

**IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION**

CITY OF CHICAGO,)
)
 Plaintiff,)
)
 v.)
)
 WESTCHESTER FIRE INSURANCE)
 COMPANY,)
)
 Defendant.)

Case No. 08 C 5535

Judge Joan H. Lefkow

OPINION AND ORDER

The City of Chicago (the “City”) brought suit against Westchester Fire Insurance Company (“Westchester”) seeking a declaratory judgment and injunctive relief related to a claim the City made with Westchester under an insurance policy. Before the court are both parties’ motions to exclude certain expert opinions. The City has moved to exclude the testimony of Westchester’s expert Dr. Michael Stringfellow. Westchester has moved to exclude certain expert opinion testimony of (1) Mr. John Huston, P.E., (2) Mr. Thomas Vukovich, and (3) Professor Randall Geiger. For the following reasons, the City’s motion [#52] is granted in part and denied in part, and Westchester’s motion [#54] is granted in part and denied in part.

BACKGROUND

This case involves a dispute over insurance coverage for a Liebert Series 600 model, 500 KVa uninterruptible power supply (the “UPS”) at the City’s 911 Call Center (the “911 Center”). The UPS failed on July 22, 2004, causing the City’s 911 system to go down. It was repaired and placed back into service the following day. The UPS then operated without incident until replaced on March 25, 2005 with two new Liebert 400 KVa UPS units. The City filed a claim

with Westchester to cover its costs related to the repair and replacement. Westchester responded that only costs related to the repair of the UPS are covered, maintaining that the UPS was fully repaired by July 26, 2004. The City contends that the UPS had latent damage from the July 22, 2004 failure requiring replacement in order for the system to be brought back to its pre-July 22, 2004 condition.

I. Westchester's Expert: Dr. Michael Stringfellow

Dr. Stringfellow is the chief scientist for PowerCET Corporation, where he works on consulting, education, and training projects on power quality, grounding, electromagnetic compatibility, and lightning and transient protection of power and communication systems. He has a Ph.D. in atmospheric electricity, is a registered professional engineer, and is a senior member of the Institute of Electrical and Electronics Engineers. Dr. Stringfellow's main focus is on lightning and its effects on overhead power lines, although he also has worked more generally on transient protection of power and communication systems and dealt with UPS units, including their design.

Dr. Stringfellow has expressed the following opinions: (1) Prior to July 22, 2004, the UPS had exhausted approximately half its rated life and likely had components nearing the end of their life. (2) The City had not appropriately maintained the UPS. (3) The UPS was damaged primarily because of a temporary overvoltage that resulted from a lightning strike to the power system. The temporary overvoltage damaged fuses at the UPS's input. (4) The damage to the UPS could have resulted from the temporary overvoltage or, more likely, the application of 120 volt AC to the circuitry by first responders. (5) During the repair, all major power electronic components and damaged control boards were replaced. No evidence exists suggesting that

latent damage was present and reduced the UPS's service life. (6) Any concern about latent damage could have been addressed through further tests or replacement of any other suspect electronic control boards. (7) The facility was improperly grounded and not in compliance with the National Electrical Code, which may have contributed to the damage. (8) The City was planning on replacing the UPS with a dual-redundant system prior to July 22, 2004. (9) The decision to upgrade the system was made before any analysis of damage to the UPS was available. (10) The temporary power system used as a backup after July 22, 2004 was unnecessarily expensive, complex, and a disproportionate response. Dr. Stringfellow's opinions are based on his scientific and engineering knowledge, experience and investigations into power system incidents, and a review of various documents, including deposition transcripts, photographs of the damaged circuit boards, and Liebert manuals and white papers.

II. The City's Experts

A. Mr. John Huston, P.E.

Mr. Huston is a licensed professional engineer and the Vice President of Technology Integration at Teng & Associates ("Teng"). He was hired by the City as a peer reviewer soon after July 22, 2004 to assess the initial failure of the UPS and help in the subsequent design of the new system. Mr. Huston viewed boards that were removed from the UPS after it was damaged, some that were visibly damaged and others that were not. He did not physically test any of the removed boards himself but sent them to be tested by Packer Engineering. Packer Engineering could not conclusively determine what caused the failure. Mr. Huston concluded, however, that there was a catastrophic failure because of a surge and that, because the logic board, which is the most protected component of the UPS, was physically damaged, every board

