

GARRETTMCKENZIE<sup>INC</sup>

# STANDBY POWER

Willis Tower, Chicago

A CASE STUDY



# THE STORY

In May 2020 over 8" of **record setting rainfall** over the course of four days unleashed an unprecedented amount of storm water taking out the electrical substation at the Willis Tower. Soaring 110 stories high, the 3rd largest skyscraper in the United States lost all power for the **first time in its 47-year history**.

## PROPERTY DAMAGE

Two backup generators some 43' beneath the tower were underwater, leaving the tower without backup power. While power was eventually restored to the building, operational backup power was critical while the existing backup generators were replaced.

## CHALLENGES

Tom Dominguez, a spokesman for Commonwealth Edison Co. reported that a substation that provides electricity to the skyscraper was still three feet underwater at midday. He announced the utility company was also working to get a backup generator on site.

Just shy of two years, GMEG Rentals – A division of **Garrett McKenzie**, 2-Meg Generator was on standby power at the Willis Tower. **Standby power** is used when the main source of power fails, enabling standby power to switch over with little delays. Diesel generators can start and assume a load in less than 10 seconds, providing the critical backup power supply while the main power source is restored.



Temporary power sourcing is critical and a necessity for business operations. Emergencies, flash flooding, or other disasters will cause power to go down, such as the flooding that occurred at the Willis Tower in May 2020.

One thing all disasters have in common is the need for portable power; not only generators, but the portable power distribution hardware to deliver the power safely and efficiently to the end use location.



Delivered nationwide, our extensive fleet of generators and power distribution hardware are available for immediate long-term and short-term rentals. *Need help with setup?* Our technical specialists are available to **deliver, setup and monitor the generators for optimal performance.**

# Rainfall in Chicago

Measured at O'Hare International Airport

**May 14 - May 15**

**4.21"**

*Wettest two-day total since  
Oct 14-15, 2017 (4.39")*

**May 14**

**3.53"**

*Record for the date  
(1.95", 1945)*

*Wettest day since Oct 14,  
2017 (4.19")*

National Weather Service Chicago  
[weather.gov/chicago](http://weather.gov/chicago) | 5/15/2020

# Record Rainfall in May

Measured at O'Hare International Airport | Chicago weather records: 1871-Present

**May 14, 2020: 3.53"**

*Wettest day in May on record*

**May 13 - May 19, 2020: 8.20"**

*Wettest week in May on record*

**May 14 - May 17, 2020: 7.88"**

*4th wettest 4-day stretch on record (more than in May 1945)*

**May 2020 Rainfall Total: 8.49"**

*New May record monthly rainfall for 3rd consecutive year*

[weather.gov/chicago](https://weather.gov/chicago) | 5/19/2020

# EQUIPMENT RENTALS | RESTORATION SUPPORT SERVICES

 Phone: +1 (877) 469-1600

---

 Email: info@garrettmckenzie.com

---

 Mailing Address: 736 North Western Ave, Suite 331  
Lake Forest, Illinois, USA 60045

---

 Receiving Address: 1775 N. Butterfield Road  
Libertyville Illinois, USA 60048

---

[WWW.GARRETTMCKENZIE.COM](http://WWW.GARRETTMCKENZIE.COM)

