

Decision 10-01-026 January 21, 2010

**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA**

Order Instituting Rulemaking on the  
Commission's Own Motion into  
Reliability Standards for  
Telecommunications Emergency Backup  
Power Systems and Emergency  
Notification Systems Pursuant to  
Assembly Bill 2393.

Rulemaking 07-04-015  
(Filed April 12, 2007)

**DECISION ADOPTING GUIDELINES FOR CUSTOMER EDUCATION  
PROGRAMS REGARDING BACKUP POWER SYSTEMS  
PURSUANT TO ASSEMBLY BILL 2393**

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**DECISION ADOPTING GUIDELINES FOR CUSTOMER EDUCATION  
PROGRAMS REGARDING BACKUP POWER SYSTEMS  
PURSUANT TO ASSEMBLY BILL 2393**

**1. Summary**

By this decision, the Commission adopts guidelines for customer education programs for facilities-based providers of telephony services (service providers) who provide service to residential customers using technologies that require backup power on the customer's premises.<sup>1</sup> The guidelines address the need for backup power to operate the customer's telephone during a power outage, backup power limitations, and service provider and customer responsibilities. The Commission directs service providers to enhance their existing customer education programs to meet the guidelines.

This proceeding is closed.

**2. Background**

A central battery system was deployed by service providers in the 1920s to improve network operations, performance and reliability. As a result, batteries and generators located in the service provider's central office were able to power both the central office and the customer's telephone in the event of a power outage, assuming the telephone system was otherwise intact. The same continues to be true today for customers receiving traditional wireline service from a facilities-based service provider through copper wires. However, when the fiber-optic and coaxial cable facilities are directly connected to the customer's premises, they do not provide power to the customer's telephone. Thus, they

may require backup power systems on the customer's premises in order to have this capability. There are other technologies, utilizing the same copper wires that provide traditional phone services, that also require backup power on the customer's premises in order to operate during a power outage.<sup>2</sup>

Assembly Bill (AB) 2393 (Levine), signed into law on September 29, 2006, added Sections 776, 2872.5 and 2892.1 to the Public Utilities Code.<sup>3</sup> Sections 776 and 2892.1 address backup power systems while Section 2872.5 addresses emergency notification systems.

Section 776 [AB 2393(1)] requires the Commission to consider the need for performance reliability standards for backup power systems installed on the premises of residential and small commercial customers by a facilities-based provider of telephony services. The Commission is to develop and implement such standards if the benefits of the standards exceed the costs. This statute also requires the Commission to report back to the Legislature on the results of this proceeding.

The Commission was directed to consider the following standards: minimum operating life, minimum time period in which a telephone system with a charged backup power system will provide the customer with sufficient electricity for emergency usage, and a means to warn the customer when the backup system's charge is low or when the system can no longer hold a charge.

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<sup>1</sup> This decision addresses only telephone services. In some instances, customers may receive additional services such as television and internet access as well as telephone service over the same facilities.

For example, AT&T's U-verse.

<sup>3</sup> All section references are to the Public Utilities Code unless otherwise indicated.

In developing any such standards, the Commission is to consider current Best Practices and the technical feasibility of establishing battery backup requirements.

Automatic dialing-announcing 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 numbers and disseminate a prerecorded message to those phone numbers in the event of an emergency.

Section 2872.5 [AB 2393(2)] requires the Commission, in consultation with the Office of Emergency Services (OES) and the Department of General Services (DGS), to determine whether standardized notification systems and protocols should be used by entities that are authorized to use automatic dialing devices to facilitate notification of affected members of the public in the event of local emergencies. The Commission is not to establish standards unless the benefits of the standards exceed the costs. The Commission is also required to provide any recommendations it may have for funding notification systems and any statutory modifications needed to facilitate notification of affected members of the public during local emergencies.

Providers of telecommunications service generally install backup power systems on their own facilities so that their networks can operate when the electric utility serving the property has a power outage. The backup power systems are designed to enable the telecommunications networks to function and customers to contact a public safety answering point operator (9-1-1 service) during an electrical outage. These backup power systems are often batteries

supplemented by diesel-powered electric generators, which recharge the batteries.

Section 2892.1 [AB 2393(3)] requires the Commission, in consultation with OES and DGS, to determine the need for backup power systems not located on the customer's premises and to determine performance criteria. If the Commission determines it is in the public interest, it is required to develop performance reliability standards for such backup power systems and implement the standards if the benefits exceed the costs.

The Commission was required to report to the Legislature on the results of the investigation before January 1, 2008, and complete the proceeding within 18 months, *i.e.*, November 30, 2008.

On September 4, 2008, the Commission issued Decision (D.) 08-09-014 addressing the above matters and finding that a customer education program regarding backup power was needed. In addition, the Commission determined that the proceeding should remain open for further investigation into the need for standards for backup power located on the customer's premises. Attachment A to D.08-09-014 is the Final Analysis Report prepared by the Commission's Communications Division which constitutes the Commission's required report to the Legislature.

### **3. Procedural Background**

The Assigned Commissioner held a series of workshops addressing backup power located on the customer's premises. The first workshop was held on November 24, 2008, addressing customer education and outreach.<sup>4</sup> The

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<sup>4</sup> "Outreach" refers to activities intended to convey a message to the service provider's customers.

second workshop was held on February 2, 2009, addressing the technical capabilities of backup power units and whether there is a need for equipment performance standards. The third workshop was held on March 9, 2009, addressing the backup power needs of people with disabilities, as well as customers with special needs due to language, health, age, medical condition, or some other factor.

On July 2, 2009, the Commission's Communications Division mailed its Draft Workshop Report to interested parties for comment. Comments were filed on July 31, 2009 and reply comments were filed on August 14, 2009. The Communications Division Staff revised the Draft Workshop Report based on the comments and prepared its Final Workshop Report (Report), which is included as Attachment A to this decision. This decision is based on the Report and addresses the issues within the scope of this proceeding. To the extent the Report addresses issues not addressed in this decision, it serves to inform the Commission about those issues.

