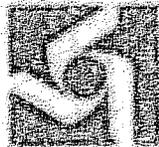


EL 98-007



**BASIN ELECTRIC  
POWER COOPERATIVE**

1717 EAST INTERSTATE AVENUE  
BISMARCK, NORTH DAKOTA 58501-0564  
PHONE: 701/223-0411  
FAX: 701/224-5396



March 31, 1998

Mr. William Bullard, Jr.  
Executive Director  
South Dakota Public Utilities Commission  
Capitol Building, 1<sup>st</sup> Floor  
Pierre, SD 57501-5070

RECEIVED

APR 02 1998

SOUTH DAKOTA PUBLIC  
UTILITIES COMMISSION

Dear Mr. Bullard:

In 1974, Basin Electric Power Cooperative, headquartered in Bismarck, North Dakota, built a 345 kV transmission line from its Leland Olds Station in Mercer County, North Dakota, to Watertown, South Dakota. A portion of this line was located near Nickelson Lake in Codington County, three miles southwest of Florence, South Dakota. A topographic map is enclosed (Attachment 1) which indicates the location of the line. When the line was initially constructed in 1974, all the towers were on dry land; due to many years of high run-off conditions, several towers are now surrounded by water.

On March 10, 1998, a Basin Electric line crew was cutting ice with chain saws to relieve the pressure on two towers now within the boundaries of Nickelson Lake. While the line crew was working to relieve the pressure from the ice, two towers collapsed; fortunately, no one was injured. A right-of-way photo mosaic is enclosed (Attachment 2). In addition to the two collapsed towers, seven adjacent towers were also partially damaged.

Basin Electric has constructed a temporary transmission line bypass around the lake. A plan and profile drawing is enclosed (Attachment 3). The location of the temporary line is shown on Attachment 1. The temporary line is supported by wood pole H-frame structures and is designed to National Electric Safety Code standards. The landowners have been contacted and additional easements obtained for this temporary line. The damaged towers have been removed and Basin Electric is currently investigating permanent alternatives to this situation.

Basin Electric hereby requests, pursuant to SDCL 49-41B-23 that the Commission waive compliance with Chapter 49-41B, Energy Conversion and Transmission Facilities, for the temporary rebuild of the portion of the line that was destroyed by the flooded conditions. This temporary bypass is necessary to maintain the 345 kV line in an operating condition which helps provide system stability to the transmission grid.

Above normal run-off in northern South Dakota the last five years has resulted in towers in several locations along this 345 kV line being surrounded by water. Basin Electric line crews inspect these towers on a regular basis. Aerators have been installed to limit ice formation, tower leg numbers have been reinforced and bent tower components are promptly replaced. These measures protect

Mr. William Bullard, Jr.

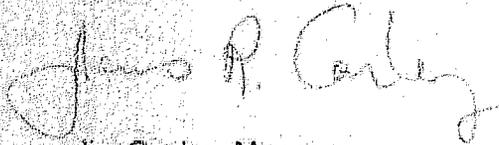
March 31, 1998

Page 2

the structures from localized freezing, but do not protect the structures from movement of large ice masses. One option to protect the towers from the large ice sheets would require construction of islands at each tower. As Basin Electric responds to these problems caused by the flooding, we will keep the Commission informed of our efforts.

If you have questions regarding this matter, please call me or our counsel, Deborah Fehr Levcnak at 701/223-0441.

Sincerely,

A handwritten signature in cursive script, appearing to read "Jim R. Conley".

Jim Conley, Manager  
Transmission System Maintenance

jc/df/mw  
Enclosures

Watertown  
Public Opinion

# Towers toppled but no one lost power

By MILLO DAILEY  
P.O. Staff Writer

**FLORENCE** — Two huge steel towers carrying 345,000 volt of electric power for Basin Electric dropped onto the ice Tuesday afternoon in a slough-pond southwest of Florence and the pull of the five heavy wires damaged three other towers.

Bob Gibbs of Groton was on the scene with a Basin crew when a combination of three years of high water, cumulative ice damage and wind brought down the towers.