in the unit was exposed to some type of distress. Based on his observations of the removed boards, others' conclusions, and his professional experience, Mr. Huston opines that the UPS, even after repair, was unreliable and not sufficient for use in a life safety facility like the 911 Center and thus needed to be replaced. He states that there was no way to know whether the UPS was functioning at the level it should unless it was factory witness tested. According to Mr. Huston, however, factory witness testing is cost-prohibitive and was not a feasible option for the City since it would have required removing the UPS from the 911 Center for testing.¹ Further, he did not believe other field testing was worthwhile, as factory witness testing would be the only way to truly determine whether the UPS was functioning at its pre-July 22, 2004 condition.

The City disclosed Mr. Huston in its amended Rule 26(a)(2) disclosures as an expert who will testify that (1) because the UPS's logic board was destroyed, the surge affected all other components of the UPS; (2) the UPS was irreparably damaged by a large electric surge that created latent semi-conductor failure; (3) the board replacement was not an adequate repair because damage from old boards would leak into new boards; (4) the UPS had to be factory witness tested to determine its true functionality, which was not financially feasible; and (5) the failure was not caused by improper maintenance because pre-failure maintenance logs demonstrate that Liebert declared the unit to be defect free.

¹ Mr. Huston also testified at his deposition that he was unsure whether Liebert would undertake factory witness testing on the UPS. Westchester assumes that the UPS could be factory witness tested.

B. Professor Randall Geiger

Professor Geiger is a professor in the Department of Electrical and Computer Engineering at Iowa State University, having previously served as chairman of the department. He has a Ph.D. in electrical engineering from Colorado State University. He teaches courses in circuits, including integrated circuits, and has published widely on related topics. He is a fellow of the Institute of Electrical and Electronics Engineers.

Professor Geiger was retained by the City to provide an opinion on “what change, if any, in the reliability of [the UPS] should be attributed to the malfunction and subsequent repair of this device.” Expert Report of Randall Geiger at 3, attached as Ex. 5 to Def.’s Mot. He concluded that, after the July 22, 2004 failure and repair, the UPS was substantially less reliable than it had been prior to the event. In preparing his expert report, Professor Geiger reviewed various documents, including depositions, failure analyses by Teng, Liebert, and Packer Engineering, and photographs of the damaged boards that were included in these analyses. After completing the report, he observed the UPS in a warehouse but stated that it was not necessary for him to see the UPS prior to rendering an opinion. Professor Geiger did testify, however, that ideally he would have personally observed the circuit boards and reviewed the circuit schematics for the UPS prior to rendering an opinion.

Professor Geiger based his opinion on the following: (1) On July 22, 2004, an event occurred that interrupted power delivery, leaving the UPS nonfunctional with visible signs of damage and unable to crossover to backup power sources. (2) Liebert technicians replaced several circuit boards with visible signs of damage, while others without visible signs of damage were replaced through a process of board-swapping until the UPS appeared operational. (3) Not

all boards, each with a large number of integrated circuits, were replaced. (4) The UPS was load tested and placed back into service on July 23, 2004, but no testing for full functionality, including the ability to crossover to a battery or generator, was done. (5) Three companies were asked to provide failure analysis, and all agreed that there were considerable signs of electrical overstress on the visibly damaged components. Professor Geiger cites three factors that he believes contributed to the decrease in the UPS's reliability after July 22, 2004: (1) it is not known whether the UPS was fully functional after repairs as the only tests performed were a load test, panel display verification, and an input/output regulation measurement; (2) the educated guess repair method, in which boards were swapped out until the UPS functioned, could have damaged the replacement boards; and (3) latent damage could exist both on boards that were not tested or replaced and boards that were replaced due to the repair procedure. Although Professor Geiger presents an equation for determining reliability and speaks generally about how the change in reliability could be measured, he has not calculated the change in the UPS's reliability caused by the July 22, 2004 failure.

While Professor Geiger admits that the root cause of the failure is unknown, he contends that the evidence of electrical overstress indicates a likelihood of latent damage to the boards that were not replaced. This latent damage, Professor Geiger posits, could have also been transferred to the replacement boards because power was applied during the repair process while defective boards were still in the circuit. Because latent damage is, by its very nature, often undetectable until a circuit fails, determining whether a circuit has latent damage often must proceed through statistics, performing an experiment where, for example, 1000 UPS systems would be subjected to the same event and monitored to determine the average time of failure for these 1000 units.