#### **4. Backup Power Systems and Their Capabilities**

Traditional telephone service was provided to customers using a pair of copper wires connected to the customer's telephone. The wires provided all of the electricity necessary to operate the telephone. As a result, phone service continued even when electric power at the customer's premises was interrupted. The advent of cordless telephones and service provided to the customer's premises using coaxial cable, fiber-optic cable and other technologies changed this situation.

A cordless telephone is essentially a pair of two-way radios. The base set is connected to the telephone system and sends and receives signals from the remote handset. The base set receives signals from the telephone system just like

a regular telephone. However, it transmits signals to and from the handset via radio waves. Its radio communications are, in most cases, powered by electricity from the building.<sup>5</sup> The handset is a radio with a rechargeable battery that is recharged when the handset is on the base set. In the event of a power outage, the base set will not work. Even if the handset is fully charged, the base set will not be capable of sending or receiving signals from the handset. Thus, a cordless telephone will not function during a power outage.

Today, many telephone customers receive telephone service through coaxial cable, fiber-optic cable or other technologies that utilize electricity from the customer's premises.<sup>6</sup> Thus, if the customer's premises experiences a power outage, the telephone service will not work without some form of backup power. To ensure that service continues during a power outage, telephone service providers who utilize these technologies provide some form of backup power using a battery. However, the battery will allow the phone to continue working only for a limited period of time. In order for customers to maintain their ability to make phone calls during a power outage, they must be informed of the need to do so, and told how to do so.

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<sup>5</sup> Electricity in the customer's premises is generally provided by an electric utility, although some customers may have the capability to generate their own electricity.

<sup>6</sup> Telephone service providers may utilize coaxial cable or fiber-optic cable in their networks. However, if traditional phone service to the customer's premises is provided through copper wires, the telephone is powered by the network and is subject to the ability of the network facilities to continue operating. It is only when service to the customer's premises is provided through coaxial cable, fiber-optic cable and some other technologies that backup power on the customer's premises is required. In some cases, telecommunications services are powered by coaxial cable that provides service without the need for a backup power source on the customer's premises. This decision addresses those situations where that is not the case.

As discussed in the Report, all of the service providers provide backup power using a backup battery. The backup battery can provide approximately eight hours of standby time or approximately four hours of talk time.<sup>7</sup> The actual amount of time the backup battery can keep the telephone in service depends on how much the telephone is used. In addition, other factors affect the amount of backup power the battery can provide.

Most power outages last less than two hours.<sup>8</sup> Therefore, the backup power provided by the service providers is sufficient under most circumstances if the battery is maintained in good condition.

Batteries do not have an infinite life. Over time they deteriorate, resulting in reduced ability to provide backup power. In addition, their performance can be adversely affected by heat and cold. In order to maintain sufficient backup power, the backup battery must be replaced as necessary. However, there are substantial differences as to the service provider's involvement in the replacement of the backup battery.

As indicated in the Report, providers of voice service over fiber-optic cable (including Verizon, AT&T, and SureWest) provide the initial backup battery, but specify that it is the customer's responsibility to monitor and replace the battery when necessary. Providers of voice service over coaxial cable (cable companies) monitor backup power equipment remotely and take responsibility for backup battery replacement.

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<sup>7</sup> "Standby time " refers to the amount of time the telephone can remain ready to make or receive a call. Talk time refers to the amount of time the telephone can remain in active use making or receiving calls.

<sup>8</sup> Final Analysis Report, Attachment A to D.08-09-014, p. 285.

In order for customers to have adequate backup power, there are two options for replacement of backup batteries; either the service provider does it or the customer does it. The Report indicates that backup batteries can be replaced by the customer. If the customer is responsible for replacement, the customer must be informed of the need for replacement and how to accomplish it.

In addition to maintaining the backup power capability initially provided by the service providers, customers may wish or need to have additional backup power. Since the backup batteries provided by the service providers can be replaced, the customer can obtain additional backup power by obtaining additional backup batteries. However, the customer can not take advantage of this opportunity unless the customer is aware of it. Here again, the customer must be informed of the possibility of obtaining additional backup batteries and, if the customer chooses to do so, how to replace them.

The above discussion demonstrates the need for the customer served by technologies that require backup power at the customer's premises to be informed of the need for backup power, how to maximize the ability to make a phone call during a power outage, and how to replace backup batteries if the customer is responsible for doing so. Thus, there is a need for appropriate customer education. However, customer education can only be achieved if the customer is aware of the need for it and the educational materials are available in a format the customer can utilize.<sup>9</sup>

Based on the above discussion, there is a need for customer education and outreach programs.

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<sup>9</sup> In order for a customer to be able to utilize the materials, the customer must be able to access them and understand them.

## **5. Necessary Elements of a Customer Education Program**

There are several elements of a customer education program that are necessary if it is to fully inform the customer about backup power.

As discussed previously, customers who receive traditional phone service over copper wires do not need backup power in order for the phone to work in the event of a power outage whereas customers served by coaxial cable, fiber-optic cable and some other technologies to the building do. An exception occurs when the customer is served via coaxial cable to a building that does not require backup power. Therefore, the first element of a customer education program is to inform customers served by technologies that require backup power on the customer's premises that they need backup power. This means that customers must be told their service requires backup power on the customer's premises and informed of the limitations of service during a power outage. In addition, they must be educated as to how to maximize their ability to make or receive necessary phone calls by proper use of their phones during an outage.

Since backup batteries will eventually require replacement, the next element is to inform the customer of the need for replacement to maintain backup power capability. This means that customers must be informed of their responsibilities regarding backup battery replacement. If the service provider has some role in replacement, the customer must know what it is and how to obtain that service. To the extent the customer is responsible for replacement, the customer must be informed of the responsibility and how to carry it out. This would include how to determine when replacement is needed, and how to perform the replacement.

The backup battery is located in the backup battery unit (BBU).<sup>10</sup> If the service provider offers the customer the option of where to place the BBU on the customer's premises, the customer must be made aware of this option so that the BBU can be made accessible to the customer if the customer is responsible for monitoring or replacing the battery.

