

PUBLIC UTILITIES COMMISSION

505 VAN NESS AVENUE
SAN FRANCISCO, CA 94102-3298



May 21, 2007

To: All Interested Parties in Order Instituting Rulemaking (R.) 07-04-015

In this letter, the Communications Division (CD) lays out the scope, agenda and procedures for conducting three technical workshops of subject matter experts, as directed by R.07-04-015.

Pursuant to Assembly Bill (AB) 2393 (Ch. 776, Stats. 2006), the Commission initiated this Rulemaking to investigate current practices for telecommunications back-up power systems and emergency notification systems. The Commission will adopt performance standards for these systems only if technically feasible and the benefits exceed the costs. The Commission is required to provide a report to the Legislature on the results of its investigation before January 1, 2008.

To this end, technical workshops will be held in the Commission's Auditorium, at 505 Van Ness Avenue, in San Francisco, as follows:

- 9 am to 3:30 pm – June 5, 2007
Back-up Power Installed on the Property of Residential and Small Commercial Customers
- 10 am to 4:30 pm – June 6, 2007
Back-up Power Systems Not Installed on the Customer's Premises
- 10 am to 4:30 pm – June 19, 2007
Emergency Notification Systems

The workshops will be available via video Webcast at: <http://www.californiaadmin.com/cgi-bin/cpuc.cgi> and via telephone at 1-866-453-6703 and, when prompted, enter the participant pass code – 218594. The workshops will also be transcribed and transcriptions will be made available to interested parties.

Appendix A outlines the agenda for these workshops. **Appendix B** sets forth workshop questions. Please respond to the Appendix B workshop questions by May 31, 2007 with copy to the proceeding service list.^{1 2} Electronic service is encouraged. Consistent with Commission rules, a hard copy must be provided concurrently to Assigned Administrative Law Judge Jeffrey P. O'Donnell. An additional hard copy is requested to be provided to Simin Litkouhi of the CD staff.

¹ The service list is available at http://www.cpuc.ca.gov/published/service_lists/R0704015_75408.htm.

² Information indicated to be proprietary and confidential will be restricted from public disclosure pursuant to Public Utilities Code Section 583 and General Order 66-C available at www.cpuc.ca.gov/published/Graphics/644.pdf.

Please include in your responses the names of technical experts and legal representatives, who will attend the workshop(s) in person, and identify the name of your technical presenter. Please indicate if you intend to make a presentation.

The Commission invites broad participation in this proceeding and will provide specialized accommodation for requests received by May 29, 2007.

WORKSHOP SCOPE

June 5, 2007 from 9:00 am to 3:30 pm in the Commission Auditorium **Back-up Power Systems Installed on the Property of Residential and Small Commercial Customers**

The Commission is to consider the need for performance reliability standards if the benefits exceed the costs and if technically feasible to develop and implement performance reliability standards for back-up power systems installed on the property of residential and small commercial customers. Consideration of standards will address: minimum operating life, minimum time period in which a telephone system with a charged back-up power system will provide the customer with sufficient electricity for emergency usage, and a means to warn the customer when the back-up system's charge is low or when the system can no longer hold a charge.

The purpose of this workshop is to receive a broad overview of:

- How back-up power currently is provided to residential and small commercial customers,
- Concerns and issues related to back-up power systems on the property of residential and small commercial customers, and
- Definition(s) of "small commercial customer" for the purpose of this investigation.

The outcome of this workshop will be an informational request that will seek more detailed information, that:

1. Clarifies the nature of existing back-up power systems;
2. Identifies current best practices;
3. Provides details on any relevant existing state or federal standards or protocols, as well as any state or federal action that gives the recommendations of standard-setting agencies the force of law;
4. Addresses the concerns and issues that the Commission must consider, including the costs, benefits, and technical feasibility of establishing battery back-up requirements;
5. Identifies recommendations presented by the parties and their level of support;
6. Assesses whether any jurisdictional issues prevent the Commission from pursuing certain recommendations;
7. Identifies a recommended course of action, as well as any other viable options;

8. Discusses the costs and benefits of implementing the recommended course of action;
9. Proposes a definition of small businesses for the purpose of this investigation; and
10. Identifies any concerns or issues that remain to be addressed.

June 6, 2007 from 10:00 am to 4:30 pm in the Commission Auditorium
Back-up Power Systems not installed on the Customer's Premises

Telecommunications service providers generally install back-up power on their property so their networks can operate in an electrical outage.³ In addition to ensuring network reliability and operational efficiencies, minimizing communications service disruptions is widely beneficial for public safety and economic sustainability. In consultation with the Governor's Office of Emergency Services (OES) and the California Department of General Services (DGS), the Commission will determine whether the benefits exceed the costs and if it is technically feasible for the Commission to develop and implement performance reliability criteria back-up power systems that are not installed on customers' premises.

