APPENDIX D – SYSTEM PERFORMANCE REQUIREMENTS

MEASUREMENT OF TRANSACTION TIMES

Command transactions times are measured from operator action until visual response or operation completion. Command transactions include both administrative transactions (e.g., logging in/out of the system, transitioning between modules) and operational transactions (e.g., entering data, searches, etc.).

Within the System, query transactions perform in the background while the operator continues to execute other tasks. These types of transactions are measured from the time the operator submits the query until the time the operator receives query results.

SYSTEM RESPONSE TIMES

The table below lists the performance expectations for different types of transactions.

Activity	Maximum Response Time
Command transactions	1 second
Command transactions with validation	2 seconds
Database queries	3 seconds
Extended queries (e.g., querying a database outside of the requested solution)	3 seconds

SYSTEM AVAILABILITY

The CAD System will be available 99.999 percent of the time and RMS and JMS Systems will be available 99.95 percent of the time. The following specification defines both System availability and the method by which it is calculated, as it is used in other sections of this RFP:

1. The System will be considered available for use only when each of the following conditions is met:
    a. Installed hardware and software have power applied and are operating correctly based on manufacturer specifications.
    b. All functions necessary for creating, editing or searching for a record maintained by the Systems are operating correctly.
2. System availability will be expressed as a percentage of the maximum expected availability over a given period. The System must be available seven days per week, 24 hours per day.
3. Scheduled down time for System upgrades will not be construed as Hours System Unavailable.
4. The percentage availability for any period will be calculated as follows:

$$\frac{(\text{Total Hours in Period} - \text{Hours System Unavailable}) \times 100}{\text{Total Hours in Period}}$$

ONGOING SYSTEM PERFORMANCE

The following specifications describe the performance requirements for the Proposer's System following formal acceptance of the System by JECC and throughout the life of the Contract between JECC and the Proposer:

1. The hardware and software components of the System must remain operational and available for use by meeting the required System response times and availability.

2. The initial System hardware and software configuration should provide for all current and future volumes as described in the RFP.

3. The hardware provided or recommended should meet the capacity expectations stated in the RFP and continue to meet reliability, and performance requirements of this RFP for a period of five (5) years from Final Acceptance. The software provided should meet the functionality requirements of this RFP throughout the lifetime of the application, as well as continually improve on existing functionality.

4. The System must accommodate all volumes and other applicable sizing parameters specified in the RFP.

5. The System must function effectively from all workstations, both fixed and wireless.

6. All files and tables can be updated on-line without adversely affecting System Performance.

7. Necessary back-ups can be done online without adversely affecting System operations and without lockouts for updates.

8. The System can complete queries to interfaced databases without adversely affecting any System Component and without tying up or locking up the workstations.

In the event that the System fails to meet any requirements of this RFP after Final System Acceptance during the warranty period as well as over the lifetime of the Contract, the Proposer must take appropriate steps to correct the problem and bring the System back into compliance with the performance and reliability requirements at no cost to JECC.