

BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF CALIFORNIA



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Petition to Adopt, Amend, or Repeal a  
Regulation Pursuant to Pub. Util. Code  
Section 1708.5, to Establish a Minimum  
Level of Competence for any and all  
Digital Information Systems and all  
components used in SmartGrid

Petition 10-07 \_\_\_\_\_ **P1007015**

Todd S. Glassey CISM CIFI  
CTO Certichron Inc  
50 W. San Fernando St,  
Suite 320  
San Jose CA 95113  
800-511-2301  
tglassey@certichron.com

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**Summary: Petition to Institute a Rule Change Enforcing California Evidence Standards as a requirement for any system and for certificate(s) of operations**

This is a petition to the California Public Utilities Commission (CPUC) to under Utility Code section §1708.5 , in its Rulemaking Operations, formally establish requirements for any Data Processing or SmartGrid AMR/AMI systems to meet the “Trustworthiness requirements” for the digital content records they produce and store which was set in the applicable Digital Evidence precedent established by the Superior Court in re California v Klahed<sup>1</sup>, a ruling, a ruling fully affirmed by the California Appellate Court and published as California State Precedent therein.

**Introduction**

**The “all Digital Evidence created or collected in SmartGrid Systems must meet minimum Court Standards” Petition**

Everyone knows today how easily digital information in any form is manufactured, and how easily content is copied or created from scratch to represent something as factual. Courts in the US and California have been struggling with this for years and have finally come to solid-terms under which Evidence can and cannot be qualified for entry to both California Courts and the Federal Courts which frame the California Court rulings.

The question then is how to build digital trust into systems which are intended to produce information which must be admissible before the Administrative Law Judges of the California Public Utilities Commission (CPUC) and both the California Court and Federal Court’s as the next two layers of oversight therein.

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<sup>1</sup> California v Khaled, California Superior Court SA128676PE from Orange County, California Appellate 30-2009-00304893, May 21<sup>st</sup> 2010.

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To address this matter both Federal and California Court's now have reference rulings providing precedent for the answers to those questions. What remains herein is for the Administrative Law Judges of the CPUC and the CPUC Executive and "Nexus Industry" Group Directors (Electric and Water Industry Segments) to take formal notice of these requirements in all approval actions moving forward.

**The supporting logic and reasoning**

Since the Energy Marketspace enabled by SmartGrid is based in allowing the Consumer open access to Power and Utility Providers, by turning the Grid itself into a Last-Mile type operation, and to mirror the Telecom Grid's operations to an extent, this fundamental statement of "evidence competence" in the components used to implement the SmartGrid system is necessary.

Neither of these situations is analogous to the situation at bar. Here the officer could not establish the time in question, the method of retrieval of the photographs, or that any of the photographs or the videotape was a "reasonable representation of what it is alleged to portray." A very analogous situation to the case at bar, however, is found in Ashford v. Culver City Unified Sch. Dist. (2005) 130 Cal.App.4<sup>th</sup> 344, 349-450, where the court held that the unauthenticated videotape allegedly showing employee's actions lacked sufficient foundation to be admitted at an administrative hearing. And in so holding the court noted that without establishing such a foundation, the videotape was inadmissible.

*Figure 1 – Excerpt from California V Khaled ruling.*

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The following above from the California v Khaled ruling set a new standard for evidence being used before any California Court's as being 'trustworthy' and set some guidelines for how that process happens.

In a technological sense, this for the CPUC pertains to how technology is used to document fact and provide proof in that documentation of said fact(s). The above excerpts from the KHALED Ruling itself clearly state that Time is a key issue of provability and in a TOU matter pertaining to a billing dispute or in one where the data would be used to prosecute frauds or theft of energy those records would be constrained to meet these rulings inside the California and Federal Court. As such it is appropriate that those same requirements transit into the California PUC everyday operations and Operating Utility Code's as well.

Unprovable Time of Use data creates this same problem for SmartGrid but further since there are administrative rulings about the capture of Accounting Data and Use Data these same evidence controls pertain to them as well. This is why evidence-grade timekeeping is required to properly operate a SmartRate billing control model.

## **Discussion**

### **Standards for the capture and retention of information are long-standing in the CPUC**

With the advent of standards like CPUC Resolution No. A-4691 from 1977 which created and set standards for the proper storage of data in utility systems new emerging technologies have expanded and require now a review of those original rules for the application of Mandatory Digital Evidence Competence therein and in all SmartGrid systems moving forward.

### **Technology is always going to be a moving target**

Why the effect of No. A-4691 needs to be reviewed for its digital evidence capabilities and controls, is that since technology is always evolving, it was by this previous language left up

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to the Utilities and their Technology Providers to continue to produce systems capable of being operated in compliance with the evolving evidence requirements of the California Courts. Only it was those utilities and their technology providers who told the Court's what was possible and what was not.

What Court's all over the world are finding is that those constraints were not actually the real hurdles and so they can have exactly what they need in their evidence technologies they just have to specify them so that they are not 'moving targets' like the technology they are based on. That said this is the intent of this petition, to bring a requirement to formally meet digital evidence standards in all SmartGrid and Record Retention Systems so that their evidence remains Court Admissible now that Khaled set that standard in California Courts formally.

Just a few years ago there was no wireless or portable computing. No Internet, no plasma or LCD TV's, no Fuel Cell or other co-gen type power systems at the mass-available retail levels so technologies ever changing footprint has a direct impact on how Energy and other Utility Services are provisioned and recorded for billing and control.

### **SmartGrid Evidence Standards**

To start this analysis we need to set a stake in the ground for any digital billing and TOU control practice which meets proper evidence standards. And further that as part of practice, all SmartGrid systems (as in Energy, Water, Heat, etc.) must produce a proper set of evidence as proof of their operations, and logs which provably allow for their documentation of the delivery of service and the settlement processes.