As these back-up systems are often batteries supplemented by diesel-powered electric generators that recharge the batteries, the Commission is also to determine the feasibility of replacing diesel generators with zero greenhouse gas emission fuel cell systems.

The purpose of this workshop is to receive a broad overview of:

- How back-up power not installed on customers' premises currently is provided,
- Concerns and issues related to back-up power systems that are not installed on customers' premises, and
- The feasibility of replacing diesel generators with zero greenhouse gas emission fuel cell systems.

The outcome of the workshop will be an informational request that will seek more detailed information, that:

1. Clarifies the nature of existing back-up power systems;
2. Identifies current best practices;
3. Provides details on any relevant existing state or federal standards or protocols, as well as any state or federal action that gives the recommendations of standard-setting agencies the force of law;

³ Within the AB 2393 legislation, "telecommunications service" means voice communication provided by a telephone corporation as defined in Public Utilities Code § 234, voice communications provided by a provider of satellite telephone services, voice communications provided by a provider of mobile telephony service as defined in Public Utilities Code § 2890.2, and voice communications provided by a facilities-based provider of voice communications utilizing Voice over Internet Protocol (VoIP) or any successor protocol.

4. Addresses the concerns and issues that the Commission must consider, including the costs, benefits, and technical feasibility of establishing back-up requirements and an assessment of the feasibility of zero greenhouse gas emission fuel cell systems to replace diesel generators for such back-up power systems;
5. Identifies recommendations presented and their level of support;
6. Assesses whether any jurisdictional issues prevent the Commission from pursuing certain recommendations;
7. Identifies a recommended course of action, as well as any other viable options;
8. Discusses the costs and benefits of implementing the recommended course of action; and
9. Identifies any concerns or issues that remain to be addressed.

June 19, 2007 from 10:00 am to 4:30 pm in the Commission Auditorium
Emergency Notification Systems

Automatic notification devices are used in emergency notification systems by law enforcement agencies, fire protection agencies, public health agencies, public environmental health agencies, city or county emergency services planning agencies, and private for-profit agencies operating under contract with, and at the direction of, one or more of these agencies. These are automatic devices that store phone devices and disseminate a prerecorded voice and text message to those phone numbers in the event of an emergency. In consultation with OES and DGS, the Commission will (i) determine the standards and protocols currently in use by those entities that operate such systems and (ii) obtain and consider the operating entities' and other interested parties' recommendations for improving emergency notification systems, which shall include an assessment of the costs and benefits of requiring standards and protocols for these systems.

The purpose of this workshop is to receive a broad overview of:

- Concerns and issues related to emergency notification systems, including funding and statutory modifications needed to facilitate such notification:

The outcome of the workshop will be an informational request that will seek more detailed information, of the concerns and issues that must be addressed to establish emergency notification systems, that:

1. Clarifies the nature of existing emergency notification systems;
2. Identifies current best practices;
3. Provides details on any relevant existing state or federal standards or protocols, as well as any state or federal action that gives the recommendations of standard-setting agencies the force of law;
4. Identifies the policy concerns and issues that the Commission must address, including funding of emergency notification systems and any necessary statutory modifications needed to facilitate such notification;
5. Assesses whether any jurisdictional issues prevent the Commission from pursuing certain recommendations;
6. Identifies recommendations presented and their level of support;

7. Identifies a recommended course of action, as well as any other viable options;
8. Discusses the costs and benefits of implementing the recommended course of action; and
9. Identifies any concerns or issues that remain to be addressed.

For further information about these workshops, contact CD staff:

- Simin Litkouhi at (415) 703-1865 or sim@cpuc.ca.gov
- Phyllis White at (415) 703-1955 or prw@cpuc.ca.gov

Very Truly Yours,

John M. Leutza, Director
Communications Division

APPENDIX A**WORKSHOP AGENDA****Tuesday, June 5, 2007****Back-up Power Systems at Residential & Small Commercial Customer Premises**

9:00 – 9:05	Welcome & acknowledgement of other officials	Simin Litkouhi, CPUC
9:05 – 9:15	Opening Remarks	Commissioner Simon
9:15 – 12:00		10 min presentations by Stakeholders & Interested Parties with 5 min Q&A
12:00- 1:00		Lunch Break
1:00 – 3:15		10 min presentations by Stakeholders & Interested Parties with 5 min Q&A
3:15 – 3:30	Closing Remarks	Simin Litkouhi, CPUC

Wednesday, June 6, 2007**Back-up Power Systems not installed on the Customer's Premises**

