quantity of deviated materials under a particular class and length shall be determined based on deviated percentage derived from the random samples.

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4.3 When the amount of deviations are not properly measurable due to technical reasons (e.g. growth rings, knots, debarking, gains, framing, holes, splits etc.), 0.25% of C&F price shall be deducted for each deviation of the supplied goods.

5. DEVIATIONS AND PENALIZATION FORMULA

5.1 Deviation in Preservative Penetration:

5.1.1 When the average percentage of deviation is 20% or below from that of the specified acceptable minimum (i.e. the penetration is up to **35.2%** of the radius) the materials shall be accepted by deducting the estimated amount of penalty/ compensation as per the following formula:

$$D = \{ C (Spr\%-Opr\%) \} \div 100$$

Where 'D' is the deductible amount in US Dollar, 'C' is the C&F price of materials, 'Spr%' is the specified penetration in percent (%) radius and 'Opr%' is the obtained penetration (average of all borings taken) in percent (%) radius.

5.1.2 When the percentage of average deviation is above 20% from that of the specified acceptable minimum (i.e. the penetration is above 35.2% of the radius), the materials shall be rejected, which however may be accepted subject to **retreatment** at the cost of the supplier provided that sufficient quantity of **treatable wood** is found available in that lot.

5.2 Deviation in Preservative Retention:

5.2.1 When the percentage of average deviation is 20% or below from that of the specified acceptable minimum (i.e. the retention is up to w/w 3.2%), the materials shall be

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accepted by deducting the estimated amount of penalty/compensation as per the following formula:

$$D= [\{C(SMR-OAR)\} \div SMR] \div 100$$

Where 'D' is the deductible amount in US Dollar, 'C' is the C&F price of materials, 'SMR' is the specified minimum retention, 'OAR' is the obtained average retention

5.2.2 When the percentage of average deviation is above 20% from that of the specified acceptable minimum (i.e. the retention is above w/w 3.2%), the materials shall be rejected, which however may be accepted subject to retreatment at the cost of the supplier to attain the required retention.

5.3 Deviation in Dimension:

5.3.1 Deviation in circumference or cross-section:

5.3.1.1 When deviation in circumference of poles, anchor logs and with cross-section (thickness and width) of crossarms is less than **5%** (five) from the specified acceptable minimum, the materials shall be accepted by deducting the estimated amount of penalty/compensation as per the following formula:

$$D= [\{C (SMD-OAD)\} \div SMD] \div 100$$

Where 'D' is the deductible amount in US Dollar, 'C' is the C & F price of the materials, 'SMD' is the specified minimum dimension, 'OAD' is the obtained average dimension.

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(Kamrul Ahsan Mollik) Asst. Secy. (Board), BRER 5.3.1.2 When the percentage of deviation exceeds 5% towards lower specified dimension, the materials shall be considered as unusable and hence would be rejected. But only in the case of poles, such deviated supplied goods shall be examined thoroughly as to determine whether those can be used under lower- class category; and the existing purchase price against the quantity of poles usable under the lower- class category shall be paid to the supplier, subject to obtaining prior approval of the Board.

5.3.2. Deviation in Length:

Deviation deductible formula for length shall be the same as deviation for deduction in circumference (5.3.1.) formula, which however shall not exceed the deviation limits of 1% (one per cent). When deviation exceeds 1% towards lower specified direction, the materials shall be considered as unusable and hence would be rejected. But such deviated supplied goods shall be examined thoroughly as to determine whether those can be used under lower-class category; and the price against the quantity of materials usable under the lower-class category shall be paid to the supplier.

5.4. Deviation in Prohibited Defects:

5.4.1. The materials with prohibited defect/defects shall be considered as unusable and unacceptable. In such conditions, the full price of the materials (deviated) shall be deducted and materials shall be returned to the supplier. This provision shall also be applicable for poles, anchor logs and crossarms.

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5.4.2. When the amount of prohibited defects are negligible and the materials are considered to be usable under the consideration that the replacement of which is time consuming and not feasible or may hinder project implementation schedule, the materials may be accepted after deduction of reasonable amount of compensation, not exceeding 50% of the received goods, subject to obtaining prior approval of the Board.

5.5. Deviation in Limited Defects:

5.5.1. The materials shall be acceptable up to deviation of 20% with price deduction as per the following formula:

$$D = [\{C(SL-OA)\} \div SL] \div 100$$

Where 'D' is the deductible amount in US\$, 'C' is the C & F price, 'SL' is the specified limit, 'OA' is the obtained average.

- 5.5.2. When deviation exceeds 20% from that of the specified acceptable minimum, the materials shall be considered as unusable and hence would be rejected. But such deviated supplied goods shall be examined thoroughly as to determine whether those can be used under lower- class category; and the existing purchase price against the quantity of goods usable under the lower- class category shall be paid to the supplier, subject to obtaining prior approval of the Board.
- 5.5.3. When the amount of limited defects could not be properly measurable or detectable under 5.5.1 & 5.5.2 above, 0.25% of C & F price shall be deducted

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for each and very defect of the materials, provided that such materials are considered to be usable under any lower category or class.

5.6 Deviations in Branding:

For any defect/deviation in branding of poles, anchor logs and cross arms, US\$ 0.10 shall be deducted per piece of material.

5.7. Deviation in Color Marking:

In the absence of specific colour marks at butt of poles, the poles shall not be considered unacceptable and hence would be accepted, but as a penalty for this deviation US\$ 0.10 shall be deducted against each deviated pole.

5.8. Lack of Inspection Hammer Marks:

Poles, anchor logs and crossarms having no deviation other than **Hammer Marks** shall be accepted subject to imposition of the following penalties. Notwithstanding the **Hammer Marks**, if there be any other deviation(s) to the same materials, additional applicable penalties/compensation(s) shall also be charged against that/those deviation(s).

- **5.8.1.** For lack of white passing hammer marks at top end of the material, **US\$ 0.10** shall be deducted per piece of material.
- 5.8.2. For lack of treatment passing or final passing hammer marks at butt ends, US\$0.20 shall be deducted per piece of material.

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5.8.3. For lack of both white and final passing hammer marks, **US\$ 0.30** shall be deducted per piece of material.

5.9. Strength of Timbers:

5.9.1. When the specified green fibre stress value of timber species for wood poles, anchor logs and crossarms (for crossarms minimum level is 55 N/mm2 or 8,000 Psi regardless of timber species, and for other items/materials it will as per the bid document) are deviated towards lower direction not exceeding 10% from that of the specified minimum, the materials shall be accepted by deducting penalty/compensation as per the following formula:

$$D= [\{C (SMGFS-OAGFS)\} \div SMGFS] \div 100$$

Where 'D' is the deductible amount in US\$, 'C' is the C & F price of materials, 'SMGFS' is the specified minimum green fibre stress, 'OAGFS' is the obtained average green fibre stress. The strength of timbers shall be determined /checked by using 6J pilodyn.

5.9.2. When the percentage of average deviation is above 10% towards lower direction from the specified minimum, the materials shall be considered as unusable and hence would be rejected. But such deviated supplied goods shall be examined thoroughly as to determine whether those can be used under lower- class category; and the existing purchase price against the quantity of goods usable under the lower- class category shall be paid to the supplier.

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