CPUC already has rules pertaining to computer information (10.3 and 10.4) and these would also apply to SmartMeters and their operations as well as devices which connected to the Meter either directly or through the power lines as well.

## **State and Federal Standards for Court Admissibility of Evidence already exist**

Certichron also believes that to make SmartGrid a success that functionally speaking the trust processes around the TOU Monitoring need to be ones which provide a truly objective and arms-length evidence model for all TOU/Primary Providers, and the related Consumer transactions whether they occur over the SmartGrid itself, the Internet, another telecommunications service interface or other Energy/Utility delivery models including but not limited to traditional DA, DR or other account relationships.

### **Compliance with Federal Evidence Requirements is required too**

Many ESP and other DA programs will cross California State borders and as such it is justified that both State and Federal evidence standards are required.

### **Today's Network Transactions need a Third Party**

Think of a network today as a private virtual connection between two parties. With only two parties involved there is no way to ultimately tell what was done from a forensic standpoint.

Since today's SmartGrid is functionally an open network or "transport for energy sales and delivery" it also has run into the same security and evidence issues as the Internet. That said in today's world network transactions without a third party are hear-say in form because its is a 'he-said she-said' type event.

We here quote and then respond to We do differ however from AT&T's reasoning about who should be involved in keeping the providers honest. To quote AT&T's response in another 08-12-009 filing:

"The Grid should be thoroughly reviewed for potential security breaches, but utilities and communications providers should use their own professional judgment, as informed by the NIST and DHS general guidance, to determine the steps to take to ensure security while controlling the costs which consumers ultimately must bear. **This places cyber security responsibility squarely where it should be – on the utility operating the particular aspect of the Smart Grid.** Allowing utilities to demonstrate reasoned conformance with the NIST and DHS guidelines rather than requiring

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absolute compliance will encourage better and more adaptive cyber security practices. And adaptation is what cyber security is all about. Standards are relatively static but cyber risks are dynamic.”

We disagree with AT&T’s view as highlighted above. The risks in allowing the delivery operator to stand as the trusted-partner is contrary to all objective control practices used today in all regulated industries. This is no more than the “Trust Me I promise I will do it right” commentary we heard from Enron and many others over the last two decades.

The inclusion of a third party, to generate and officiate those evidentiary grade time stamps as part of every transaction is another potential key-step towards assuring compliance with the state and federal evidentiary standards and for designing transparency into the SmartGrid system. It is for that we also seek acknowledgement in the Petitions as well.

**Optional Availability of third-party monitoring service**

Further, those third-party monitoring services should be available to all parties, providers and their customers to properly authenticate all energy and utility use.

These will be important administrative controls for Energy Management Service components at all layers.

**Spoliation of Records is actionable**

In the State of California the loss or spoliation<sup>2</sup> of business records is an actionable offense. Significant fines and other penalties have been assessed with regard to how records are maintained. These continue at the Federal Level<sup>3</sup> as well with

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<sup>2</sup> In California, the independent tort of spoliation was eliminated in favor of applying the remedy within the pending litigation as a discovery sanction. *Cedars-Sinai Medical Ctr. v. Superior Court* (1998), 18 Cal.4th 1, 12. In federal courts, the spoliation concept was recognized as early 1817 in *The FORTUNA---Krause et.al.Claimants, infra*, is based on the inherent power of courts to control abuses in litigation, and often arises from a request for a jury instruction re adverse inference. *Lewy v. Remington Arms* (8<sup>th</sup> Cir 1988), 836 F.2d 1104, 1111.

<sup>3</sup> "District Judge.District courts may impose sanctions as part of their inherent power “for willful disobedience of a court order.” *Chambers v. NASCO, Inc.*, 501 U.S. 32, 45 (1991) (quoting *Alyeska Pipeline Service Co. v. Wilderness Society*, 421 U.S. 420, 258 (1975)). In the Ninth Circuit, spoliation of evidence raises a presumption that the destroyed evidence goes to the merits of the case, and further, that such evidence was adverse to the

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In SmartGrid systems all records need to meet both the retention requirements and digital content integrity requirements, meaning it is no longer reasonable to 'spool all of the day's operating logs onto a tape and have Iron Mountain or other off-site provider pick it up, there are now formally requirements for the formal maintenance of that data.

The same is true of records which have been tampered with or cannot have their integrity proved (i.e. proven that they were not tampered with) as in *Cedars-Sinai Medical Ctr. v. Superior Court* (1998), 18 Cal.4th 1, 12<sup>45</sup>

### **Cyber Security – Secure and provable/private record services**

As supporting arguments for the need to establish regulatory evidence standards for

SmartGrid components, realize that virtually all of these are computers or are controlled by some form of a computer device today. As noted above that brings eDiscovery mandates into SmartGrid and all regulated infrastructure of the California Energy Delivery and Production Grids as well as the Water Control and Delivery Grids as well.

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party that destroyed it. *Phoceene Sous-Marine, S.A. v. U.S. Phosmarine, Inc.*, 682 F.2d 802, 806 (9th Cir.1982) (discussing *Hammond Packing Co. v. Ark.*, 212 U.S. 322, 349-54 (1909)); *Nat'l Ass'n of Radiation Survivors v. Turnage*, 115 F.R.D. 543, 557 (N.D.Cal.1987) ("Where one party wrongfully denies another the evidence necessary to establish a fact in dispute, the court must draw the strongest allowable inferences in favor of the aggrieved party"); *Computer Assoc. Intern., Inc. v. American Fundware, Inc.*, 133 F.R.D. 166, 170 (D.Colo.1990). Additionally, "[t]he obligation to retain discoverable materials is an affirmative one; it requires that the agency or corporate officers having notice of discovery obligations communicate those obligations to employees in possession of discoverable materials." *National Ass'n of Radiation Survivors*, 115 F.R.D. at 557-58

<sup>4</sup> Independent cause of action for tort rejected in favor of resolving matter in pending litigation. The Court's language suggests a liberal or broad approach to remedying discovery abuses within the pending litigation. Dictum: "Destroying evidence in response to a discovery request after litigation has commenced would surely be a misuse of discovery within the meaning of section 2023, as would such destruction in anticipation of a discovery request."