Alternatively, Professor Geiger stated that latent damage could potentially be detected through destructive evaluation of parts. While factory witness testing could be used to determine whether the UPS was operating at its pre-July 22, 2004 functionality, Professor Geiger expressed doubt that this would conclusively demonstrate whether there was latent damage to the unit. According to Professor Geiger, the only known method of practically and reliably reducing the risks associated with latent damage is to replace the parts exposed to electrical overstress.

C. Mr. Thomas Vukovich

Mr. Vukovich is the City's architect charged with maintaining City properties. He has a bachelor's degree in architecture and an Illinois architectural license. After the failure, Mr. Vukovich was asked to oversee bringing the 911 Center back to its pre-failure condition.

The City identified Mr. Vukovich as its 30(b)(6) representative and as an expert. Mr. Vukovich's testimony, as summarized in the City's amended Rule 26(a)(2) disclosures, mainly concerns facts related to the upkeep and repair of the UPS, replacement of the UPS, and the City's insurance claim. The City also represented that Mr. Vukovich will testify that the UPS has latent semiconductor failure due to the July 22, 2004 surge.

LEGAL STANDARD

Rule 702 of the Federal Rules of Evidence governs the admissibility of expert witness testimony. *See Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579, 588, 113 S. Ct. 2786, 125 L. Ed. 2d 469 (1993); *Kumho Tire Co., Ltd. v. Carmichael*, 526 U.S. 137, 147, 119 S. Ct. 1167, 143 L. Ed. 2d 238 (1999). To admit expert testimony, the court must find that the expert is proposing to testify to (1) valid scientific, technical, or other specialized knowledge, and (2) his testimony will assist the trier of fact to understand or determine a fact in issue. *Durkin v.*

Equifax Check Servs., Inc., 406 F.3d 410, 420 (7th Cir.2005) (citing *Ammons v. Aramark Unif. Servs., Inc.*, 368 F.3d 809, 816 (7th Cir.2004)). “The first prong tests the reliability of the testimony; the second prong tests its relevance.” *Frey v. Chi. Conservation Ctr.*, 119 F. Supp. 2d 794, 797 (N.D. Ill. 2000). Some of the factors useful in analyzing the reliability of an expert’s testimony are (1) whether the theory is based on scientific or other specialized knowledge that will assist the trier of fact and can be tested; (2) whether the theory has been subjected to peer review; (3) the known or potential rate of error and the existence of standards controlling the technique’s operation; and (4) the extent to which the methodology or technique employed by the expert is generally accepted in the scientific community. *Daubert*, 509 U.S. at 593–94. These factors, however, are not a “definitive checklist or test,” *id.* at 593, and the importance of different factors will vary based on “the particular circumstances of the particular case at issue.” *Kumho*, 526 U.S. at 150. The objective “is to make certain that an expert, whether basing testimony upon professional studies or personal experience, employs in the courtroom the same level of intellectual rigor that characterizes the practice of an expert in the relevant field.” *Id.* at 152. The proponent of the testimony bears the burden of proving that the proffered testimony meets these requirements. *Frey*, 119 F. Supp. 2d at 797. “Determination on admissibility should not supplant the adversarial process; ‘shaky’ expert testimony may be admissible, assailable by its opponents through cross-examination.” *Gayton v. McCoy*, 593 F.3d 610, 616 (7th Cir. 2010).

