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November 28, 2006

Via Electronic and Overnight Mail

Ms. Carole J. Washburn
Washington Utilities and Transportation Commission
1300 S. Evergreen Park Drive SW
Olympia, WA 98054

Dear Ms. Washburn

RE: Cingular Request for Permanent Waiver/Exemption from Battery Back-up Requirement, Docket UT-063060

On behalf of Cingular, I respectfully provide the Commission with additional information regarding Cingular's Request for Permanent Waiver of WAC 480-123-070(6) Regarding Eligible Telecommunications Carriers ("Exemption") filed on July 31, 2006. In the Exemption, Cingular requested a permanent waiver of the requirement mandating 4 hours battery backup at existing cell sites, or in the alternate, requested at least two years to bring all of its existing cell sites into compliance. In either case, Cingular requested that the Commission allow it to choose the appropriate means of fulfilling the backup power requirement.

I want to emphasize that Cingular is only requesting an exemption from the 4-hour cell site battery backup requirement for sites built *prior* to the date the new ETC rules went into effect, July 29, 2006.² Cingular is committed to providing 4-hours of backup power (not necessarily battery back-up) for all cell sites built *after* July 29, 2006. Further, Cingular is currently in compliance with all other ETC backup power requirements as it already has backup generators at all microwave hubs and at least 5 hours battery backup and a permanent generator at each of its switch locations.³

Cingular has every incentive in ensuring that its network performs in a variety of circumstances. Cingular has a long history of providing customers in the State of Washington with wireless phone service. Based on this experience, Cingular has instituted certain network standards designed to address a variety of situations, including those in which commercial power is lost. These network standards, however, do not require 4-hour of battery backup at <u>all</u> cell site locations.

¹ Unless otherwise noted, all references are to Cingular's ETC designated area.

² See Order Amending and Adopting Rules, Docket UT-053021.

³ See WAC 480-123-030(1)(g)

The following additional information supports Cingular's Exemption request.

1. The Commission Should Not Dictate the Type of Backup Power (Batteries) at Cell Sites:

- The Commission should not concern itself with the specific manner in which backup power is provided to a cell site. From a customer's perspective there is no difference between battery-backup and a permanent generator, as both provide backup power to the cell site.
- ♦ In fact, there are numerous advantages to having a permanent generator at a site instead of backup batteries. The advantages of a generator include:
 - o Longer back-up power (typically at least 24 hours);
 - No need to constantly reevaluate the site to determine whether additional batteries are required⁵;
 - o Generally a longer useful life; and,
 - o Usually less expensive to deploy.
- In some circumstances, however, it is simply not feasible to install a generator due to restraints imposed by some landlords and/or city ordinances. For this reason, Cingular requests that the Commission not mandate that it utilize generators. Instead Cingular requests that the Commission allow Cingular to analyze each cell site on a case by case basis, and utilize a generator when in Cingular's determination it is practical to do so.⁶

In sum, the Commission should allow Cingular to decide the appropriate source of back-up power, be it battery, generator or another option as determined by Cingular on a case by case basis, after a full analysis of all applicable factors.

2. Adding 4 hours Battery Backup to Cell Sites Built Before the New Rules Went into Effect is Cost Prohibitive:

- ♦ Cingular has a great number of existing cell sites.
- Since filing its Exemption request, Cingular has extensively examined its cell sites. The following cost estimates derived through this examination further support Cingular's Exemption request, as any other result would unnecessarily divert funds from the real purpose of the ETC program, which is to provide additional coverage and capacity:

⁴ Sites that have a permanent generator also have a minimum amount of battery backup to allow time for the generator to turn on and "power up" so that it can provide full power to the site. Permanent generators turn on automatically when commercial power is lost without any manual intervention.

⁵ Whenever additional radios, a new technology, or new equipment is added to a cell site this will change the amount of batteries needed to provide a set amount (e.g. 4 hours) of backup power as there will be additional "draw" on those batteries from the added electronics.

⁶ As appropriate, Cingular would also like to be able to use other reasonable technologies to provide backup power, such as environmentally friendly hydrogen fuel cells. Backup power technologies are continually evolving and new ones may prove to be desirable in the future.

⁷ See <u>Confidential</u> Exhibit A for the number of cell sites Cingular currently has operating in Washington State. This number, of course, changes frequently as Cingular adds new cell sites.

- o In addition to the obvious direct costs of the additional batteries and installation, other costs must also be considered, such as additional lease expense and related transaction costs to accommodate the additional space needed to install the batteries and/or generators. Exhibit B depicts three very different types of cell sites; however, each of these cell sites would require lease modifications in order to allow Cingular to install additional batteries to meet the 4-hour battery backup requirement.
- A number of Cingular's existing cell sites have 3.75 hours of battery backup.⁸ It would cost millions of dollars to modify these cell sites to provide fifteen (15) additional minutes of battery backup.⁹
- o It would cost up to \$29.6 million¹⁰ to ensure that all sites have 4-hours of battery backup.
- o It would cost approximately twenty percent less to install a combination of permanent generators and batteries instead of batteries alone. 11

It would be cost prohibitive for Cingular to provide 4 hours of battery backup at all existing cell sites. Instead, ETC funds would be much better spent on additions to coverage and capacity.