10:00 – 10:05	Welcome & acknowledgement of other officials	Simin Litkouhi, CPUC
10:05 – 10:15	Opening Remarks	Commissioner Simon
10:15 – 12:00		10 min presentations by Stakeholders & Interested Parties with 5 min Q&A
12:00- 1:00		Lunch Break
1:00 – 4:15		10 min presentations by Stakeholders & Interested Parties with 5 min Q&A
4:15 – 4:30	Closing Remarks	Simin Litkouhi

WORKSHOP AGENDA

Tuesday, June 19, 2007

Emergency Notification Systems

10:00 – 10:05	Welcome & acknowledgement of other officials	Simin Litkouhi, CPUC
10:05 – 10:15	Opening Remarks	Commissioner Simon
10:15 – 12:00		10 min presentations by Stakeholders & Interested Parties with 5 min Q&A
12:00- 1:00		Lunch Break
1:00 – 4:15		10 min presentations by Stakeholders & Interested Parties with 5 min Q&A
4:15 – 4:30	Closing Remarks	Simin Litkouhi

APPENDIX B

Workshop Questions

Back-up Power Systems at Residential & Small Commercial Customer Premises (June 5, 2007 Workshop)

1. Please identify the nature of your business and your interest in this workshop.
2. For providers of “voice” communications that require back-up battery at the customer premise what underlying technology (e.g., copper wires, fiber-optic cable, coaxial cable, wireless, satellite, etc.) is currently used? Are you planning to introduce any new technologies in the next five years?
3. Currently, do you have Best Practices/Requirements/Specifications for back-up power systems at residential and small commercial customer premises? If so, please provide a broad overview of these Best Practices.
4. For non-facilities-based service providers offering voice telephony services/applications (and the related terminal equipment) who is responsible for the power back-up systems at the residential and small commercial customer premises?
 - If you do not consider yourself responsible for the battery back-up systems, what specific agreement do you have between the facilities-based provider and the customer to assure availability of back-up power during emergency situations?
5. Currently, are you involved with any federal, state, local government and/or industry standard bodies in requirements/standards development activities regarding the back-up power systems at residential and small commercial customer premises for emergency situations?
 - If yes, please provide a broad overview of your involvement.
6. Back-up battery and associated equipment at the customer premise details:
 - Who is responsible for procuring/replacing the back-up power system (the service provider, customer, etc.)?
 - What is the minimum operating life of the back-up battery?
 - What is the minimum time period for which a telephone system with a charged back-up power system can provide the customer with sufficient electricity for emergency usage (stand by time, actual call time, etc.)?
 - How long does it take to recharge a fully discharged battery after utility power is restored?
 - What is the means of providing alarms (e.g., indicator lights, audible signals, vibration signal from pager, etc.) to the customer on the status of the back-up power unit?
 - Are there special alarming considerations for the population with disabilities?
 - Are components with shorter lifetimes (e.g., batteries) readily available from local retail stores or do they require special purchase from qualified suppliers?
 - Can the battery withstand environment stress, such as water damage, fire, mild/modest earthquakes, etc.
7. As a telephony service provider, if you are responsible for back-up power systems at the residential and small commercial customer premises:
 - Do you have monitoring and alarming systems for those back-up power systems so that you can determine if they are fully charged or working properly? If so, please describe them.
 - How many centers across the state are you using to monitor the back-up power systems?

- Do you currently (or are you planning to) charge customers for monitoring and alarming services associated with back-up power system?
8. Have you done or are you aware of any cost/benefit analysis related to the issue of back-up power systems at the residential and small commercial customer premises?
 - If yes, please share such a study (or aspects of the study).
 9. For manufactures of back-up batteries and associated units:
 - What are the different battery types that are currently available for use at customer locations?
 - What are the emerging battery technologies that will potentially be available commercially (at retail locations) in the next five years?
 10. What are other significant challenges being faced today in the operation and management of these back-up power systems at residential and small commercial customer premises?
 11. Are there any other regulations, such as from the FCC, EPA, etc that service providers are required to comply with that CPUC should take into consideration in the context of this proceeding?

Back-up Power Systems Not Installed on the Customer's Premises
(June 6, 2007 Workshop)

1. Please identify the nature of your business and your interest in this workshop.
2. For providers of “voice” communications that require back-up battery at the customer premise what underlying technology (e.g., copper wires, fiber-optic cable, coaxial cable, wireless, satellite, etc.) is currently used? Are you planning to introduce any new technologies in the next five years?
3. Currently, do you have best practices/requirements/specifications for back-up power systems on your network? Please identify where in your network the back-up power systems are located, such as Central Office, Digital Loop Carrier systems, Remote Switches/Digital Terminals, Cable Headends, etc.
 - If you have such best practices/requirements/specifications, provide a broad overview of these Best Practices?
 - Are you willing to share detailed best practices/requirements/specifications (or relevant aspects of them) with the CPUC as part of the follow-on information request?
4. Have you implemented your best practices/requirements/specifications consistently across the State of California? As an example does every Central Office or Headend installation have back up power or have you done a “per site” analysis to determine what needs to be implemented?
5. To what extent have you implemented the best practices recommended by the FCC-sponsored Network Reliability and Interoperability Council (NRIC-VII) published in December 2005?
6. What type of energy storage technologies are you currently using for back-up power systems not installed at the customer's premises? (e.g., Nickel Cadmium [NiCad], Lithium Metal Polymer [LMP] valve regulated lead acid [VRLA], etc.)