If customers are responsible for backup battery replacement, they must be told how to obtain a replacement. This would necessarily include how to obtain backup batteries from the service provider. If other sources of backup batteries are available, the customer should be informed of the battery specifications sufficient to identify an appropriate replacement battery.

If customers need or want additional backup power, they too must be told how to obtain additional backup batteries. If backup power can be supplied from a source other than the backup battery, information should be made available on the other types of backup power, to the extent the service provider has the information, and how to connect them to the telephone equipment.<sup>11</sup>

If customers are responsible for backup battery replacement, the customer initiates service at a location that previously had service (e.g. in the case of a renter), and the service provider does not install a new backup battery, the customer should be notified of this fact because the existing battery is more likely to need replacement than a new one.

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<sup>10</sup> The term BBU is used here for convenience. Some service providers or technologies may use a different term to describe the equipment the backup battery is located in. In some cases, there may be more than one backup battery located in more than one BBU.

<sup>11</sup> This refers to backup power for the telephone only. It does not refer to backup power for the building such as a generator.

The backup battery will not power a cordless phone and other equipment connected to the telephone line that require electricity from the building, such as telecommunications devices used to assist disabled customers. Customers need to be informed of this limitation.

Based on the above discussion, the following elements should be included in a customer education program as a minimum.

- Customers should be informed that their service utilizes a backup battery located on the customer's premises to provide service during a power outage.
- Customers should be told that cordless phones will not work during a power outage.
- Customers should be informed of the limitations of the backup battery's ability to provide service during a power outage and how to maximize the customer's ability to make necessary calls during a power outage. This includes the fact that the backup battery can not power a cordless phone or other equipment connected to the telephone line that require electricity from the customer's premises, such as telecommunications devices used to assist customers with disabilities.
- Customers should be informed of the service provider's and customer's responsibilities regarding battery monitoring and replacement. This should include information on the limitations of the service provider's liability as it relates to backup power.
- Information should be provided about the customer's options regarding where to place the backup battery unit on the customer's premises.
- If the service provider is responsible for battery monitoring and replacement, information should be provided on how customers can contact the service provider for information about the battery or if the customer believes the battery is not working properly.

- If the service provider is responsible for battery replacement but does not monitor battery condition, customers should be told that age and temperature impact battery performance, and provided information on how customers can monitor battery condition and how to contact the service provider if the battery needs replacement. This should include information on indicators (lights, audible tones, etc.) on the BBU that indicate battery condition.
- If the service provider is responsible for battery monitoring and/or replacement, information should be provided on how customers can contact the service provider for information about obtaining additional backup power capability such as additional batteries.
- If the customer is responsible for battery monitoring and replacement, customers should be told that age and temperature impact battery performance, how to determine whether replacement is needed, how to obtain replacement backup batteries and how to install them. This includes information on indicators (lights, audible tones, etc.) on the BBU that indicate battery condition. This also includes whether the service provider can supply replacements and how to get them. If backup batteries are available from other sources, sufficient battery specifications should be provided to identify an appropriate replacement battery. In addition, customers should be told of possible sources or types of sources for the batteries, such as local hardware stores, etc.
- If the customer initiates service at a location that previously had service (e.g. in the case of a renter), and the service provider is not responsible for battery monitoring and replacement, the service provider should notify the customer if it does not install a new backup battery.
- If the service provider is not responsible for battery replacement, but offers battery replacement or other related services, information should be provided on what services are available, their cost to the customer and how to obtain them.
- If backup power can be supplied from a source other than the backup battery, the customer should be told of this fact and

how to request additional information from the service provider. Upon request, information should be made available on the other types of backup power, to the extent the service provider has the information, and how to connect the backup power source to the telephone equipment.

## **6. Outreach**

Customer education materials do no good if the customer is unaware of them. Therefore, there should be some form of outreach sufficient to make the customer aware of the available information.

When customers are initially connected to the service provider's network using technologies that require backup power on the customer's premises, they should be provided with the above information in a format they can utilize. For example, if it is in printed form, it should be in type size big enough to comfortably read. If the customer is visually impaired, a larger type size, brail or some form of audio presentation should be used.

If the customer was marketed in a language other than English, the information should be made available in that language in a format the customer can utilize. Some examples of suitable formats are: written materials, a recorded audio presentation or an oral presentation through a translator.

Over time, customers may forget or mislay the information provided, or otherwise need reminding. Therefore, customers should be periodically reminded of the fact that they are provided service using a technology that needs backup power, on at least an annual basis, and be made aware of the information and how to get it. A visually prominent notice on the customer's bill is one way to accomplish this at little or no cost.

## **7. Existing Customer Education Plans**

Existing customer education programs vary considerably. As shown in Chapter 2 of the Report, most of the service providers adequately inform

customers of the need for backup power and that during a power outage, the backup battery will provide service for only a limited amount of time. Only some of the service providers provide limited information on how to use the telephone during an outage to maximize the customer's ability to make necessary calls. In short, no service provider adequately provides all of the necessary information listed in Section 5 above. Therefore, improvement in the service providers' customer education materials is needed.

### **8. Existing Customer Outreach**

The service providers provide some customer education information when the customer initiates service. However, as shown in Chapter 2 of the Report, no service provider conducts outreach efforts after that. Additionally, as shown in Chapter 4 of the Report, most service providers do not provide customer education materials in a language other than English. Therefore, improvement in the service provider's outreach is needed.

### **9. Small Commercial/Business Customers**

Section 776 refers to the need for performance reliability standards for backup power systems installed on the premises of residential and small commercial customers. However, the term "small commercial customers" is not defined. Service providers, such as Verizon, define small business in terms of the number of employees the customer has. The guidelines imposed herein would be related to access lines regardless of the number of employees. Therefore, there is no readily available definition of small commercial or business customer in terms of access lines. The workshop participants generally addressed residential

customers, not small commercial or business customers, and did not recommend an appropriate definition.