DISCUSSION

I. The City’s Motion

A. Dr. Stringfellow’s Qualifications

The City first contends that Dr. Stringfellow's opinions should be barred because he does not have expertise in low voltage integrated circuits. For support, the City relies on an affidavit from Professor Geiger, which states that Dr. Stringfellow does not have "the more narrow and relevant background needed to serve as an expert in the area of low voltage integrated circuits or in issues associated with failure mechanisms and latent damage in these types of circuits." Aff. of Randall Geiger ¶ 2, attached as Ex. D to Pl.'s Mot. While Professor Geiger's observations may well convince the trier of fact not to place much weight on Dr. Stringfellow's testimony, they do not establish that Dr. Stringfellow is unqualified to provide expert testimony about what may have caused the July 22, 2004 failure and the effect of the failure on the UPS. The "battle of the experts" the City attempts to engage in with its motion to exclude Dr. Stringfellow is more properly undertaken at trial in pitting Dr. Stringfellow's and Professor Geiger's opinions against each other. Although Dr. Stringfellow has not published on the specific topic at hand, this is not a prerequisite to being qualified to render an opinion.² See Fed. R. Evid. 702 (an expert witness may be qualified by "knowledge, skill, experience, training, or education"). Dr. Stringfellow has been trained generally in circuitry, worked in the utility industry, and analyzed transient propagation and the protection of power and communication systems from such disturbances. He testified in his deposition that while early in his career he focused on high voltage systems, his work is now more concerned with low voltage systems. Dr. Stringfellow has worked with UPS units, even helping design and build one for a company he worked for, and studied the

² Peer review is only one possible consideration in determining whether an expert's theory is reliable. See *Kumho*, 526 U.S. at 150; *Daubert*, 509 U.S. at 593-94. "[L]ack of peer review will rarely, if ever, be the single dispositive factor that determines the reliability of expert testimony." *Smith v. Ford Motor Co.*, 215 F.3d 713, 720 (7th Cir. 2000). In this case, Dr. Stringfellow is not proposing to use a novel method that would require consideration of whether it has been peer reviewed to determine reliability.

effects of power disturbances on such units. The court finds that this experience qualifies Dr. Stringfellow to testify as an expert on the potential causes of the July 22, 2004 failure and its effect on the UPS.

B. The City's Decision to Replace the UPS

Dr. Stringfellow is of the opinion that the City had plans to replace the UPS prior to the July 22, 2004 failure and has used that failure as a "pretext for [the UPS's] replacement by Westchester Insurance Company." Expert Report of Michael F. Stringfellow, Ph.D., P.E. at 11, attached as Ex. B to Pl.'s Mot. He bases this opinion on the timeline of events in the case, including newspaper articles after the event in which an engineer involved in the original design of the UPS system at the 911 Center claimed that the original recommendation was to use a dual-redundant system but that only one was installed as a cost-saving measure. Dr. Stringfellow also has opined that the temporary power system the City employed between the failure and installation of the dual redundant system "was unnecessarily expensive, complex and a disproportionate response to the incident." *Id.* at 12.

Dr. Stringfellow's opinions related to the replacement of the UPS are improper and will be barred. Dr. Stringfellow is not qualified to testify about the City's decisionmaking process as it related to the initial decision to only install one UPS unit or the replacement of the UPS with a dual-redundant system. Further, the issues to which he proposes to testify are not ones requiring expert testimony; scientific or technical knowledge is not necessary to determine whether the City was planning to replace the UPS prior to its failure. Westchester can present the timeline of events it claims underlies Dr. Stringfellow's conclusion to the trier of fact and allow the trier of fact to draw whatever conclusions are appropriate.

Dr. Stringfellow may, however, testify as to his opinion that the City's temporary power system was a disproportionate response to the incident. Such an opinion does not attack the credibility of any factual witness, which is improper, *see Goodwin v. MTD Prods., Inc.*, 232 F.3d 600, 609 (7th Cir. 2000), but instead presents another view of what was necessary, from an engineering standpoint, to maintain the operation of the 911 Center and prevent another UPS failure. As one of the issues at trial is likely to be whether or not the City's expenses for the temporary power system should be covered by Westchester, and technical knowledge related to the maintenance of UPS systems would be helpful to the trier of fact, Westchester will not be barred from offering expert testimony on the issue.

C. The Cause of the Event

The City also challenges the reliability of Dr. Stringfellow's opinions that (1) damage to the UPS occurred primarily as the result of a temporary overvoltage caused by a lightning strike to the Commonwealth Edison power system and (2) the UPS was not properly maintained. In coming to the conclusion that lightning was involved, Dr. Stringfellow examined lightning data from the National Lightning Detection Network between 2:00 p.m. and 3:00 p.m. on July 22, 2004 within fifteen miles of the 911 Center.³ While he admits that no lightning was located in the immediate vicinity of the 911 Center, he noted significant activity in the surrounding area that could have caused a severe power disturbance that traveled to the 911 Center. The City takes issue with Dr. Stringfellow's conclusion of lightning as even Dr. Stringfellow admits that other causes for the failure are possible and Teng concluded that no lightning strikes occurred at precisely 2:25 p.m. "[A]n expert need not testify with complete certainty . . . ; rather he may

