

April 25, 2017

The Honorable City Council
Office of the City Clerk
Room 395, City Hall
Mail Stop 160

Attention: Councilmember Nury Martinez
Chair, Energy and Environment Committee

Honorable Members:

Subject: Council File No. 17-0195 - Inclement Weather Impact/February 17, 2017

This report was developed in response to a Motion (Martinez-Krekorian-Buscaino) requesting the Los Angeles Department of Water and Power (LADWP) report on the impacts of the inclement weather that began February 17, 2017.

Prior to the February 17 to 21, 2017, wind and rainstorms, LADWP's Power System reviewed lessons learned from previous storms. Best practices were implemented, including year round tree trimming, increased staffing in the call center, and improved internal coordination to provide timely information and return calls to customers, especially where extended outages occurred.

Los Angeles experienced one of the strongest storms in a decade with heavy rainfall and intense, high-speed winds with gusts over 60mph, resulting in over 175,000 customers experiencing a power outage from February 17 to 21, 2017. This was the largest storm the Power Transmission and Distribution Division had seen in at least five years. The storm flooded streets; toppled drought affected trees and submerged some underground power cables and equipment, creating a significant challenge in restoring power quickly. In addition, tree and debris removal were necessary prior to electrical service restoration, which extended outage times significantly.

Over 900 staff were working in the field during the peak of the storm. The Electric Trouble Dispatch section using the Outage Management System (OMS) recorded over 18,000 customer calls and 85 crews worked 16-hour shifts per day replacing cross-arms, cables, conductors, transformers and other distribution equipment damaged as a result of the storm with the assistance of contracted crews.

In one instance the OMS database reported "maximum number of allowed sessions" had been exceeded, indicating a system overload. To alleviate future overload occurrences, a proactive alerting component has been enabled. This alerting component lets the support team know when the system is at 50 percent and 80 percent capacity to the maximum number of sessions in a database.

In the other instance, the database "archive log" ceased operations due to the massive volume of activity during the storm. Archiving is an important feature that allows the database to be recovered to any point in time if the database crashes. A log of all the actions in the database needs to be maintained in real-time. Information Technology staff performed a backup to clear out the archive log, which allowed the database to be brought back online. The capacity of the archive log has been increased by 100 percent and proactive alerting enabled to let the support team know when the archive log is nearing capacity.

While both issues have been resolved and proactive alerting has been put in place, LADWP will research the best replacement hardware for the OMS database infrastructure.

During this time period, LADWP consistently provided residential and business customers with around the clock support. Over 85,000 customer calls were received by the Customer Contact Center, which is more than 500 percent the normal averages of 15,000 for a three-day holiday weekend. Customer Service Representatives received customers' outage reports, provided status updates, relayed neighborhood condition information, and provided safety tips for homes and businesses during the outage.

The Customer Service Division also supported the trouble crews to focus their efforts by contacting customers in neighborhoods that only had singular outages to verify status. This allowed crews in the field to focus on neighborhoods with mass outages and to expedite restorations.

In preparation for the related storms, scheduled Contact Center staff was doubled for all shifts. Throughout the weekend, additional call-outs for increased staffing were made. With the increased staffing, average customer wait times were kept to under 10 minutes for each day.

To ensure that accurate information about the status of outages and repairs is available to all customers, the LADWP Communications, Marketing and Community Affairs Division was in regular contact with electric trouble dispatchers and senior managers in the power system to obtain the most accurate and complete information available. Communications team members worked throughout the storm to prepare and disseminate information on the status of outages through news releases and through its popular social media channels, which were monitored constantly. Our Outage Update press releases are posted on the LADWP online newsroom (www.ladwpnews.com) and are shared via email with media, key community stakeholders including Neighborhood Councils and with City Hall contacts in both the Mayor and City Council offices. They were also posted on LADWP's Facebook and Twitter pages.

During and immediately following the storm, LADWP issued 13 news releases and handled 34 news media inquiries. Outage updates and work status of crews were also provided via social media, significantly exceeding typical reach and impression rates:

- On Facebook, 15 posts reached nearly 54,000 users, and received 2,300 reactions, 176 comments and 702 clicks. The majority of comments made were positive and appreciative of our crews' work in restoring electric service.
- On Twitter, LADWP posted 29 messages that made more than 283,000 impressions, and resulted in 12,800 engagements, 463 likes and 4,600 link clicks.