As a group, it is reasonable to assume that business or commercial customers would be more knowledgeable about communications needs and capabilities than some residential customers. Therefore, the requirement to implement the guidelines imposed herein applies to residential customers only. If, in the future, it becomes apparent that such a requirement is necessary for small commercial or business customers, the Commission will take appropriate action at that time.

## **10. Conclusion**

Without adequate customer education and outreach, customers could end up without the ability to make necessary phone calls during a power outage. In the case of an emergency, and assuming the service provider's network still functions, this could lead to personal injury or property damage.

As shown above, the service providers' customer education information and outreach do not include all of the elements shown in Sections 5 and 6 above. Therefore, they will be required to enhance their existing customer education programs to comply with the guidelines adopted in this decision.

## **11. Jurisdiction**

This decision adopts guidelines for customer education programs for service providers who provide service to residential customers using coaxial cable, fiber-optic cable, or other technologies that require backup power on the customers' premises. "Service providers" include cable providers and Voice over Internet Protocol (VoIP) providers. Although some parties, in comments and reply comments on the Draft Workshop Report, questioned whether the

Commission has the authority to impose customer education requirements on such service providers, we do not find these arguments persuasive.

As stated previously, Public Utilities Code Section 776 provides that the Commission shall consider the need for and, if necessary, develop and implement performance reliability standards for “all backup power systems installed on the property of residential and small commercial customers by facilities-based providers of telephony services.”<sup>12</sup> “Telephony services” is not defined in this section. However, the Commission may interpret the statute to ascertain the intent of the Legislation; first according to its plain language, and then by considering the Legislative history of the statute and the wider historical circumstances of its enactment.<sup>13</sup> The plain language of the provision is not limited to “telephone corporations.” Indeed, the legislative history of the bill indicates that this section, as introduced, was applicable to a “telephone corporation.” However, prior to enactment, the bill was amended to apply to a “facilities-based provider of telephony services.”<sup>14</sup> Thus, the statute is not limited to “telephone corporations” as defined by Public Utilities Code Section 234, but rather applies to a broader category of telephone service providers.

Section 2892.1, which addresses backup power for “telecommunications service” systems not on the customers’ premises, expressly includes VoIP. “Telecommunication service” is defined as voice communication provided by a “telephone corporation,” a provider of “satellite telephone services,” a provider

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<sup>12</sup> Section 776(a).

<sup>13</sup> (*Dyna-Med, Inc. v. Fair Employment and Housing Commission* (1987) 43 Cal.3d 1379, 1387.)

<sup>14</sup> AB 2393, as amended in Senate, August 24, 2006.

of “mobile telephony service,” and a “facilities-based provider of voice communication services utilizing voice over Internet Protocol or any other successor protocol.” Thus, Section 2892.1 also includes entities that the Commission does not currently regulate as “telephone corporations” under Section 234.

AB 2393 was introduced for the purpose of dealing with the increasingly prevalent use of fiber optic cable in telephone services.<sup>15</sup> As stated above, unlike traditional telephone systems using copper wire, systems using fiber optic cable, coaxial cable, and other technologies require an independent power source in order to work during a power outage. If the Commission were to interpret AB 2393 to exclude telephone services provide by cable companies and/or VoIP providers, as some parties have suggested, the purpose of the bill would be seriously undermined.

In comments on the Draft Workshop Report, a number of parties contended that the Commission is preempted by federal law from imposing educational requirements on VoIP providers. At the outset, the Commission points out that this case does not involve the issue of regulating VoIP providers as “telephone corporations” under Section 234, or as “public utilities” under Section 216. The issue here is simply whether the Commission has the authority to impose educational requirements related to emergency power on VoIP providers. As discussed below, the Commission clearly has such authority.

Furthermore, the requirements of AB 2393 are aimed at protecting the public health and safety of California residents in an emergency situation and,

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<sup>15</sup> See Analysis of AB 2393, Assembly Committee on Utilities and Commerce, April 24, 2006.

therefore, meeting those requirements necessitates the exercise of the state's historic police power. A state's police powers are not considered to be superseded by a federal statute unless that is the "clear and manifest purpose of Congress." (*Rice v. Santa Fe Elevator Corp.* (1947) 221 U.S. 218, 230.) In this case, the Commission is implementing a state statute that deals with emergency backup power for "telephony services." No party has pointed to any case indicating that the Commission is preempted from imposing the education requirements adopted here on facilities-based providers of telephony services, regardless of the technology used by such providers.<sup>16</sup> Further we find it unlikely that the FCC would issue a declaratory order concluding that the exercise of such traditional police power is preempted.<sup>17</sup>

In these circumstances, we believe it is reasonable to issue these guidelines for customer education programs for the affected providers of telephony services in California, and we order all such providers to comply with these requirements.

Parties have also asserted that the Commission is precluded from applying the education requirements to VoIP because the Commission has already determined that the FCC has preempted the field of VoIP. Those parties rely on

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<sup>16</sup> Moreover, pursuant to Article III, Section 3.5 of the California Constitution, the Commission may not declare a statute unenforceable or refuse to enforce a statute unless an appellate court has declared it unlawful.

<sup>17</sup> Indeed, while the FCC concluded that Minnesota was preempted from regulating Vonage's VoIP service as a traditional telephone service, it carved out an exception for general laws governing entities conducting business within the state. *In the Matter of Vonage Holdings Corporation's Petition for Declaratory Ruling Concerning an Order of the Minnesota Public Utilities Commission* (WC Docket No 03-211) (2004) 19 FCC Recd 22404 ¶ 1, (*Vonage Order*).

D.06-06-010, which closed the Commission's investigation into establishing a regulatory framework for VoIP. First, by this decision today, the Commission is not revisiting the decision made in D.06-06-010 to refrain from applying traditional telephone regulations to VoIP. Since then, however, the legislature enacted AB 2393, which requires the Commission to consider backup power requirements for VoIP and other telephony services. This decision adopts the requirements necessary to implement this statute.

Even if this specific requirement relating to backup power were considered a modification of D.06-06-010, VoIP providers have been active participants in this proceeding and had notice and an opportunity to be heard on the issue of whether any requirements adopted would be applicable to VoIP.