³ The UPS failure occurred around 2:25 p.m.

testify that one factor could have been a contributing factor to a given outcome.” *Gayton*, 593 F.3d at 619. That there are other possible causes and no lightning strikes were recorded at exactly the time of the event are properly topics for cross-examination, and not a basis for barring Dr. Stringfellow’s opinion altogether. *See Smith v. Ford Motor Co.*, 215 F.3d 713, 718 (7th Cir. 2000) (“The soundness of the factual underpinnings of the expert’s analysis and the correctness of the expert’s conclusions based on that analysis are factual matters to be determined by the trier of fact, or, where appropriate, on summary judgment.”). Dr. Stringfellow’s methodology, relying on lightning data to determine whether lightning may have been a cause of overvoltage, is not outside the realm of accepted bases on which an admissible opinion can be formed.

Dr. Stringfellow’s conclusions regarding maintenance of the UPS is based on more than the cancellation of the maintenance contract. In his report and deposition testimony, he cited other reasons as well: a similar power disturbance that occurred in July 2003 that occurred when technicians were working on the UPS, reports that the batteries and connections were in poor condition, review of the summary of the maintenance logs, and the fact that ProTech, which performed some maintenance on the UPS, was not as familiar with the UPS as Liebert, its manufacturer. The court cannot say that reliance on these factors to conclude that maintenance was spotty makes Dr. Stringfellow’s conclusion conjecture. While Dr. Stringfellow’s conclusion is not unassailable, it is not the court’s role to determine whether, as the trier of fact, it should be accepted at this stage.

D. Reliance on Hearsay

An expert may rely on hearsay in forming an opinion if it is “of a type reasonably relied

upon by experts in the particular field in forming opinions or inferences upon the subject.” Fed. R. Evid. 703. In concluding that damage to circuit boards was more likely caused by the application of 120 volt AC by first responders to the UPS than a temporary overvoltage, Dr. Stringfellow relied on indications in the record, including in a Liebert report on the event, that the ProTech technician who first responded to the failure, David Hale, applied such voltage directly to the UPS in an attempt to operate the circuit breakers. Hale, however, denied doing so at his deposition. The fact that Hale denies injecting power to the UPS does not automatically make the Liebert report on which Dr. Stringfellow partially relied unreliable. It does, however, call into question the weight Dr. Stringfellow assigns to this event. Because Dr. Stringfellow also maintains that the observable damage, in his experience, is indicative of such an injection, demonstrating that he is not solely relying on the Liebert report, the court does not find it necessary to exclude this opinion. Whether it holds water, however, is for the trier of fact to decide.

II. Westchester’s Motion

A. Mr. Huston

Westchester challenges Mr. Huston’s testimony on the existence of latent damage within the UPS unit, claiming that his opinions are merely speculation and that the methodology he used does not meet *Daubert*’s reliability requirement. It argues that Mr. Huston’s methodology is not sound because he never inspected the UPS or the damaged boards, obtained schematic drawings of the Liebert unit, or performed any testing even though he acknowledged that factory witness testing could be done. Mr. Huston testified that he inspected the damaged boards and viewed the UPS on various occasions after it was repaired, so Westchester’s criticism on these

grounds is unfounded.

Westchester's challenge to all three of the City's experts is essentially premised on a belief that the only acceptable basis for an opinion on the UPS's functionality is factory witness testing. While the City's experts admit that factory witness testing would establish the UPS's true functionality,⁴ nothing dictates that this is the only method that can be used to render an admissible opinion. Mr. Huston proposes to testify about latent damage based on his knowledge of the surrounding events and his professional experience.⁵ This experience includes failure analysis, witness tests of other UPS units, and the design, manufacture, and repair of component parts. Applying this experience to the underlying facts to form opinions about the functionality of the UPS after the July 22, 2004 event and subsequent repair is not unreliable and in fact often a method used and generally accepted in similar situations.⁶ While the methodology Mr. Huston used may not be perfect or the ideal, the court is satisfied that it meets the standards for admission, especially as the case will proceed to a bench trial. *See SmithKline Beecham Corp. v. Apotex Corp.*, 247 F. Supp. 2d 1011 (N.D. Ill. 2003) (Posner, J., sitting by designation) ("The primary purpose of the *Daubert* filter is to protect juries from being bamboozled by technical evidence of dubious merit In a bench trial it is an acceptable alternative to admit evidence of borderline admissibility and give it the (slight) weight to which it is entitled." (citation omitted)), *aff'd on other grounds*, 403 F.3d 1331 (Fed. Cir. 2005). Westchester may expose the

⁴ In fact, the City's amended Rule 26(a)(2) disclosures identify this as a topic to which Mr. Huston will testify.