7. What type of energy generation technologies are you currently using for back-up power systems not installed at the customer's premises? (e.g., diesel generator, propane generator, fuel cells, solar, wind, etc.)
8. What future technologies do you envision for the back-up power systems (either energy storage and energy generation) not installed at customer's premises?
9. Currently, are you involved with any federal, state, local government and/or industry standard bodies in requirements/standards development activities regarding the back-up power systems not installed on customer premises?
 - If yes, please, provide a broad overview of your involvement.
10. Have you done (or are you aware of) any assessment regarding the feasibility of using zero greenhouse gas emission fuel cell systems to replace diesel generators for back-up power systems not installed on customer's premises? Do you have any cost/benefit analysis related to that issue? If yes, please, share such a study (or aspects of the study).
 - Other energy generator systems could include solar, wind, and bio-diesel (not zero emission).
 - Other storage systems could include batteries, flywheels, etc.
11. For manufactures of back-up power equipment:
 - What are the emerging battery technologies that will potentially be available commercially (at retail locations) in the next five years?
 - Are you involved in standard setting bodies? If so, please summarize your involvement?
12. What are other significant challenges being faced today in the operation and management of these back-up power systems at network sites?
13. Are there any other regulations, such as from the FCC, EPA, etc that service providers are required to comply with that CPUC should take into consideration?

Emergency Notification Systems **(June 19, 2007 Workshop)**

1. Please, identify the nature of your business and your interest in this workshop.
2. As a stakeholder in emergency notification systems, besides responding to common threats (e.g., fire, earthquake, flooding, and local attacks/shootings) what do you view is the purpose of emergency notification systems?

STANDARDS

3. Are you involved with government or industry standards setting bodies on any aspects of standards for notification systems? (A representative sample of industry bodies involved in this subject includes, but is not limited to: ITU-T, ATIS, CTIA, 3GPP, OASIS, COMCARE, etc.).
 - If you are involved in standards, please summarize your involvement.
4. Besides the Common Alerting Protocol (CAP), do you know of other efforts to provide an open, non-proprietary digital message format for all types of alerts and notifications? If so, please describe them

5. Please describe any standards, requirements and/or objectives you have for emergency notification systems?
6. What are the issues, pros and cons, for standardizing Warning Messages? (e.g., benefits of machine-readable Warning Messages for information integration with other sources, decision making, automated translation, easy dissemination, building situational awareness during a crisis; ensuring the recipient understands the message, etc.)
7. What are the issues, pros and cons, related to standardizing the features, parameters and capabilities of notification systems?
8. Identify any other relevant issue(s) that should be addressed in order to properly consider standardization of emergency notification systems and protocols? (e.g., interoperability of hazard-warning technologies, challenges of implementing multi-lingual warnings across a set of different technologies, localizing the warning message, establishing alerting procedures, implementing a user interface for emergency message generation, and using a template for structuring upstream data to support situational awareness for emergency managers.)

TECHNOLOGY

9. Is there a way to distribute warnings consistently over all available means of communications? Do the different application level protocols allow for a diverse and extensible array of multimedia messages or are standards needed to enable these capabilities?
10. What technologies or applications are available for geographically targeting messaging?
11. For persons who use cell phones and the Internet as their primary means of communication, how can you ensure that the right warning messages get to the right people irrespective of their location or end user device?
12. How should emergency information sharing and data exchange be facilitated and coordinated between local, state, tribal, national and industry organizations that provide emergency response and management services?
13. How do existing emergency notification systems take into account the communications needs of people with disabilities who use non-standard methods of communication in? What improvement is needed?
 - What standards or protocols should be adopted for emergency notification systems?

EMERGENCY NOTIFICATION SYSTEM USER PERSPECTIVE

14. What is your experience as a user of notification system(s) in the following areas:
 - System availability, capacity, performance and reliability
 - Available capabilities
 - Security
 - Shortfalls/areas of improvement
15. Do you see the need for standards? If so, in what specific areas?
16. How do you ensure the privacy of the persons on the notification lists?

COST/BENEFITS

17. Have you done or are you aware of any assessment regarding the standardization of emergency notification systems and protocols? Do you have any cost/benefit analysis related to that issue? If yes, please, share the study (or aspects of the study).