<sup>5</sup> *Munshani v. Signal Lake Venture Fund II* (Mass. App. Ct. 3/26/04), 805 N.E.2d 998; 2004 Mass. App. LEXIS 323, 60 Mass. App. Ct. 714; When a court appointed neutral determined that an e-mail offered by plaintiff to avoid a statute of frauds was not authentic, plaintiff took the 5<sup>th</sup> and then appealed the dismissal of its case on the grounds that the sanction was excessive. Dismissal affirmed based on commission of fraud on the court and also as appropriate sanction based on inherent power of court. The court entered judgment that dismissed the complaint in an action seeking \$25 million for breach of oral promise on theories of breach of contract and unjust enrichment; credibility was a major issue. The judge found plaintiff committed a fraud on the court by manufacturing evidence, swearing to its authenticity, and continuing to insist on its authenticity for more than seven months while an expert investigated the matter. The court ordered plaintiff to pay the costs and fees of the court's expert and the defendants' attorney's fees and costs in connection with fraud investigation. On appeal, plaintiff argued the sanction was excessive for an isolated act of perjury that did not go to the merits.

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Gone are the 100% mechanical systems which were only aggregate consumption monitors. Today's control systems provide use, time tracking, and actually rate controlling as well for Co-gen operations.

**Digital Evidence Controls will open new markets and businesses**

The addition of the Digital Evidence Control requirements to SmartGrid operations will provide a new set of markets and services for consumer energy sales controls. It will also better regulate the nexus between the information superhighway (the Internet) and the energy grid enabling purchase and delivery interfaces for bulk and DA Energy Programs directly. These capabilities make it also possible to meet the privacy requirements of key mandates like the Payment Card Industry's Data Security Standard for the collection and exchange of private and financial information through the nexus.

**CAISO Implications of this Petition**

It is worth noting that this petition also has direct implications to CAISO, and all Electrical Energy Providers as well as Consumers in the State of California since many of the systems in use today are not capable in their current state of delivering culpable evidence with certain modifications.

The reason's are that proper "Digital Evidence Compliance" practices will have to be developed by CAISO and others to properly document the control of their key information base under CPUC Rule 10.3 and 10.4.

To meet the requirements of a uniform digital evidence standard effectively, utilities as providers will need to fully meet existing US and California State Evidence Standard providing basic point of sale control systems at the SmartMeter level.

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This compliance will put in place the integrity controls which will also open up a number of other control/service opportunities for CAISO possibly (i.e. vending machine licenses for each SmartGrid meter operating as an energy purchase and control station).

### **SmartGrid and the Vision**

With regard to the existing and new SmartGrid itself, the few considerations we propose to make are made in the Proposed Decision, and are made to ensure that the Grid can provide reliable evidence of its proper operation, and through this to create the transparency necessary in an open market.

[p.108] “16. A presentation of a Smart Grid Vision Statement that shows that the proposed deployment plan advances a “Smart Electric Market” that is transparent and demand responsive, provides pricing information and promotes an open energy trade and delivery platform would be consistent with SB 17 policies and initiatives.”

With a fully empowered and transparent grid the End-User should be able to buy their energy from anyone offering it for sale and contract for the delivery of that energy through their Last Mile Provider. The enablement of the SmartGrid as a transparent platform for energy distribution requires a uniform evidence model which meets all the legal requirements for operations both within and across State borders. Certichron believes that the rate design embodied in this description is easily accomplished by the integration of a proper legal model and trusted third party.

### **California’s SmartGrid needs trust capability which exceeds any one party’s potential to commit frauds.**

The ultimate idea driving this petition is that “the system must be better than the people who operate” it to protect the Public Trust it is being rolled out to support. This same level of data capture and data integrity applies to Time of Use controls especially since there are legal requirements under US law for which timescale, in this case NIST(UTC) must be used for legally enforceable time-service transactions.

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Likewise from a trust perspective while the "Operator of the Last Mile" provisioning is one party who should be tracking the Time Of Use controls they are not an objective representative of the end-user's Time of Use Data.

Why? A simple 2 minute 'time-slip' for instance in a billing cycle would produce a misstatement and the associated billing for hundreds of millions of dollars over a year for most medium sized utilities and that scales for the larger entities here in the State of California.

**Third Party Time Provider and Audit Partner is the answer**

Irregardless of how the problem of reliable evidence is solved it is important in SmartGrid operations.

As one option we provide the following. In the Utility Operations world 3<sup>rd</sup> party certifying agent takes on new meaning since TOU billing is becoming key to managing costs and keeping proper use loading consistent.

As such this has direct impact since it is those SmartGrid EMS and SmartMeter Systems which must have their time-of-day provably tracked. The most efficient and possibly the only real way to provably add trust to SmartGrid transactions is to add a trusted third party to certify the timeliness of the billing controls so that no TOU billing errors occur.

Because of this potential and the sheer number of intended frauds from an investment standpoint in the Energy Sector over the last ten years, there is a serious lack of trust in Energy Sector executives. When leveraged against the misstatement of client-use in Smart Meter operations which have in fact occurred, a trusted third party to any of these operations of the SmartGrid is the only reliable way to create global levels of trust.

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Simply put, Time of Use (TOU) service models mandate a provable way to document the use of the Energy commodity. They also strongly define where customer controls start and suppliers infrastructure ends.

One solution for addressing this liability is building what in networking is described as a Trust-Anchor, and that would be the introduction of a third-party as an objective observer or reference for some aspect of the transaction, in this case being a timing-authority (a credible source of reliable time data) to calibrate the time-of-day settings in all of the infrastructure under control as a SmartGrid.

