



**City of Tacoma
TACOMA POWER
Low Voltage Network Protectors
RFB Specification No. PT20-0202F**

QUESTIONS and ANSWERS

All interested parties had the opportunity to submit questions in writing by email to Alex Clark by August 28th, 2020. The answers to the questions received are provided below and posted to the City's website at www.TacomaPurchasing.org: Navigate to *Current Contracting Opportunities / Supplies*, and then click *Questions and Answers* for this Specification. This information IS NOT considered an addendum. Respondents should consider this information when submitting their proposals.

Question 1: Is the City of Tacoma is able to separate the 2 lines items being requested on the subject line RFP into 2 separate bids, it will increase the level of bid competition realized for this material – is that viable for the City of Tacoma?

Answer 1: We will allow bids on one or both items. The larger units will only be purchased if we get a customer project that requires them. We have current demand for the smaller 2,000A units. This change will be captured in Addendum No. 1.

Question 2: 2.02.4A – Door Handle - The door handle(s) shall be integrated with the door clamp provisions. For clarity – would you please elaborate on this further?

Answer 2: The door clamp provisions on the submersible enclosures needs to have a handle incorporated into the top clamps.

Question 3: 2.02.6B – Exterior Hardware - All exterior hardware and fasteners shall be Type 304 Stainless Steel or better. The bolts used to connect the terminals or any conductive material are Si-Bronze or Brass. Please advise if this is acceptable?

Answer 3: Yes conductive external terminal surfaces of SI-Bronze or brass.

Question 4: 2.03.1C - The protector structure materials Excluding the backboard, arc chutes, inter-phase barriers, and other insulating materials, the protector structure, mechanism, linkages, and all engagements, shall utilize metallic construction. Clarification - Eaton's dead-front CM52 utilizes an industrial class power breaker modified for network applications by using a high temperature thermoset mold construction. There are thousands of these breakers used today in industrial and network specific applications. All loading mechanisms internal to the power breaker are of metallic construction. Please advise if this is this acceptable?

Answer 4: The use of the high temperature thermoset mold breaker housing with all metallic loading mechanisms is acceptable for the proven design used by Eaton.

Question 5: 2.03.2A - Network side terminals the Network (load) side terminals shall be fully rated tin plated copper spade connectors with 2-hole NEMA drilled patterns. The number of holes and plate sized for the terminals shall be follow

section 11.5.2 of IEEE C57.12.44.2014. Eaton standard is silver plated. We can accommodate this requirement but it would be non-standard. Please advise if silver plated is acceptable?

Answer 5: Yes, silver plated is acceptable.

Question 6: 2.04.2A5 - Forward power flow tripping option on fault detection - The relay shall be capable of being temporarily armed to trip for fault level current into the network. This option would be field selectable by the attending crew during maintenance as a temporary setting for personnel protection. The system requires some visual reminder when this setting is active. Clarification - Eaton's fault detection uses a separate analog trip circuit that does not use the relay. This removes processing time and provides faster clearing times for maximum effect. Please advise if this is this acceptable?

Answer 6: Yes it is acceptable if the forward overcurrent trip execution task completion is faster by not using the relay.

Question 7: 2.06.2 – INSTRUMENT TRANSFORMERS - Current, potential, and control Instrument transformers shall be provided as required and be encased in epoxy that provides a submergibility rating of 25ft depth for 7-days. Eaton standard units are provided with non-submersible CT, PT and CPTs. Submersible instrument transformers can be provided for a price increase. CTs are non-submersible, is this requirement mandatory?

Answer 7: Not mandatory. Given that we are specifying a total submersible enclosure. This language is an old hold over statement from an era when we specified dust tight enclosures. This change will be captured in Addendum No. 1.

Question 8: 2.06.3A – AUXILIARY CONTACT RATINGS - The auxiliary contacts shall have a minimum current rating of 20 Amps and be rated for 600 Volts. The minimum current rating is 5A for our aux. contacts. For the purposes of the CM52 network protector we have not seen where higher is needed. Please advise if 5A is acceptable, if not would you please detail what is driving the 20A req so we can review further.

Answer 8: This is old hold over language too. It was given to reduce voltage drop across the aux contact leads to drive remote devices. We are fine with a 5A min. This change will be captured in Addendum No. 1.

Question 9: 2.06.10 – Closing motor - The closing motor shall receive power from the transformer side of the rollout unit. Motors shall be capable of providing the required torque to ensure proper closure in 2.5 seconds or less with the minimum closing voltage applied without over-heating. Motor shall be capable of withstanding at least 7 days of submersion under a head of 25 feet of water. Eaton's standard motor is non-submersible. A submersible motor can be provided per specification with a price increase.

Answer 9: This too is a hold over from the dust tight spec. We can waive this since we are requiring water tight enclosures. This will be captured in Addendum No. 1.