⁵ Westchester does not challenge Mr. Huston's qualifications.

⁶ Westchester's own expert, Dr. Stringfellow, has used a similar methodology in coming to his conclusions.

shortcomings in Mr. Huston's opinion and methodology through "[v]igorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof." *Daubert*, 509 U.S. at 596; *see also Smith*, 215 F.3d at 718. The court, sitting as trier of fact, will, at the appropriate time, determine the weight Mr. Huston's opinion is entitled to.

B. Professor Geiger

Westchester also challenges the reliability of Professor Geiger's opinions. It claims that his methodology is flawed, as he did not examine the UPS, the visibly damaged boards, the maintenance logs,⁷ or circuit schematics, conduct any interviews, or perform any tests prior to rendering his opinion. Further, Westchester contends that his opinions are only speculation, as much of what is in his report and testimony is conditional (i.e. there *may* be latent damage, electrical overstress *may* have caused latent damage), and Professor Geiger admitted that latent damage to the UPS cannot be proven.

As discussed in connection with Mr. Huston's testimony, Westchester's challenges to Professor Geiger's opinions are unpersuasive. Professor Geiger maintains that factory witness testing, although it would determine if the UPS is functional, would not reveal whether latent damage is present. Geiger Dep. 133:17–20, attached as Ex. 6 to Def.'s Mot. ("But even if they were to ship [the UPS] back to the factory today and do the testing, they could not verify whether there was latent damage present by doing those tests."). Westchester ignores this qualification. Further, when dealing with latent damage and an unknown cause of failure, some degree of speculation is necessarily involved. Latent damage is, by definition, not readily

⁷ While Professor Geiger did not directly examine the maintenance logs, he did review a summary of the maintenance logs compiled by Mr. Huston. As the logs have been lost and Westchester does not provide any reason to doubt that the summary was not accurate, the court does not consider this a valid basis on which to question Professor Geiger's methodology.

apparent. Thus, the fact that Professor Geiger conditions his conclusions by using the word “may” is not surprising; indeed, it reflects Professor Geiger’s recognition of the limitations of his opinion. *See Smith*, 215 F.3d at 718–19 (explaining that an expert’s hypothetical explanation of a possible or probable cause is admissible where it is more than mere speculation). Similarly, while it would be more useful to the trier of fact to have a number derived from the reliability equation Professor Geiger presents correlating to the significant change in reliability he claims occurred, the fact that the calculation has not been performed is an issue to be explored at trial. Professor Geiger should not be precluded from using the equation as illustration to explain what factors a determination of reliability depends on and the reasons why he believes the reliability of the UPS decreased after July 22, 2004. As it did during Professor Geiger’s discovery deposition, Westchester can fully explore the limits of Professor Geiger’s opinions and present contrary evidence at trial.

C. Mr. Vukovich

Westchester argues that Mr. Vukovich is not qualified to render an expert opinion about the existence of latent damage within the UPS, as he is an architect, not an engineer, with only a general understanding of how a UPS operates and no prior experience with electrical failure analysis. It further contends that any opinion regarding latency issues is speculation. The City responds that it does not intend to present Mr. Vukovich as an expert on latency. Thus, to the extent the City does not oppose Westchester’s motion, it will be granted and Mr. Vukovich will not be allowed to testify on latency issues.

CONCLUSION AND ORDER

For the foregoing reasons, the City's motion [#52] is granted in part and denied in part, and Westchester's motion [#54] is granted in part and denied in part. Dr. Stringfellow may not testify about the City's decision making process in replacing the UPS with a dual redundant system. Mr. Vukovich may not testify on latency issues.

Dated: September 1, 2010

ENTER: 

JOAN HUMPHREY LEFKOW
United States District Judge