### **Applicable Security Standards – NIST SP800-52 and 53**

As a basis for constraining the need for this today NIST controls are only talked about. We seek this petition to mandate that whatever technology is necessary to make the system meet the Evidence Standards is to be used.

Today that means NIST Controls and so for any systems providing key control of customer use information we propose the addition of the requirement that those systems meet the ever-evolving digital evidence standards in place during the time of their operations and today that would mean meeting the NIST Control Standards. The controls we refer to are those which allow for billing and adaptive rate plans to be put in place need to be provable and secure, and as such meet both NIST SP800-52<sup>6</sup> and 53<sup>7</sup> standards for Information Security as well as the NIST ICS recommendation. Additionally there are a set of US Critical Infrastructure Controls which DHS has in place which any Utility Service operated to serve the Public Interest must meet.

With advanced pooling and local/regional energy reservoirs being used to buffer D/A and other bulk purchases, the smart solution is one which fully implements a set of controls

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<sup>6</sup> <http://csrc.nist.gov/publications/nistpubs/800-52/SP800-52.pdf>

<sup>7</sup> <http://csrc.nist.gov/publications/nistpubs/800-53-Rev2/sp800-53-rev2-final.pdf>

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that comply completely with NIST service requirements including the use of the NIST timebase as the trust-anchor for all transactions.

**Forensic Telemetry is what enables the CPUC Open Rate Models**

We want to introduce the term of Forensic Telemetry (FT). FT is the part of the system which allows for key forensic proofs to be drawn from it. For many this will be implementing NIST control processes in their equipment and operating practices and to that end we notice that systems which properly implement the NIST recommendations will have FT designed into their operating fabric.

We strongly agree that tariffs and pricing impact all forms of supply and demand-side activities, including direct access (“DA”), demand response (“DR”), energy efficiency (“EE”), and time of use (“TOU”) systems and as mandated are easily delivered when they are operated with a trusted third party time-service provider and that evidentiary grade time and trusted-third party security model will address the control-processes needed to enable all of the open rates contemplated in the ruling.

**Forensic Telemetry is a key piece of Meter AMR systems**

Meter Management Solutions exist which allow the use of already deployed accessible meters as well as more network/communication savvy meters so the ability to deploy safe and secure meters as well as Internet and existing Last Mile based control systems as in solutions like those proposed by AT&T and other Internet Service Providers make the potentials of an open marketplace attainable in a much more aggressive timeline that many would think.

With the Meter as the Bright-Line CPE demarcation point it becomes the key agent for controlling the timely logging of its activities. Certichron supports commentary from Wal-Mart and others on the importance of properly demarking customer and supplier perimeters as well.

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**Other CPUC Dockets this affects**

Certichron also notices that Evidence Standards and in particular time-management in AMI services are a key component in TOU billing systems and should be afforded the same consideration in at least two other planning related open rulemaking dockets at the Commission, namely:

- Order Instituting Rulemaking to Integrate and Refine Procurement Policies and Consider Long Term Procurement Plans, R.10-05-006, filed May 6, 2010;

and

- Order Instituting Rulemaking to Oversee the Resource Adequacy Program, Consider Refinements, and Establish Annual Local Procurement Obligations, R.09-10-032, filed October 29, 2009.

Certichron believes the same set of services proposed here for 09-12-008 and based on the availability of real NIST calibrated time services to the meter and AMI infrastructure, that the Commission is warranted in continuing to meet the milestone deadlines and goals for providing consumers with access to data adopted in D.09-12-046, with three milestones,

those being:

- the policy objective for the provision of retail and wholesale price information by the “end of 2010,” ; and
- which also provides access to usage data through an agreement with a third party by the “end of 2010,”; and
- Access to usage information on a near real-time basis for customers with an Advanced Metering Infrastructure (AMI) meter by the “end of 2011.”

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**Formally Amending the CPUC Utility Code Sections 3.1 & 3.3**

Further that as part of the petition herein, under CPUC Certificate to Operate filing procedures as defined in Rule 3<sup>8</sup>, we petition the CPUC and its Administrative Law Judges clarify the evidence requirements in operating utilities and their infrastructure in the State of California and in doing so to add specific requirements to Rule 3.1 to include the requirement that any control or data systems built to administer or operate the utility systems must meet the basic California Evidence Standards for Digital Content Capture and Management, and also add to Rule 3.3(2) the requirement to attest that any system being proposed for certification for operation is compliant to all existing California Evidence Requirements for court admissible digital reporting and data.

**Formally Amending Ruling No. A-4691**

In addition, this petition as stated elsewhere, requests formal modification of CPUC A-4691<sup>9</sup> from 1977 and its successors to include a requirement that any data or document retention system must make allowances for and provide properly qualified evidence-grade containment for those data objects and records which are maintained as part of compliance with A-4691 and other CPUC resolutions, rules and directives.

**Rule 6.3 Compliance Statement**

This petition is fully compliant with Section 6.3 (sections (a) and (b)) as specified in the following two sections.

**Rule 6.3(a) Compliance**

Per Rule 6.3(a), since there is a factual standard for the adoption of specific guidance from the CPUC here which was formally issued by the California Superior Court and then the 6<sup>th</sup> District California Appellate Court's Affirmation of the California v Khaled ruling which provides the requirements for generating "Trustworthy Evidence", evidence which in this

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<sup>8</sup> [http://docs.cpuc.ca.gov/published/Rules\\_prac\\_proc/70731.htm](http://docs.cpuc.ca.gov/published/Rules_prac_proc/70731.htm)

<sup>9</sup> <http://www.cpuc.ca.gov/NR/rdonlyres/18DAC767-CFD1-41FA-90DB-3AC030CDEB9E/0/PreservationofRecords.doc>

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case be used before the Judges of the California Public Utilities Commission or those of any other California Court.