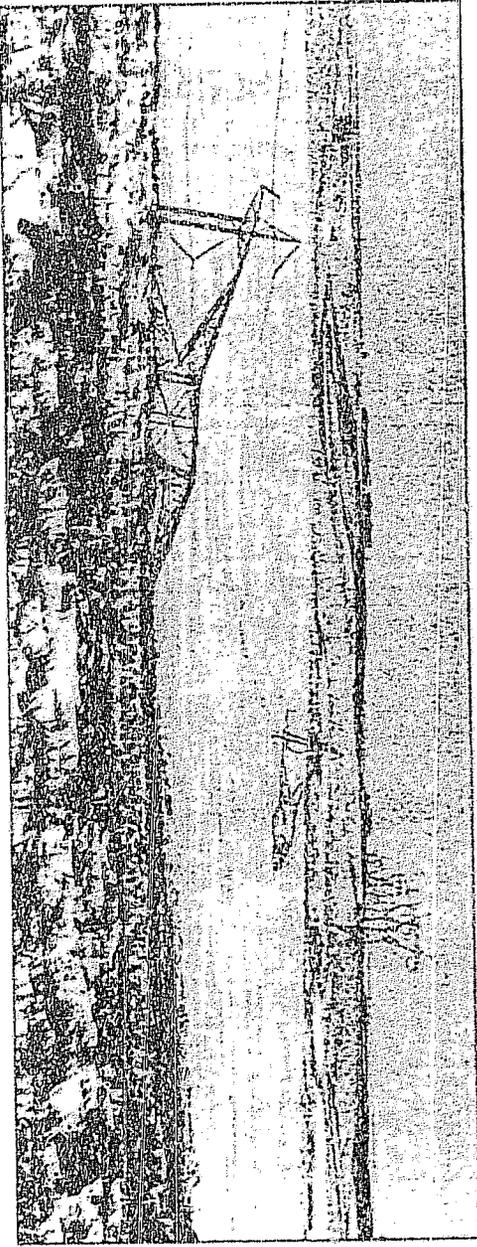
In fact, he said, when the towers went down he and other workers were on the scene and cutting ice around the towers closest to the shoreline about 2 p.m. when the wind finally added the last straw to bring them down.

"A farmer reported damage to the middle tower," Gibbs said. "And we inspected it with a plane Monday."

Tuesday the crew were on the scene with a small tracked vehicle, and had decided to chop ice around the tower nearest shore to remove some of the stress on the steel.

"You would be killed there," Gibbs said. "If we had a tower, we would have been squashed."

A Basin spokesman said the towers were damaged by ice and high water. He said the towers were damaged by ice and high water. He said the towers were damaged by ice and high water.



**TOWERS TOPPLE** — Two 345,000 volt transmission towers near Florence toppled from combined stresses of ice, wind and water Tuesday afternoon and three others were damaged when they fell. Basin Electric workers at the scene had been cutting the towers wet down.

The towers carry three main conducting wires in a bottom tier, and two smaller shield wires along the top of the towers.

Threatened towers and wires would not affect Basin's wholesale customer, Gibbs said, because the system is a huge grid that has several thousand miles of power lines in it. He said the towers were damaged by ice and high water.

Basin Electric workers at the scene had been cutting the towers wet down. He said the towers were damaged by ice and high water.

ing ice around the nearer tower when it fell. A supervisor said, "We were right there. If we hadn't moved, we would have been squashed." (Public Opinion photo by Millo Dailey)

**JUST BECAUSE** the power has been shut down and the lines grounded does not mean people should go crawling around the towers or wires, Gibbs said.

"It would be a good area to stay away from," he said.

There could be problems from weathered towers and the heavy wire, he said. Other towers in the area also have been leaning in water in the past, he said.

combination of risks. Gibbs said he did not know when or how the towers would be replaced and repaired, or how long the project could take.

The fallen towers had been subjected to heavy ice and potentially excessive water in the relatively new slough. Other towers in the area also have been leaning in water in the past, he said.

Basin Electric workers at the scene had been cutting the towers wet down. He said the towers were damaged by ice and high water.

**BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF SOUTH DAKOTA**

IN THE MATTER OF THE FILING BY BASIN )	ORDER APPROVING
ELECTRIC POWER COOPERATIVE FOR A )	WAIVER
WAIVER OF A PERMIT FOR TEMPORARY )	
REBUILDING OF A PORTION OF A 345 KV )	EL98-007
TRANSMISSION LINE )	

On April 2, 1998, Basin Electric Power Cooperative (Basin) filed with the Public Utilities Commission (Commission) a request for a waiver of the provisions of SDCL Chapter 49-41B. Basin is the owner of a 345 kV transmission line which extends from its Leland Olds Station in Mercer County, North Dakota to Watertown, South Dakota. On March 10, 1998, two towers collapsed and seven adjacent towers were partially damaged while crews were working to relieve ice pressure. The ice was on Nicholson Lake in Codington County, South Dakota, and the towers, originally on dry land, were surrounded by water due to many years of high run-off conditions. In its filing, Basin described the location of the proposed temporary facility.

