CMSC435 Software Engineering Quiz 05 Name:

## Critique each requirement

What are the problems with these requirements and the way they are stated?

1. The alarm shall remain active for 5 seconds.

It is an incomplete statement. Is it audio or visual alarm or both?

2. When primary is lost, secondary unit takes over.

Is this a "must" or is this "optional". Use words like "must" and "shall" consistently.

3. The system shall purge state control records and files that are older than the retention period.

Requirement is incomplete and vague without specifying the retention period or providing reference as to where the information can be obtained. Requirement cannot be implemented or tested as stated.

4. When doing calculations the software shall produce correct results.

This requirement is not necessary. This type of requirement is inherent t correctness should not need to be specified, unless it refers to a specific (complex) calculation and what is considered as correct.

5. The output of the program shall usually be given within 10 seconds.

Requirement contains a general word "usually". Is there any condition in which this requirement should not be the case?

Requirement is incomplete. Output of the program is not specified. Also, when do you start counting the 10 seconds.

Requirement cannot be implemented or tested as stated.