It is appropriate for the CPUC to formally take notice of this matter and the requirements therein for systems deployed as part of the “TOU or Operations evidence capture systems” in California Utility Systems and their commercial or private operations.

**Rule 6.3(b) Compliance**

Rule 6.3(b) provides that a petition to adopt, amend, or repeal a regulation pursuant to Pub. Util. Code § 1708.5 “must state whether the issues raised in the petition have, to the petitioner's knowledge, ever been litigated before the Commission, and if so, when and how the Commission resolved the issues, including the name and case number of the proceeding (if known).”

To the best of Petitioner’s knowledge, the issues raised in this petition have never been litigated before the Commission since they pertain to a recently issued California Appellate Court ruling affirming a minimum competence for digital evidence being reviewed before California Court’s but as part of this petition there are potentially extensions of an existing rule with regard to these digital evidence concepts in regard to the retention of records from systems Ruling A-4691 from July 12<sup>th</sup> 1977, and as such this petition will apply to any data capture practice operating anywhere within the California Utility Grid and like systems.

**Conclusion**

In closing this we applaud the Commissioner’s work in this ruling and believe it is in the best interest to keep the decisions time-lines intact since the technology to address the control issues and quality of evidence being produced at all levels of the SmartGrid system exists today and is in fact ready for use in California. To that end and before the Administrative Law Judges of the Commission we petition as follows:

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**Petition for an issuance of a Rule regarding that “SmartGrid systems must produce evidence meeting the defined standards for court admissibility”**

Certichron formally petitions the CPUC to issue specific guidance that “All SmartGrid” component systems and infrastructure components (as well as existing operating SCADA systems) must meet the California State Evidence Standards as enforced by California v Khaled, and that all SmartGrid components also comply with CPUC Rules 10.3 and 10.4 (see Appendices) in that their vendor’s and operator’s must produce ongoing evidence of their operation which meets the California State and Federal Rules of evidence and precedents such as Lorraine v Markel<sup>10</sup> (see Appendices).

To facilitate this Certichron believes therefore that it is appropriate to specify in the petitioned ruling that

***“Any and all SmartGrid monitoring processes must also produce court admissible evidence of operations which meets the minimum legal standards for digital evidence both at the State of California's level and that of the Federal Government”.***

as part operating requirements for any systems which will generate data which may be used as testimony or reporting of fact before the Public Utilities Commissions, California State Courts and Federal Courts.

**Verification (Rule 1.11) and eSignature**

This filing is made compliant to the rules of the California Public Utilities Commission and is verified per Rule 1.11 as being attested to as true and correct and for which items are relied on as being true and correct, that under the perjury statute of the State of California, this submission is attested to

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<sup>10</sup> Lorraine v. Markel Am. Ins. Co., 241 FRD 534 (D. Md. 2007)

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Witness my electronic hand under eSign , 7/8/2010, Boulder Creek California,

/s/ Todd S. Glassey

Todd S. Glassey, CISM CIFI  
Certichron inc  
TGlassey@Certichron.COM

## **Appendix A - California Sanction-for-Spoilation related Case List**

The case precedent for the necessity to produce and protect proper operating records is also substantiated and reflected in all of the following rulings. What this clearly states is that there is a clear and present need to protect all content from all systems which may be regulated by any of the State of California's Court's including those within the California Public Utilities Commission.

A & M Records v. Heilman (1977) 75 Cal.App.3d 554.  
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### Executive Director's office

Executive Director, Paul Clanon [PClanon@CPUC.CA.GOV](mailto:PClanon@CPUC.CA.GOV)

### Administrative Law Judges Office

Chief ALJ Karen Clopton - [KClopton@CPUC.CA.GOV](mailto:KClopton@CPUC.CA.GOV)

### Industry Director's Offices

**Water Industry Division Director**, Raminder Kahlon, through service at  
[water\\_division@cpuc.ca.gov](mailto:water_division@cpuc.ca.gov)

**Energy Industry Division** Director Julie Fitch, [jf2@cpuc.ca.gov](mailto:jf2@cpuc.ca.gov)

Andrew Campbell  
**CALIF PUBLIC UTILITIES COMMISSION**  
EXECUTIVE DIVISION  
505 VAN NESS AVE RM 5203  
SAN FRANCISCO CA 94102-3214  
Email: [agc@cpuc.ca.gov](mailto:agc@cpuc.ca.gov)  
Status: STATE-SERVICE

Jennifer Caron  
**CALIF PUBLIC UTILITIES COMMISSION**  
ENERGY DIVISION

505 VAN NESS AVE AREA 4-A  
SAN FRANCISCO CA 94102-3214  
Email: [jc8@cpuc.ca.gov](mailto:jc8@cpuc.ca.gov)  
Status: STATE-SERVICE

Hazlyn Fortune  
**CALIF PUBLIC UTILITIES COMMISSION**  
ENERGY DIVISION  
505 VAN NESS AVE AREA 4-A  
SAN FRANCISCO CA 94102-3214

BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF CALIFORNIA

Email: [hcf@cpuc.ca.gov](mailto:hcf@cpuc.ca.gov)  
Status: STATE-SERVICE  
Sudheer Gokhale

**CALIF PUBLIC UTILITIES COMMISSION**  
ELECTRICITY PLANNING & POLICY BRANCH  
505 VAN NESS AVE RM 4102  
SAN FRANCISCO CA 94102-3214  
Email: [skg@cpuc.ca.gov](mailto:skg@cpuc.ca.gov)  
Status: STATE-SERVICE  
Aloke Gupta

**CALIF PUBLIC UTILITIES COMMISSION**  
ENERGY DIVISION  
505 VAN NESS AVE AREA 4-A  
SAN FRANCISCO CA 94102-3214  
Email: [ag2@cpuc.ca.gov](mailto:ag2@cpuc.ca.gov)  
Status: STATE-SERVICE  
Jessica T. Hecht