Staff also engaged in one-on-one interactions with customers through social media channels who reported wires down, trees down or a specific localized problem that necessitated follow-up or referral to power system crews or customer service. Many of these interactions received positive comments by customers who we engaged with.

It's important to note that given the magnitude of this storm, a number of customers shared their satisfaction with the service and understood that resources were strained to the limit with storms of this magnitude and appreciated that linemen must put safety first and that the work to restore service can take many hours – especially during an intense wind and rain storm when weather slows work and where wind and rain have downed multiple power lines and poles.

In conclusion, this storm impacted 11.7 percent of our 1.5 million electric service customers. Crews were exposed to extreme weather conditions and restored customers as safely and quickly as possible, with over 68 percent of affected customers having their service restored within 24 hours. There were a couple of issues with the Outage Management server and call wait times however, solutions have been identified and implemented.

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If you have any further questions or if additional information is required, please contact me at (213) 367-1338, or have your staff contact Ms. Winifred Yancy, Director, Legislative and Intergovernmental Affairs, at (213) 367-0025.

Sincerely,



David H. Wright
General Manager

WJY:nsh

c: Councilmember Bob Blumenfield, Vice-Chair, Energy and Environment Committee
Councilmember Gil Cedillo, Member, Energy and Environment Committee
Councilmember Paul Koretz, Member, Energy and Environment Committee
Councilmember Mitch O'Farrell, Member, Energy and Environment Committee
Councilmember Paul Krekorian
Councilmember Joe Buscaino
Ms. Sharon Tso, Chief Legislative Analyst
Mr. Rafael Prieto, Legislative Analyst, Office of the Chief Legislative Analyst
Ms. Winifred Yancy

MOTION

ENERGY & ENVIRONMENT

As a result of this past weekend's rain, Angelenos in neighborhoods across the City experienced weather related power outages. Various news reports and Department of Water and Power (DWP) media releases and social media updates indicated power outages affecting a peak of more than 80,000 customers on Friday, 45,000 customers on Saturday, nearly 17,000 on Sunday, and 1,500 on Monday. Residents in the Sherman Oaks area experiencing significant impacts resulting from a sinkhole at Laurel Canyon Boulevard near Woodbridge Street, which swallowed two vehicles and has resulted in limited traffic access until repairs are completed.

Bureau of Sanitation and Public Works crews immediately responded to the sinkhole, and have been working to assess, clean up, and begin repairs to the broken sewer pipe. The DWP reported to have had crews working tirelessly across the City since the storms hit, and while power was restored to some customers within hours, other neighborhoods were without power for 12 to 24 hours, possibly longer. A lengthy power outage becomes much more than an inconvenience – these disruptions result in emotional, physical, and financial stress for parents trying to prepare meals and take care of their kids, seniors and elderly relying on medical equipment, and businesses trying to operate and serve their customers. Similarly, traffic disruptions as a result of failed infrastructure and emergency repairs add to a myriad of challenges for Angelenos, including the daily stress of parents taking their kids to schools, seniors trying to get to medical appointments, and businesses impacted by lost customers.

To better assess what happened over this past weekend, relevant departments should report to the Council with information on the impacts of the storm, the City's responses, and opportunities to ensure appropriate service and communication with customers.

I THEREFORE MOVE that the Department of Water and Power be requested to report on the impacts of the inclement weather that began on February 17, 2017, the amount, cause, and duration of power outages experienced by DWP customers, as well as an analysis of the performance of the utility's wet weather operations with particular focus on any potential lessons learned, and any best practices confirmed to be effective.

I FURTHER MOVE that the Board of Public Works and the Bureau of Sanitation report to the Council with information on the Laurel Canyon sinkhole, the bureau's response, and how affected residents were and continue to be informed and updated.

I FURTHER MOVE that both the Department of Water and Power and the Bureau of Sanitation be requested to report on current or potential efforts to ensure a customer focused service and communication strategy during and after times of inclement weather, power outages, and infrastructure failures. This report should include what can be done to communicate - in real time and in localized terms - of any incidents, the status, and process for repairs. In particular, this report should also focus on how these agencies maintain their relationships with customers at a personal/individualized level during and after these types of incidents are experienced, and how they perform any customer service "triage" and follow up for affected customers.

PRESENTED BY:

Nury Martinez
NURY MARTINEZ
Councilwoman, Sixth District

FEB 21 2017

SECONDED BY:

Paul Kellor
Joe Brown

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