SLEC Cooling Tower Rebuild RFP# 2024-202 Questions & Answers – Revision 3 September 5, 2024

1Q: We have questions regarding: FMPA SCOPE OF WORK COOLING TOWER REBUILD, Part 1, Item 1.01 Vision Statement, Item A: ... "The engineered field erected tower will meet FM Approved criteria"... Can you confirm this is a mandatory requirement? Can you confirm that you require a tower that is FM Approved and not one that just meets the criteria?

1A: FMPA desires the cooling tower options that does not eliminate any bidder, i.e., FM Approved on a field-erected cooling tower will **<u>NOT</u>** be a mandatory requirement.

2Q: Is the allotted demo/erection time 10 days? If so, is that for all four cells?

2A: The allotted demo/erection time is 10 days for two (2) cells. Additional details will be discussed at the Pre-bid meeting/site walk-down.

3A: 2.02 – What are the design conditions for the cooling tower? Please state this in terms of flow (gpm), HWT (F), CWT (F), and design WB (F).

3A: This information has/is already provided in original files on the SFTP site under folder "As-Designed Performance" as file "Cooling Tower Performance Curves. FMPA also strongly encourages vendors to also review the heat rate test data for the latest operating data under the folder "Heat Rate & Operation Data" - also in the original files on the SFTP site.

4A: Please clarify that the max fan motor input power shall not exceed 230kW at a fan speed of 125 RPM?

4A: Correct, with new higher efficiency fans, the limit we are setting is 230 kW unless the vendor proves that to be impractical.

5A: Please clarify the "Cell Operation" performance requirement.

1. Is this to mean that the cooling tower must be able to meet the design conditions (per answer to question 1 above) using only 3 out of 4 cells?

5A: Correct.

6A: 2.03 -Structure – The first part of this section states the new FRP structure "utilizing the existing basin anchor points." Later it states "all structural connection hardware swill be $\frac{1}{2}$ " diameter, or larger." Are we to re-use the existing locations (on 7'-0 x 7'-0 centers) or post install new anchor points and spacing as new structure requires?

6A: We would like to utilize the existing 7' centers for a simple "stick by stick" replace method, but if a vendor can prove significant benefits for reliability, cost savings, etc. by making it a more common spacing w/ minimal 1/2" diameter bolts then we are open to evaluate those options as well.

7A: Partitions/Firewalls – Please clarify partition walls are to be double-sided 20 min FRP firewalls?

7A: Partition & firewalls are to be double sided with a minimal 12 oz/sq. ft.

8A: VFD – There is an optional price requested for "one (1) complete VFD control system (NEMA appropriate outside cabinet) For 460/3/60 Hz 100 hp motor operation." Is this optional request meant for contractor to supply one (1) cabinet that can house all four (4) VFDs, or, is each VFD to have it's own cabinet?

8A: This is a VFD for one (1) fan only. The remaining three (3) fans will not be VFD controlled.

9A: Section 2.02: "At design conditions, cold water return temperature shall not exceed 87F with one (1) of two (2) currently installed circulating pumps in service."

What is the expected flow capacity of 1 circulating water pump? -

9A: Current pumps each provide 46,702 GPM with 61 Ft of head @ 710 RPM.

10A: Does this one pump condition assume all 4 cells of tower are operating?10A: Yes.

11A: Environmental Conditions: Can you please expand on the Summertime and Wintertime Operation conditions?

11A: Ambient conditions for summertime & wintertime are given in Section 2.02. Also supplied on the SFTP site is the design and current-day operating heat rate data which vendors are expected to analyze and use to model in order to accurately size based on summer/winter conditions for accurate water temperature and cooling impacts.