3. Four (4) Hours of Back-up Power is Simply Not Needed at Existing Cell Sites:

- Cingular does not believe that 4 hours of backup power is needed at all existing sites to provide wireless service to the majority of its customers during a commercial power outage.
- The majority of significant customer-affecting outages are not due to commercial power failure. Internally, Cingular utilizes a Service Interruption Report ("SIR") to track significant customer-affecting outages both voice and data. As detailed in the report, outages can be due to a multitude of reasons, including loss of telecommunications transport, ¹² equipment failure, and loss of power. From January 1, 2006 to October 8, 2006, there was only 1 SIR outage affecting voice calls that was due to the failure of commercial power. ¹³

⁸ See Confidential Exhibit A for the exact number of cell sites in this category.

⁹ See Confidential Exhibit C for the cost to provide these cell sites with 15 more minutes of backup power.

¹⁰ This number includes the sites needing 15 additional minutes of backup power discussed above, but does not include TDMA only cell sites. See <u>Confidential</u> Exhibit A for more information on TDMA only cell sites. See <u>Confidential</u> Exhibit C for more information regarding this estimate.

¹¹ This number includes the sites needing 15 additional minutes of backup power discussed above, but does not include TDMA only cell sites. See <u>Confidential</u> Exhibit C for more information regarding this estimate.

¹² Telecommunications transport is provided by a third party provider (e.g. Qwest or another LEC) to connect the cell site to the switch and the switch to the public switched telecommunications network.

¹³ Attached as Confidential Exhibit D is Cingular's SIR for January 1, 2006 to October 8, 2006.

- Additionally, even if there is a commercial power failure, the majority of customers in the affected area will still be able to receive some service from our "coverage" sites. By way of background, Cingular's cell sites can generally be divided into two categories -- those sites necessary to provide "coverage" and those that provide "capacity" or fill in discrete "holes" within our network.
 - o A number of Cingular's sites are "coverage" sites. 15
 - O All of Cingular's "coverage" sites will have 4 hours of backup power by the end of 4th quarter 2007. In its plan submitted to the Commission for the period ending 3rd quarter 2007, Cingular stated that some of the ETC funds it received would be used to add backup power to existing cell sites. 16
- Further, Cingular is constantly monitoring the performance of its network through its Regional Network Operations Center ("RNOC") located in Redmond, Washington. If commercial power is lost at a cell site, there will immediately be an alarm at the RNOC. The RNOC will evaluate the alarm and will, as necessary, notify the cell site technician responsible for the site. The cell site technician, in coordination with the RNOC, will attempt to determine the forecasted duration of the power outage by working cooperatively with the power company. This technician will take all appropriate remedial measures, such as deploying a portable generator. These portable generators allow Cingular to recharge batteries at several cell sites during extended outages, or provide backup power to a single, high priority site directly.¹⁷

4. Two (2) Years Would be Needed to Bring All Sites to 4-hours Battery Backup:

Due to the sheer number of cell sites that would need to be modified, Cingular would need two years to install 4 hours of battery backup at its cell sites.

¹⁴ Cingular defines "coverage" sites as those needed to provide a "footprint".

¹⁵ See <u>Confidential</u> Exhibit A for the number of "coverage" cell sites and additional information regarding the cell sites included in this category.

¹⁶ See Cingular's Confidential ETC Certification Filing, UT-063052, July 31, 2006. The Commission approved Cingular, among others, with its certification letter to USAC and the Federal Communications Commission dated September 28, 2006.

¹⁷ In the case of an extended outage at a high priority cell site, Cingular can also deploy Cells on Wheels ("COWs") or a smaller "Calf" to provide service to an affected area. Both COWs and the Calf have generators that provide well in excess of 4 hours of backup power. <u>Confidential</u> Exhibit E contains pictures of both COWs and a Calf.

In summary, the citizens of Washington State would benefit significantly if Cingular were able to focus its ETC funds on building additional infrastructure to provide coverage and improve capacity within its ETC designated area. Spending upwards of 29.6 million dollars in order to retrofit sites that were built prior to the effective date of these rules would require Cingular to utilize limited ETC resources on a functionality that likely will be necessary only in very narrow circumstances, instead of allowing Cingular to direct its ETC funds towards more vital areas. In addition, any concerns the Commission may have relating to commercial power failure should be alleviated as the majority of Cingular's customers will still be able to receive 4 hours of backup power through Cingular's "coverage" sites as described above.

Sincerely,

E. Don MacLeod

cc: Bob Shirley

Enclosures (Confidential)