The Commission also clarifies that, in D.06-06-010, it did not relinquish its authority to regulate VoIP and did not state that it was "federally preempted" from regulating VoIP. Rather, the Commission stated that, since the FCC was exercising its authority over VoIP, it was "premature for us to assess what our regulatory role over VoIP will be."<sup>18</sup> While the Commission stated there was no immediate need to address VoIP consumer protection issues, it left open the possibility of reassessing this determination in the future.<sup>19</sup> Thus, while D.06-06-010 states the Commission's intent to refrain from establishing a regulatory framework for VoIP, it does not state that the Commission is federally preempted from applying any requirements on VoIP services. The Commission reiterates that, in this case, the Commission is adopting a very specific

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<sup>18</sup> D.06-06-010, at pp. 2-3.

<sup>19</sup> D.06-06-010, at pp. 4-5.

requirement pursuant to a state statute dealing with emergency backup power. D.06-06-010 does not prevent the Commission from doing so.

## **12. Cost-Benefit Analysis**

Section 776 requires the Commission to develop and implement standards if the benefits of the standards exceed the costs. However, how this is to be done is not indicated. Thus, the Commission may determine how to perform this evaluation. The Commission chooses to perform this evaluation in the following manner.

The guidelines adopted herein are similar to the directions one would expect to be included with any equipment purchase. With an adequate customer education program, customers may decide for themselves whether they want additional backup power. In addition, they will be able to ensure that their backup power system is maintained in good working order to the extent it is their responsibility to do so. Since service providers already have customer education programs, the guidelines should merely amount to an enhancement of their existing customer education programs. The Commission has no reason to believe this can not be done at minimal cost, especially on a per customer basis. At the same time, making the customer fully aware of the limitations of telecommunications service provided using technologies that require backup power on the customer's premises, and the customer's responsibilities and options regarding backup power, are of significant value in promoting the customer's safety. As a result, the value to the customer exceeds the costs to the service provider, which are ultimately recovered from customers. The benefits of the customer education guidelines imposed herein exceed the costs.

The guidelines will ensure the customer is provided with sufficient information to make informed decisions regarding backup power. Thus, the

customer will have sufficient information to make sure the benefits resulting from the customer's decisions regarding backup power exceed the costs of those decisions from the customer's perspective.

### **13. Implementation**

As discussed above, service providers who provide service to customers using technologies that require backup power on the customer's premises will be required to implement a customer education program that includes the customer education information and outreach specified in Sections 5 and 6 above. Since existing customer education programs do not satisfy these requirements, a reasonable amount of time is needed to upgrade the existing programs. In this case 180 days will be allowed. If a service provider requires additional time, it may request an extension from the Commission's Executive Director as provided for in Rule 16.6 of the Commission's Rules of Practice and Procedure. Any such request shall include a detailed explanation of why the extension is needed.

In order to verify implementation, service providers shall file an information only compliance advice letter detailing their customer education programs, including information and outreach. Copies of the educational materials shall be included with the filing.

Service providers will be required to make the customer education information available to their existing customers who are served via technologies that require backup power on the customer's premises, to the extent they have not already done so.

Service providers who do not currently provide service to customers using technologies that require backup power on the customer's premises need not comply with these requirements at this time. However, they shall comply prior to offering such service.

#### **14. Comments on Proposed Decision**

The proposed decision (PD) of Commissioner Timothy Alan Simon in this matter was mailed to the parties in accordance with Section 311 of the Public Utilities Code and comments were allowed under Rule 14.3 of the Commission's Rules of Practice and Procedure. Comments were filed on November 9, 2009 and reply comments were filed on November 16, 2009. Comments were filed by the following entities.

- Pacific Bell Telephone Company
- Verizon California Inc.
- Surewest Telephone
- Small LECs<sup>20</sup>
- The California Association of Competitive Telecommunications Companies
- The California Cable & Telecommunications Association and Comcast Phone of California, LLC.
- The Telecommunications Access for the Deaf and Disabled Administrative Committee
- Cox California Telecom, LLC
- Disability Rights Advocates
- The Utility Reform Network
- Division of Ratepayer Advocates

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<sup>20</sup> Calaveras Telephone Company, Cal-Ore Telephone Co., Ducor Telephone Company, Foresthill Telephone Co., Happy Valley Telephone Company, Hornitos Telephone Company, Kerman Telephone Company, Pinnacles Telephone Co., The Ponderosa Telephone Co., Sierra Telephone Company, Inc., The Siskiyou Telephone Company, Volcano Telephone Company, and Winterhaven Telephone Company. Collectively, "Small LECs."

- Telecommunications Access for the Deaf and Disabled Administrative Committee

All comments were considered and changes have been made to the PD as appropriate.

### **15. Assignment of Proceeding**

Timothy Alan Simon is the assigned Commissioner and Jeffrey P. O'Donnell is the assigned Administrative Law Judge in this proceeding.

### **Findings of Fact**

#### **Background**

1. AB 2393, signed into law on September 29, 2006, added Sections 776, 2872.5 and 2892.1 to the Public Utilities Code.
2. Sections 776 and 2892.1 address backup power systems while Section 2872.5 addresses emergency notification systems.
3. Section 776 requires the Commission to consider the need for performance reliability standards for backup power systems installed on the premises of residential and small commercial customers by a facilities-based provider of telephony services. The Commission is to develop and implement such standards if the benefits of the standards exceed the costs.
4. On September 4, 2008, the Commission issued D.08-09-014 addressing AB 2393 and finding that a customer education program regarding backup power was needed.

#### **Backup Power Systems and Their Capabilities**

5. A cordless telephone will not function during a power outage.
6. Telephone service provided through coaxial cable, fiber-optic cable and some other technologies utilizes electricity from the building and will not work without some form of backup power.

7. To ensure that service continues during a power outage, telephone service providers who utilize coaxial cable, fiber-optic cable and some other technologies provide some form of backup power using a battery that allows the phone to continue working only for a limited period of time.

8. All of the service providers provide backup power using a backup battery that can provide approximately eight hours of standby time or approximately four hours of talk time.

