

From: [Frank Ehebrecht](#)
To: [FOIA](#)
Subject: Re: Data of the blackout of 10th August 1996
Date: Thursday, March 12, 2015 6:29:40 AM

Dear Ms Winn,

again, thank you for your prompt response. Depending on the size of the data you could also send it by email. If the data exceeds a reasonable size my mailing address is:

Ex 6

Thanks,
Frank Ehebrecht

Date Rec'd: 3/11/2015 Due Date: 4/8/2015 Tracking Number: BPA-2015-00987-F

FOIA schrieb am 2015-03-11:

> Sir, This definitely helps. One more thing I will need is a mailing
> address for you.

> I will get your request entered into our process.

> Kim Winn

> -----Original Message-----

> From: Frank Ehebrecht Ex 6

> Sent: Wednesday, March 11, 2015 11:29 AM

> To: FOIA

> Subject: Re: Data of the blackout of 10th August 1996

> Dear Ms Winn,

> thank you for your swift response. In my understanding, the outage of
> August 10, 1996, was one of the biggest outages of the United States.
> It has its own Wikipedia article:
> http://en.wikipedia.org/wiki/1996_Western_North_America_blackouts
> Up to 4 million customers were affected. The paper where I learned
> about this event is called "Predicting Critical Transitions From Time
> Series Synchronphasor Data". They used "about 10 minutes of measured
> bus voltage frequency data from the Bonneville Power Administration
> territory, up until the point of seperation". Is this enough
> information? If not, I will have to wait for an answer of the lead
> author of the paper and then contact you again.

> Thanks,
> Frank Ehebrecht

> FOIA schrieb am 2015-03-11:

> > Mr. Ehebrecht, Good morning. Thank you for your interest in the
> > Bonneville Power Administration (BPA). I am the Freedom of
> > Information Act Public Liaison for BPA.

I am unsure if your description of the records you are looking for is defined enough for us to conduct a search. We have over 15,000 miles of transmission line in the Pacific NW region of the U.S. Do you know the location (town, county, or state) of the outage you are referencing?

Please reply soonest, so that we can begin to process your request.

Again, thank you for your interest in BPA.

Kim Winn
503-230-5273

-----Original Message-----

From: Frank Ehebrecht Ex 6
Sent: Wednesday, March 11, 2015 7:44 AM
To: FOIA
Subject: Data of the blackout of 10th August 1996

Dear Sir or Madam,

I am a physics student at the 'Westfaelische Wilhelms-Universitaet' (Muenster, Germany). Currently I am working on my master thesis, where I explore different measures for predicting critical transitions. In a publication of Professor Cotilla-Sanchez of the Oregon State University data of the outage of August 10th of 1996 was analyzed. He found certain indicators of the outage before it actual happend. I wanted to ask you, if you could provide me with data on this event for research purposes.

Thanks,
Frank Ehebrecht

On August 10, 1996, the western electric grid experienced another massive blackout.^[4]

This power outage affected customers in seven western U.S. states, two Canadian provinces, and [Baja California](#), Mexico. Approximately 7.5 million customers lost power for periods ranging from several minutes to six hours. The outage stretched from Canada to New Mexico and knocked out power to 4 million customers amid a triple-digit heat wave.

At 2:06 p.m., the Big Eddy-Ostrander line flashed and grounded to a tree. At 2:52 p.m., the John Day–Marion line (also owned by BPA) flashed to a tree; due to a circuit breaker being out of service, this also took the Marion–Lane line out of operation. At 3:42 p.m., the Keeler–Allston line arced and grounded to a tree near [Hillsboro, Oregon](#), just southwest of [Portland](#). It was the fourth power line in Oregon to fail in less than two hours. Five minutes later, at 3:47 p.m., the 230 kV Ross–Lexington line (also owned by Bonneville Power Administration) flashed and grounded to a tree near [Vancouver, Washington](#), across the [Columbia River](#) from the Portland/Hillsboro area. This started a small fire. One minute later, at 3:48 p.m., the 13 turbines at [McNary Dam](#), on the Columbia about 190 miles upstream from Portland, tripped off line.^[5]

Within a few seconds, several dozen lines had opened across the Interconnection, and more than a dozen generating units went offline, leaving Oregon disconnected from California and Northern California disconnected from Southern California. High load and demand coupled with inadequate tree-trimming practices, improper system operation, and out of service equipment, contributed to the severity of the disturbance.^[6]