## **QUESTION AND ANSWERS FOR:**

## RFB # 18-65, 1/10/19 FOR

## **TUBULAR STEELSTRUCTURES**

1. The RFQ documents only list 56 tubular steel structures, which are the poles. However, the package shows arms with fabrication drawings. Should we be including the cost of the arms as well as the poles even though the bid forms only show the poles? I don't want to include the arms if other bidders are not which would skew our bid higher than the others but I also don't want to exclude the arms if you're expecting us to provide them and then have to hit Greenville with a change order. Please let me know either way if we should be including the arms.

The 56 Tubular steel structures are referring to the number of complete structures not individual poles (i.e. an H-frame is considered 1 Tubular Steel Structure). Refer to Attachment A, "Pole Replacement Schedule", for more details of each structure. Notice in this table column 1(Structure #), there is a total of 56 complete structures. In column 5(Structure Type), there are more details regarding the amount of poles per structure. Regarding whether to include arms in the quote, please see Section II, 1. Scope, "The proposal submitted by the manufacturer shall include field bolts, locknuts, vangs, attachment provisions for arms and/or insulators, anchor bolts, base plates, and other necessary items to make a complete structure." This does not include arms, just the attachment provisions for each arm. H-Frame cross arms should be included in the quote. Also See Section II, 5a(1) for design requirements of H-Frame Cross arms and mounting straps.

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2. Some of the structures on this RFQ are guyed or are H-Frames. I cannot stress enough how important it is for H-Frame or guyed structures to use flanges for connections as opposed to slip joints, which is what is normally used for connections on light duty poles. Flanges are more expensive than slip joints however, so I don't want to quote those unless all the bidders are doing so. When using slip joints there is some variation in the assembled structure length and the tops of H-Frame structures may not be at exactly the same elevation. On guyed structures, significant vertical loads can develop across the slip joint resulting in overslip at the time a maximum horizontal load is being applied. If this happens, the pole can instantly become shorter, the guys go slack and a significant deflection event can occur. This cannot happen when using flanges.

Please see Pole Specification Section II, 5a(4), "The shaft joints to be made in the field shall be slip joints or bolted flange joints. Slip joint length shall be at least 1-1/2 times the largest inside

diameter of the female section. Bolted flange joints shall be used for medium angle and heavy angle guyed structures and X-braced H-frame structures." According to this paragraph, bolted flange joints should be quoted for "medium angle and heavy angle guyed structures" and "Xbraced H-frame structures". We expect all H-Frame structures and angle guyed structures to utilize bolted flange joints. All other structures should be quoted as slip joints. In regards to the variations of structure lengths and tops of H Frames, please See Pole Specification Section II, 5d "Tolerances". This table provides tolerance values of both slip joints and flange connections. For example, the tolerances for Assembled Pole length with slip joint connections shall not exceed -6" and +12". Also note in Section II, 5a(4), "Slip joint length shall be at least 1-1/2 times the largest inside diameter of the female section."