9. The actual amount of time the backup battery can keep the telephone in service depends on how much the telephone is used and other factors.

10. Most power outages last less than two hours.

11. Over time, backup batteries deteriorate resulting in reduced ability to provide backup power, and their performance can be adversely affected by heat and cold.

12. In order to maintain sufficient backup power, the backup battery must be replaced as necessary.

13. Providers of voice service over fiber-optic cable (including Verizon, AT&T, and SureWest) provide the initial backup battery, but specify that it is the customer's responsibility to monitor and replace the battery when necessary.

14. Providers of voice service over coaxial cable monitor backup power equipment remotely and take responsibility for backup battery replacement.

15. Backup batteries can be replaced by the customer.

16. Customers can obtain additional backup power by obtaining additional backup batteries, but can not take advantage of this opportunity unless the customer is aware of it.

17. There is a need for appropriate customer education regarding backup power.

18. Customer education can only be achieved if the customer is aware of the need for it and the educational materials are available in a format the customer can utilize.

**Necessary Elements of a Customer Education Program**

19. The backup battery is located in the BBU.

**Outreach**

20. Customer education materials do no good if the customer is unaware of them.

21. Over time, customers may forget or mislay the information provided, or otherwise need reminding.

**Existing Customer Education Plans**

22. Most of the service providers adequately inform customers of the need for backup power and that during a power outage, the backup battery will provide service for only a limited amount of time.

23. Only some of the service providers provide limited information on how to use the telephone during an outage to maximize their ability to make necessary calls.

24. No service provider adequately provides all of the necessary information.

**Existing Customer Outreach**

25. The service providers provide some customer education information when the customer initiates service.

26. No service provider conducts outreach efforts after the customer initiates service.

27. Most service providers do not provide customer education materials in a language other than English.

### **Small Commercial/Business Customers**

28. Section 776 refers to the need for performance reliability standards for backup power systems installed on the premises of residential and small commercial customers, but does not define the term “small commercial customer.”

29. There is no readily available definition of small commercial or business customer in terms of access lines.

30. Workshop participants generally addressed residential customers, not small commercial or business customers, and did not recommend an appropriate definition.

31. As a group, it is reasonable to assume that business or commercial customers would be more knowledgeable about communications needs and capabilities than some residential customers.

### **Conclusion**

32. Without adequate customer education and outreach, customers could end up without the ability to make necessary phone calls during a power outage. In the case of an emergency, and assuming the service provider’s network still functions, this could lead to personal injury or property damage.

### **Jurisdiction**

33. AB 2393 was introduced for the purpose of dealing with the increasingly prevalent use of fiber-optic cable in telephone services.

34. No party has pointed to any case indicating that the Commission is preempted from imposing the education requirements adopted here on facilities-based providers of telephony services, regardless of the technology used.

### **Cost-Benefit Analysis**

35. Section 776 requires the Commission to develop and implement standards if the benefits of the standards exceed the costs, but does not indicate how this is to be done.

36. The guidelines adopted herein are similar to the directions one would expect to be included in any equipment purchase.

37. With an adequate customer education program, customers may decide for themselves whether they want additional backup power, and will be able to ensure that their backup power system is maintained in good working order to the extent it is their responsibility to do so.

38. Since most service providers already have a customer education program, the guidelines should merely amount to an enhancement of their existing customer education programs.

39. The Commission has no reason to believe that enhancement of the service providers' existing customer education programs to meet the guidelines imposed herein can not be done at minimal cost, especially on a per customer basis.

40. Making the customer fully aware of the limitations of telecommunications service provided using technologies that require backup power, and the customer's responsibilities and options regarding backup power, is of significant value in promoting the customer's safety.

41. The value to customers of enhancing the service providers' existing customer education programs to meet the guidelines imposed herein exceeds the costs to the service providers, which are ultimately recovered from their customers.

42. The guidelines provide the customer with sufficient information to make sure the benefits resulting from the customer's decisions regarding backup power exceed the costs of those decisions from the customer's perspective.

### **Conclusions of Law**

#### **Backup Power Systems and Their Capabilities**

1. In order for customers to maintain their ability to make phone calls during a power outage, they should be informed of the need to do so, and told how to do so.

2. The backup power provided by the service providers is sufficient under most circumstances if the battery is maintained in good condition.

3. If the customer is responsible for backup battery replacement, the customer should be informed of the need for replacement and how to accomplish it.

4. The customer should be informed of the possibility of obtaining additional backup batteries and, if the customer chooses to do so, how to replace them.

5. There is a need for customer education and outreach programs.

#### **Necessary Elements of a Customer Education Program**

6. Customers should be told they are served by technologies that require backup power on the customer's premises and informed of the limitations of service during a power outage.

7. Customers should be educated as to how to maximize their ability to make or receive necessary phone calls by proper use of their phones during an outage.

8. Since backup batteries will eventually require replacement, customers should be told of the need for backup battery replacement to maintain backup power capability.

9. If the service provider has some role in replacement, the customer should know what it is and how to obtain that service.

10. To the extent the customer is responsible for replacement, the customer should be informed of the responsibility and how to carry it out, including how to determine when replacement is needed, and how to perform the replacement.

11. If the service provider offers the customer the option of where to place the BBU on the customer's premises, the customer should be made aware of this option so that the BBU can be made accessible to the customer if the customer is responsible for monitoring or replacing the battery.

12. If customers are responsible for backup battery replacement, they should be told how to obtain a replacement, including how to obtain backup batteries from the service provider.

13. If sources of backup batteries other than the service provider are available, the customer should be informed of the battery specifications sufficient to identify an appropriate replacement battery.

14. If customers need or want additional backup power, they too should be told how to obtain additional backup batteries.

15. If backup power can be supplied from a source other than the backup battery, information should be made available on the other types of backup power, to the extent the service provider has the information, and how to connect them to the telephone equipment.

16. If customers are responsible for backup battery replacement, the customer initiates service at a location that previously had service (e.g. in the case of a renter), and the service provider does not install a new backup battery, the customer should be notified of this fact because the existing battery is more likely to need replacement than a new one.