**CALIF PUBLIC UTILITIES COMMISSION**  
DIVISION OF ADMINISTRATIVE LAW JUDGES  
505 VAN NESS AVE RM 5113  
SAN FRANCISCO CA 94102-3214  
Email: [jhe@cpuc.ca.gov](mailto:jhe@cpuc.ca.gov)  
Status: STATE-SERVICE  
Bruce Kaneshiro

**CALIF PUBLIC UTILITIES COMMISSION**  
ENERGY DIVISION  
505 VAN NESS AVE AREA 4-A  
SAN FRANCISCO CA 94102-3214  
Email: [bsk@cpuc.ca.gov](mailto:bsk@cpuc.ca.gov)  
Status: STATE-SERVICE  
Dorris Lam

**CALIF PUBLIC UTILITIES COMMISSION**  
ENERGY DIVISION  
505 VAN NESS AVE AREA 4-A  
SAN FRANCISCO CA 94102-3214  
Email: [dnl@cpuc.ca.gov](mailto:dnl@cpuc.ca.gov)  
Status: STATE-SERVICE

Diana L. Lee  
**CALIF PUBLIC UTILITIES COMMISSION**  
LEGAL DIVISION  
505 VAN NESS AVE RM 4107  
SAN FRANCISCO CA 94102-3214  
Email: [dil@cpuc.ca.gov](mailto:dil@cpuc.ca.gov)  
Status: STATE-SERVICE  
Karl Meeusen

**CALIF PUBLIC UTILITIES COMMISSION**  
ENERGY DIVISION  
505 VAN NESS AVE AREA 4-A  
SAN FRANCISCO CA 94102-3214  
Email: [kkm@cpuc.ca.gov](mailto:kkm@cpuc.ca.gov)  
Status: STATE-SERVICE  
Joy Morgenstern

**CALIF PUBLIC UTILITIES COMMISSION**  
ENERGY DIVISION  
505 VAN NESS AVE AREA 4-A  
SAN FRANCISCO CA 94102-3214  
Email: [jym@cpuc.ca.gov](mailto:jym@cpuc.ca.gov)  
Status: STATE-SERVICE  
David Peck

**CALIF PUBLIC UTILITIES COMMISSION**  
ELECTRICITY PLANNING & POLICY BRANCH  
505 VAN NESS AVE RM 4103  
SAN FRANCISCO CA 94102-3214  
Email: [dbp@cpuc.ca.gov](mailto:dbp@cpuc.ca.gov)  
Status: STATE-SERVICE  
Yuliya Shmidt

**CALIF PUBLIC UTILITIES COMMISSION**  
ENERGY PRICING AND CUSTOMER PROGRAMS  
BRANCH  
505 VAN NESS AVE RM 4104  
SAN FRANCISCO CA 94102-3214  
Email: [ys2@cpuc.ca.gov](mailto:ys2@cpuc.ca.gov)  
Status: STATE-SERVICE

## CPUC Service List Members

[e-recipient@caiso.com](mailto:e-recipient@caiso.com)  
[ddayton@cleanenergysol.com](mailto:ddayton@cleanenergysol.com)  
[sesco@optonline.net](mailto:sesco@optonline.net)  
<mmoore@newportpartnersllc.com>,  
<keith.mccrea@sutherland.com>,  
<donauldgilligan@comcast.net>,  
<mharrigan@ase.org>,  
<adam@agp-llc.com>,  
<michael@opower.com>,  
<jimross@r-c-s-inc.com>,  
<rockybacchus@gmail.com>,  
<gtropsa@ice-energy.com>,  
<ckmitchell1@sbcglobal.net>,  
<SDPatrick@SempraUtilities.com>,

<dmahmud@mwdh2o.com>,  
<nkarno@yahoo.com>,  
<thamilton@icfi.com>,  
<pwuebben@aqmd.gov>,  
<larry.cope@sce.com>,  
<monica.ghattas@sce.com>,  
<CFPena@SempraUtilities.com>,  
<liddell@energyattorney.com>,  
<andrew.mcallister@energycenter.org>,  
<dmano@enalsys.com>,  
<etaylor@enalsys.com>,  
<mlewis@ctg-net.com>,  
<mike.rogers@greenhomesamerica.com>,  
<judi.schweitzer@post.harvard.edu>,

BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF CALIFORNIA

<rscott@cheers.org>,  
<dale@betterbuildings.com>,  
<wilkinson@es.ucsb.edu>,  
<pcanessa@charter.net>,  
<mtierney-lloyd@enernoc.com>,  
<JeffreyH@hellermanus.com>,  
<RemiT@hellermanus.com>,  
<dil@cpuc.ca.gov>,  
<jeanne.sole@sfgov.org>,  
<william.sanders@sfgov.org>,  
<bfinkelstein@turn.org>,  
<hayley@turn.org>,  
<marcel@turn.org>,  
<mang@turn.org>,  
<nlong@nrdc.org>,  
<cjn3@pge.com>,  
<steven@moss.net>,  
<jsqueri@goodinmacbride.com>,  
<edwardoneill@dwt.com>,  
<jimflanagan4@mac.com>,  
<saw0@pge.com>,  
<ssmyers@att.net>,  
<jak@gepillc.com>,  
<wbooth@booth-law.com>,  
<jerryl@abag.ca.gov>,  
<rknight@bki.com>,  
<jody\_london\_consulting@earthlink.net>,  
<hoerner@redefiningprogress.org>,  
<swentworth@oaklandnet.com>,  
<samk@greenlining.org>,  
<TWhite@homeenergy.org>,  
<john@proctoreng.com>,  
<pmschwartz@sbcglobal.net>,  
<tim@marinemt.org>,  
<wem@igc.org>,  
<hankryan2003@yahoo.com>,  
<bhines@svlg.net>,  
<Rob@ConSol.ws>,  
<jweil@aglet.org>,  
<bill@jbsenergy.com>,  
<elee@davisenergy.com>,  
<mike@calcerts.com>,  
<rnichols@navigantconsulting.com>,  
<tcrooks@mcr-group.com>,  
<eemblem@3eintinc.net>,  
<chris@cuwcc.org>,  
<mboccardo@dolphingroup.org>,  
<glw@eslawfirm.com>,  
<jparks@smud.org>,  
<ljimene@smud.org>,  
<bmatulich@egia.com>,  
<cscruton@energy.state.ca.us>,  
<kmills@cfbf.com>,  
<rob@clfp.com>,  
<steve@greenplumbersusa.com>,  
<js@clearedgepower.com>,  
<tom@ucons.com>,  
<ABesa@SempraUtilities.com>,  
<achang@efficiencycouncil.org>,  
<WBlattner@SempraUtilities.com>,  
<clamasbabbini@comverge.com>,  
<elvine@lbl.gov>,  
<gstaples@mendotagroup.net>,  
<HYao@SempraUtilities.com>,  
<john@enactenergy.com>,  
<mwbeck@lbl.gov>,  
<PVillegas@SempraUtilities.com>,  
<sschiller@efficiencycouncil.org>,  
<tglassey@certichron.com>,  
<mrw@mrwassoc.com>,  
<cpuc@certichron.com>,  
<EGrizard@deweysquare.com>,  
<rekl@pge.com>,  
<tam.hunt@gmail.com>,  
<gandhi.nikhil@verizon.net>,  
<ameliag@ensave.com>,  
<Clark.Pierce@us.landisgyr.com>,  
<wjp4@bpconsulting.org>,  
<CCole@currentgroup.com>,  
<emily.hallett@positiveenergy.com>,  
<puja@opower.com>,  
<sean.harrington@opower.com>,  
<staples@staplesmarketing.com>,  
<mking@staplesmarketing.com>,  
<nphall@tecmarket.net>,  
<skihm@ecw.org>,  
<annette.beitel@gmail.com>,  
<padib@apx.com>,  
<jmeyers@naima.org>,  
<pjacobs@buildingmetrics.biz>,  
<bbarkett@summitblue.com>,  
<mmcguire@summitblue.com>,  
<bobbi.sterrett@swgas.com>,  
<emello@sppc.com>,  
<David.Pettijohn@ladwp.com>,  
<bmcdonnell@mwdh2o.com>,  
<KWong@SempraUtilities.com>,  
<KShore@SempraUtilities.com>,  
<gclayborn@gmail.com>,  
<nhernandez@isd.co.la.ca.us>,  
<kecia.davison@csgrp.com>,  
<scott.bowman@csgrp.com>,  
<david@nemtzw.com>,  
<susan.munves@smgov.net>,  
<jcluboff@lmi.net>,  
<jack.rosenthal@p2seng.com>,  
<brad.bergman@intergycorp.com>,  
<southlandreports@earthlink.net>,  
<cyin@yinsight.net>,  
<twayne@roadrunner.com>,  
<sculbertson@icfi.com>,  
<don.arambula@sce.com>,  
<tory.weber@sce.com>,  
<devon@hartmanbaldwin.com>

BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF CALIFORNIA

<Case.Admin@sce.com>,  
<Jennifer.Shigekawa@sce.com>,  
<Laura.Genao@sce.com>,  
<dwood8@cox.net>,  
<rsperberg@onsitenergy.com>,  
<jlaun@apogee.net>,  
<Elizabeth.DeSouza@csgrp.com>,  
<ashley.watkins@energycenter.org>,  
<CentralFiles@SempraUtilities.com>,  
<irene.stillings@energycenter.org>,  
<jennifer.porter@energycenter.org>,  
<sephra.ninow@energycenter.org>,  
<CentralFiles@SempraUtilities.com>,  
<JYamagata@SempraUtilities.com>,  
<bob.ramirez@itron.com>,  
<rachel.harcharik@itron.com>,  
<david.gordon@efm-solutions.com>,  
<kjk@kjkammerer.com>,  
<LukeH@enalasys.com>,  
<cneedham@edisonmission.com>,  
<cperkins@energycoalition.org>,  
<TFlanigan@EcoPetition.us>,  
<sthompson@ci.irvine.ca.us>,  
<sbarata@opiniondynamics.com>,  
<mlong@anaheim.net>,  
<cheryl.collart@ventura.org>,  
<Jeff.Hirsch@DOE2.com>,  
<dmatson@co.santa-barbara.ca.us>,  
<hhuerta@rhainc.com>,  
<pk@utilitycostmanagement.com>,  
<atencate@rsgrp.com>,  
<lcasentini@rsgrp.com>,  
<jcelona@sbcglobal.net>,  
<ann.kelly@sfgov.org>,  
<bruce.foster@sce.com>,  
<matt@sustainablespaces.com>,  
<norman.furuta@navy.mil>,  
<eric@ethree.com>,  
<jchou@nrdc.org>,  
<kgrenfell@nrdc.org>,  
<lettenson@nrdc.org>,  
<rlauman@ecosconsulting.com>,  
<andrew\_meiman@newcomb.cc>,  
<ann\_mccormick@newcomb.cc>,  
<efm2@pge.com>,  
<yxg4@pge.com>,  
<John\_Newcomb@newcomb.cc>,  
<filings@a-klaw.com>,  
<LDRi@pge.com>,  
<magnuson.leif@epa.gov>,  
<lhj2@pge.com>,  
<matt\_sullivan@newcomb.cc>,  
<mpa@a-klaw.com>,  
<nes@a-klaw.com>,  
<sls@a-klaw.com>,  
<tmfry@nexant.com>,  
<aliddell@icfi.com>,  
<jared@efficiencyfirst.org>,  
<cassandra.sweet@dowjones.com>,  
<mgo@goodinmacbride.com>,  
<sdhilton@stoel.com>,  
<policy.solutions@comcast.net>,  
<cem@newsdata.com>,  
<lisa\_weinzimer@platts.com>,  
<Mike@pge.com>,  
<slda@pge.com>,  
<SRRd@pge.com>,  
<slw2@pge.com>,  
<wmcguire@fypower.org>,  
<bkc7@pge.com>,  
<regrelcpuccases@pge.com>,  
<jkz1@pge.com>,  
<rafi@pge.com>,  
<epetrill@epri.com>,  
<andrew.wood3@honeywell.com>,  
<sharon@emeter.com>,  
<kathleen.gaffney@kema.com>,  
<elowe@barakatconsulting.com>,  
<tlmurray@earthlink.net>,  
<singh70@gmail.com>,  
<mistib@comcast.net>,  
<ashish.goel@intergycorp.com>,  
<grant.cooke@intergycorp.com>,  
<jay.bhalla@intergycorp.com>,  
<rfox@intergycorp.com>,  
<sbeserra@sbcglobal.net>,  
<ghamilton@gepllc.com>,  
<michael.cheng@paconsulting.com>,  
<cadickerson@cadconsulting.biz>,  
<alex.kang@itron.com>,  
<Ann.Peterson@itron.com>,  
<fred.coito@kema.com>,  
<jenna.canseco@us.kema.com>,  
<jennifer.fagan@itron.com>,  
<jtiffany@ase.org>,  
<john.cavalli@itron.com>,  
<brbarkovich@earthlink.net>,  
<Karin.Corfee@kema.com>,  
<Bruce@BuildItGreen.org>,  
<awatson@quest-world.com>,  
<robertg@greenlining.org>,  
<jskromer@gmail.com>,  
<craigtyler@comcast.net>,  
<darmanino@co.marin.ca.us>,  
<michele@boggis.com>,  
<rita@ritanortonconsulting.com>,  
<gthomas@ecoact.org>,  
<emahlon@ecoact.org>,  
<michael@ecoact.org>,  
<mary.tucker@sanjoseca.gov>,  
<NancyKRod@conSol.ws>,  
<bobho@mid.org>,  
<joyw@mid.org>,  
<gsenergy@sonoma-county.org>

BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF CALIFORNIA

<tconlon@geopraxis.com>, <jbazemore@emil.com>,  
<garrick@jbsenergy.com>, <ppl@cpuc.ca.gov>,  
<bmfinkelor@ucdavis.edu>, <atr@cpuc.ca.gov>,  
<rmccann@umich.edu>, <aeo@cpuc.ca.gov>,  
<mbhunt@ucdavis.edu>, <cbe@cpuc.ca.gov>,  
<mgillette@enernoc.com>, <cf1@cpuc.ca.gov>,  
<dmahone@h-m-g.com>, <cxc@cpuc.ca.gov>,  
<kenneth.swain@navigantconsulting.com >, <crv@cpuc.ca.gov>,  
<dmg@cpuc.ca.gov>,  
<kdusel@navigantconsulting.com>, <trh@cpuc.ca.gov>,  
<lpark@navigantconsulting.com>, <hcf@cpuc.ca.gov>,  
<david.reynolds@ncpa.com>, <jbf@cpuc.ca.gov>,  
<scott.tomashefsky@ncpa.com>, <jl2@cpuc.ca.gov>,  
<asloan@rs-e.com>, <cln@cpuc.ca.gov>,  
<mclaughlin@braunlegal.com>, <jst@cpuc.ca.gov>,  
<dgeis@dolphingroup.org>, <jnc@cpuc.ca.gov>,  
<ehebert@energy.state.ca.us>, <jdr@cpuc.ca.gov>,  
<jcastleberry@rs-e.com>, <jci@cpuc.ca.gov>,  
<wynne@braunlegal.com>, <keh@cpuc.ca.gov>,  
<klewis@energy.state.ca.us>, "Mahoney, Kim" <kmb@cpuc.ca.gov>,  
<mharcos@rs-e.com>, <ks3@cpuc.ca.gov>,  
<rsapudar@energy.state.ca.us>, <lp1@cpuc.ca.gov>,  
<bernardo@braunlegal.com>, <mmw@cpuc.ca.gov>,  
<pstoner@lgc.org>, <mkh@cpuc.ca.gov>,  
<lmh@eslawfirm.com>, <nfw@cpuc.ca.gov>,  
<vwood@smud.org>, <pw1@cpuc.ca.gov>,  
<jane@autocell.net>, <pcf@cpuc.ca.gov>,  
<richard@autocell.net>, <snr@cpuc.ca.gov>,  
<wwester@smud.org>, <srn@cpuc.ca.gov>,  
<rmowris@earthlink.net>, <tcx@cpuc.ca.gov>,  
<hgilpeach@scanamerica.net>, <tcr@cpuc.ca.gov>,  
<Dbjornskov@peci.org>, <zap@cpuc.ca.gov>,  
<paul.notti@honeywell.com>, <ztc@cpuc.ca.gov>,  
<brian.hedman@cadmusgroup.com>, <awp@cpuc.ca.gov>,  
<Sami.Khawaja@cadmusgroup.com>, <crogers@energy.state.ca.us>,  
<janep@researchintoaction.com>, <agarcia@energy.state.ca.us>,  
<9watts@gmail.com>, <msherida@energy.state.ca.us>,  
<samsirkin@cs.com>, <sbender@energy.state.ca.us>,  
<mbaker@sbwconsulting.com>, [pbarthol@energy.state.ca.us](mailto:pbarthol@energy.state.ca.us),  
<jholmes@emil.com>, <webdra@cpuc.ca.gov>

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