1. In the 1990s the Plaintiff, Greenwood Utilities Commission ("Greenwood Utilities"), began an upgrade project on its Frame V Gas Turbine ("the turbine") at its Henderson Generating Station.

2. In order to upgrade the turbine, Greenwood Utilities entered into a contract with Upchurch Plumbing, Inc. ("Upchurch"). Pursuant to this contract Upchurch was to design and install a digital control system for the turbine. Upchurch then subcontracted with Triconex Systems, Inc. ("Triconex") for both the design and installation of the control system.

3. Greenwood Utilities entered into a separate contract with General Electric Company ("GE") to produce the mechanical upgrade of the turbine and to complete its reinstallation at the Henderson Generating Station.

4. The control system designed by Triconex was defective. The system required the input of data by which the controls determined the turbine shaft speed. Triconex chose to place the data sensors on an auxiliary shaft without ascertaining the speed of the auxiliary shaft. Since the auxiliary shaft turned at a different speed than the turbine shaft speed the data sensors caused the control system to indicate a lower operating speed for the turbine than the actual operating speed.

5. The turbine featured an overspeed trip device which would stop the turbine if it exceeded a designated speed. During the installation and start up of the control system, the overspeed bolt tripped at the reported speed of 4,000 RPM. This was considerably below the designated trip speed of 5,346 RPM. Triconex engineer Hamid Niakian sought to confirm the actual turbine speed by independent testing. Greenwood Utilities employee Jerry ***1105** Shaw assisted in this testing. Mr. Shaw entered the small confined area of the turbine with a strobotac instrument. Mr. Shaw, using the strobotac instrument, checked the speed of the turbine and called out the speed to Mr. Niakian who was in the control room. The speeds confirmed by Mr. Shaw matched those indicated by the Triconex controls.

6. Mr. Shaw's competence was called into question by the defendants at trial. However, no party ever offered any evidence to prove that Mr. Shaw was not competent or that his readings were incorrect. Mr. Shaw testified that he took speed readings from the shaft pursuant to the instructions of Mr. Niakian. Since the speeds obtained by Mr. Shaw were the same as those indicated by the Triconex control device, the Court is led to the only logical conclusion; that Mr. Shaw correctly took readings from the auxiliary shaft just as he was directed by Mr. Niakian. It is logical that Mr. Niakian would direct Mr. Shaw to the auxiliary shaft, since that is where Triconex placed the data sensors.

7. After confirmation of the speed by independent means, Greenwood Utilities adjusted the overspeed bolt in reliance on Triconex's faulty design. This led to the operation of the Turbine at a speed of at least 6,932 RPM, causing irreparable damage to the turbine.

8. The Court finds that the Triconex controls, if properly designed, should have prevented the overspeed incident regardless of the operation of the overspeed bolt.

9. Under its contract Triconex was obligated to deliver a working system. The system that was installed was defective. Accordingly, the Court finds that Triconex is liable to Greenwood Utilities for Breach of Contract.

10. The Court finds that GE did not breach its contract with Greenwood Utilities. GE had no obligation under its contract to second-guess the Triconex design.

11. The Court finds that Greenwood Utilities has sustained the following losses:

1. Initial repair contract with .$1,500,0