17. Customers should be told that the backup battery will not power a cordless phone and other equipment connected to the telephone line that require electricity from the building, such as telecommunications devices used to assist disabled customers.

18. The following elements should be included in a customer education program.

- Customers should be informed that their service utilizes a backup battery located on the customer's premises to provide service during a power outage.
- Customers should be told that cordless phones will not work during a power outage.
- Customers should be informed of the limitations of the backup battery's ability to provide service during a power outage and how to maximize the customer's ability to make necessary calls during a power outage. This includes the fact that the backup battery can not power a cordless phone or other equipment connected to the telephone line that require electricity from the building, such as telecommunications devices used to assist customers with disabilities.
- Customers should be informed of the service provider's and customer's responsibilities regarding battery monitoring and replacement. This should include information on the limitations of the service provider's liability as it relates to backup power.
- Information should be provided about the customer's options regarding where to place the backup battery unit on the customer's premises.
- If the service provider is responsible for battery monitoring and replacement, information should be provided on how customers can contact the service provider for information about the battery or if the customer believes the battery is not working properly.
- If the service provider is responsible for battery replacement but does not monitor battery condition, customers should be told that age and temperature impact battery performance, provided information on how customers can monitor battery condition and how to contact the

service provider if the battery needs replacement. This should include information on indicators (lights, audible tones, etc.) on the BBU that indicate battery condition.

- If the service provider is responsible for battery monitoring and/or replacement, information should be provided on how customers can contact the service provider for information about obtaining additional backup power capability such as additional batteries.
- If the customer is responsible for battery monitoring and replacement, customers should be told that age and temperature impact battery performance, provided information on how to determine whether replacement is needed, how to obtain replacement backup batteries and how to install them. This includes information on indicators (lights, audible tones, etc.) on the BBU that indicate battery condition. This also includes whether the service provider can supply replacements and how to get them. If backup batteries are available from other sources, sufficient battery specifications should be provided to identify an appropriate replacement battery. In addition, customers should be told of possible sources or types of sources for the batteries, such as local hardware stores, etc.
- If the customer initiates service at a location that previously had service, and the service provider is not responsible for battery monitoring and replacement, the service provider should notify the customer if it does not install a new backup battery.
- If the service provider is not responsible for battery replacement, but offers battery replacement or other related services, information should be provided on what services are available, their cost to the customer and how to obtain them.
- If backup power can be supplied from a source other than the backup battery, the customer should be told of this fact and how to request additional information from the service provider. Upon request, information should be made available on the other types of backup power, to the extent the service provider has the information, and how to connect the backup power source to the telephone equipment.

### **Outreach**

19. There should be some form of outreach sufficient to make the customer aware of the available information.

20. When customers are initially connected to the service provider's network, they should be provided with the information specified in the guidelines in a format they can utilize.

21. If the customer was marketed in a language other than English, the information specified in the guidelines should be made available to the customer in that language in a format the customer can utilize.

22. Customers should, at least annually, be reminded of the fact that they are provided service using a technology that needs backup power on the customer's premises and be made aware of the information specified in the guidelines and how to get it.

#### **Existing Customer Education Plans**

23. Improvement in the service providers' customer education materials is needed.

#### **Existing Customer Outreach**

24. Improvement in the service provider's outreach is needed.

#### **Small Commercial/Business Customers**

25. The requirement to implement the guidelines should apply to residential customers only.

#### **Conclusion**

26. Since the service providers' customer education information and outreach do not fully satisfy the guidelines shown in Sections 5 and 6 of this decision, they should be required to enhance their existing customer education programs to comply with the guidelines.

### **Jurisdiction**

27. “Service providers” as used in this decision means all facilities-based providers of telephony services, including cable providers and facilities-based VoIP providers of telephony services.

28. The Commission has the authority to impose customer education requirements related to emergency backup power on cable and VoIP providers.

29. Section 776 applies to “facilities-based providers of telephony services.”

30. Section 776 does not define “telephony services.”

31. The Commission may interpret a statute to ascertain the intent of the Legislature; first according to its plain language, and then by considering the Legislative history of the statute and the wider historical circumstances of its enactment.

32. As originally introduced, Section 776 was applicable to a “telephone corporation.” Prior to enactment, Section 776 was amended to apply to a “facilities-based provider of telephony services.”

33. The plain language of Section 776 is not limited to “telephone corporations,” but rather applies to a broader category of telephone service providers.

34. Section 2892.1 defines “telecommunications service” as voice communication provided by a “telephone corporation,” a provider of “satellite telephone services,” a provider of “mobile telephony service,” and a “facilities-based provider of voice communication services utilizing voice over Internet Protocol or any other successor protocol.”

35. Section 2892.1 includes entities that the Commission does not currently regulate as “telephone corporations” under Section 234.

36. Because fiber optic cable, coaxial cable, and other technologies require an independent power source in order to work during a power outage, to interpret AB 2393 to exclude telephone services provided by cable companies and/or VoIP providers would seriously undermine the purpose of the bill.

37. This case does not involve the issue of regulating VoIP providers as “telephone corporations” under Section 234, or as “public utilities” under Section 216.

38. The requirements of AB 2393 are aimed at ensuring the public health and safety of California residents in an emergency situation and, therefore, involve the exercise of the state’s historic police power.

39. The historic police powers of the States are not to be superseded by a federal statute unless that is the “clear and manifest purpose of Congress.”

40. Pursuant to Article III, section 3.5, of the California Constitution, the Commission may not declare a statute unenforceable or refuse to enforce a statute unless an appellate court has declared it unlawful.

41. In the *Vonage Order*, the FCC carved out an exception for general laws governing entities conducting business with the state.

42. By this decision, the Commission is not revisiting the decision made in D.06-06-010 to refrain from applying traditional telephone regulation to VoIP.

43. In D.06-06-010, the Commission stated that, since the FCC was exercising its authority over VoIP, it was “premature for us to assess what our regulatory role over VoIP will be.”

44. D.06-06-010 does not prevent the Commission from imposing educational requirements related to emergency power on VoIP providers.

### **Cost-Benefit Analysis**

45. The Commission may determine how to evaluate whether the benefits of standards it may impose exceed the costs.

46. The benefits of the customer education guidelines imposed herein exceed the costs.

### **Implementation**

47. Service providers should be allowed 180 days to upgrade their existing programs to meet the guidelines adopted herein.

48. Service providers should be allowed to request additional time to upgrade their existing programs from the Commission's Executive Director as provided for in Rule 16.6 of the Commission's Rules of Practice and Procedure. Any such request should include a detailed explanation of why the extension is needed.

49. In order to verify implementation, service providers should file an information only compliance advice letter detailing their customer education programs, including information and outreach, and including copies of the educational materials.

50. To the extent they have not already done so, service providers should be required to make the customer education information available to their existing customers who are served via technologies that require backup power on the customer's premises.

51. Service providers who do not currently provide service to customers using technologies that require backup power on the customer's premises should not be required to comply with these guidelines at this time.

52. Prior to offering service to customers using technologies that require backup power on the customer's premises, service providers who do not currently provide such service should comply with the guidelines.

**O R D E R**

**IT IS ORDERED** that:

1. Within 180 calendar days of the effective date of this decision, facilities-based providers of telephony services (service providers) who provide service to residential customers using coaxial cable, fiber-optic cable or other technologies that require backup power on the customer's premises shall enhance their existing customer education programs, or implement a customer education program if they do not have one, for customers receiving such service, to comply with the customer education information and outreach guidelines specified below.

2. Within 180 calendar days of the effective date of this decision, service providers subject to Ordering Paragraph 1 shall file an information only compliance advice letter detailing their customer education programs that comply with this decision, including information and outreach. Copies of the educational materials, scripts, etc. shall be included with the filing.

3. If a service provider requires additional time to comply with Ordering Paragraph 1 or 2, it may request an extension from the Commission's Executive Director as provided for in Rule 16.6 of the Commission's Rules of Practice and Procedure. Any such request shall include a detailed explanation of why the extension is needed.

4. Service providers who do not currently provide service to residential customers using technologies that require backup power on the customer's premises need not comply with these requirements at this time. However, prior to offering such service, they shall have such a program in place as provided for

in Ordering Paragraph 1 and file a compliance advice letter as provided for in Ordering Paragraph 2.

5. The following elements shall be included in the service provider's customer education program as a minimum.

- Customers shall be informed that their service utilizes a backup battery located on the customer's premises to provide service during a power outage.
- Customers shall be told that cordless phones will not work during a power outage.
- Customers shall be informed of the limitations of the backup battery's ability to provide service during a power outage and how to maximize the customer's ability to make necessary calls during a power outage. This shall include the fact that the backup battery can not power a cordless phone or other equipment connected to the telephone line that require electricity from the customer's premises, such as telecommunications devices used to assist customers with disabilities.
- Customers shall be informed of the service provider's and customer's responsibilities regarding battery monitoring and replacement. This shall include information on the limitations of the service provider's liability as it relates to backup power.
- Information shall be provided about the customer's options regarding where to place the backup battery unit on the customer's premises.
- If the service provider is responsible for battery monitoring and replacement, information shall be provided on how customers can contact the service provider for information about the battery or if the customer believes the battery is not working properly.
- If the service provider is responsible for battery replacement but does not monitor battery condition itself, customers shall be told that age and temperature impact battery performance, and provided information on how customers can monitor battery condition and how to contact the service provider if the battery needs replacement. This shall include information on indicators (lights, audible tones, etc.) on the backup battery unit that indicates battery condition.

- If the service provider is responsible for battery monitoring and/or replacement, information shall be provided on how customers can contact the service provider for information about obtaining additional backup power capability such as additional batteries.
- If the customer is responsible for battery monitoring and replacement, the customer shall be told that age and temperature impact battery performance, and provided information on how to determine whether replacement is needed, how to obtain replacement backup batteries and how to install them. This includes information on indicators (lights, audible tones, etc.) on the backup battery unit that indicate battery condition. This also includes whether the service provider can supply replacements and how to get them. If backup batteries are available from other sources, sufficient battery specifications shall be provided to identify an appropriate replacement battery. In addition, customers shall be told of possible sources or types of sources for the batteries, such as local hardware stores, etc.
- If the customer initiates service at a location that previously had service, and the service provider is not responsible for battery monitoring and replacement, the service provider shall notify the customer if it does not install a new backup battery.
- If the service provider is not responsible for battery replacement, but offers battery replacement or other related services, information shall be provided on what services are available, their cost to the customer and how to obtain them.
- If backup power can be supplied from a source other than the backup battery, the customer shall be told of this fact and how to request additional information from the service provider. Upon request, information shall be made available on the other types of backup power, to the extent the service provider has the information, and how to connect the backup power source to the telephone equipment.

6. When customers who receive service using technologies that require backup power on the customer's premises are initially connected to the service provider's network, they shall be provided with the information specified in ordering paragraph 5, no later than the time of installation, in a format the customer can utilize.

7. If the customer was marketed in a language other than English, the customer education information shall be presented in that language in a format they can utilize.

8. Service providers shall inform existing residential customers who receive service using technologies that require backup power on the customer's premises of the fact that their service needs backup power, and of the educational materials and how to get them. This shall be done, within 90 days of the service provider's compliance with Ordering Paragraph 2, in a form the customer can utilize.

9. At least annually, customers who receive service using technologies that require backup power on the customer's premises shall be reminded by the service provider of the fact that their service needs backup power, and be made aware of the educational materials and how to get them. This shall be done in a form the customer can utilize.

10. This decision shall be served on all facilities-based providers of telephony services.

11. Rulemaking 07-04-015 is closed.

This order is effective today.

Dated January 21, 2010, at San Francisco, California.

MICHAEL R. PEEVEY  
President  
DIAN M. GRUENEICH  
JOHN A. BOHN  
TIMOTHY ALAN SIMON  
Commissioners

R.07-04-015 COM/TAS/tcg

[D1001026 Attachment A](#)