Chapter 49-41B, South Dakota Compiled Laws, provides for the issuance of permits for the construction of transmission facilities. The Commission has jurisdiction in this matter pursuant to SDCL Chapter 49-41B, particularly 49-41B-23. The provisions of Chapter 49-41B may be waived by the Commission if a transmission facility has been destroyed by flood or other natural disaster and the need for construction of a new facility is necessary to promote the public health, safety, or welfare.

At its regularly scheduled meeting of April 9, 1998, the Commission considered the request of Basin. Upon reviewing the filing and the comments of staff and Basin, the Commission finds that good cause exists for granting the waiver of the necessity for a permit for the building of a temporary facility by Basin near Nicholson Lake in Codington County, South Dakota, to replace that facility which was damaged or destroyed by flood or other natural disaster on March 10, 1998. It is therefore

ORDERED that the necessity for a permit for Basin to construct a facility near Nicholson Lake in Codington County, South Dakota, to replace a transmission facility damaged or destroyed by flood or other natural disaster on March 10, 1998, in a location as described in the maps and plats filed in this action shall be granted until a more permanent solution is found; it is further

ORDERED that Basin shall keep the Commission informed of its efforts to arrive at a permanent solution for the problem it experienced in this filing.

Dated at Pierre, South Dakota, this 17<sup>th</sup> day of April, 1998.

CERTIFICATE OF SERVICE

The undersigned hereby certifies that this document has been served today upon all parties of record in this docket, as listed on the docket service list, by facsimile or by first class mail, in properly addressed envelopes, with charges prepaid thereon.

By Melanie Keeso

Date: 4/17/98

(OFFICIAL SEAL)

BY ORDER OF THE COMMISSION:

James A. Burg  
JAMES A. BURG, Chairman

Pam Nelson  
PAM NELSON, Commissioner

Laska Schoenfelder  
LASKA SCHOENFELDER, Commissioner

**Basin Electric  
Power Cooperative**

PO BOX 1000  
SOUTH DAKOTA  
PIERRE, SD 57501-0100  
PHONE 605-773-4300



August 24, 1998

**RECEIVED**

AUG 28 1998

Mr. Martin Bettman  
SD Public Utilities Commission  
Capitol Building, First Floor  
Pierre, SD 57501-5070

**SOUTH DAKOTA PUBLIC  
UTILITIES COMMISSION**

Dear Mr. Bettman:

Basin Electric Power Cooperative has received Nationwide Permit Number 199830319 from the US Army Corps of Engineers to replace two transmission towers in the vicinity of Lake Nicholson in Codington County. The tower replacement will be located within the existing right-of-way. Enclosed are copies of the application materials sent to the US Army Corps of Engineers for your files.

If you have any questions, please contact me.

Sincerely,

James A. Berg  
Water Quality/Waste Management Coordinator

jab:mav  
Enclosure

cc: John Miller, Department of Environment & Natural Resources  
Doug Leschisin, Fish and Wildlife Service  
Jim K. Miller, Basin Electric Power Cooperative  
Dave Erickson, Basin Electric Power Cooperative

The burden for this collection of information is estimated to average 5 hours per response, including the time for reviewing instructions, gathering existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Director for Information Management and Reports, Service Directorate of Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0710-0003), Washington, DC 20503. Please do not send your form to either of these addresses. Completed applications must be submitted to the District Engineer having jurisdiction over the project of the proposed activity.

PRIVACY ACT STATEMENT

Authority: 5 U.S.C. 552a, 36 CFR 101.113, Section 404. Principal Purpose: These laws require permits authorizing activities in, or affecting, navigable waters of the United States, the discharge of dredged or fill material into waters of the United States, and the transportation of dredged material to the waters of the United States. Routine Uses: Information provided on this form will be used in evaluating the application for the permit. Collection: Disclosure of requested information is voluntary. If information is not provided, however, the permit application cannot be processed and a permit will not be issued.

One set of signed drawings or good reproducible copies which show the location and character of the proposed activity must be attached to this application (see instructions and instructions) and be submitted to the District Engineer having jurisdiction over the location of the proposed activity. An application that is not completed in full will be returned.

ITEMS 1 THRU 4 TO BE FILLED BY THE CORPS

1. AGENCY SYMBOL	2. FIELD OFFICE CODE	3. DATE RECEIVED	4. DATE APPLICATION COMPLETE
------------------	----------------------	------------------	------------------------------

ITEMS BELOW TO BE FILLED BY APPLICANT

5. APPLICANT'S NAME Main Electric Power Cooperative	8. AUTHORIZED AGENT'S NAME AND TITLE (an agent is not required)
6. APPLICANT'S ADDRESS 1717 East Interstate Avenue Sioux Falls, SD 57104	9. AGENT'S ADDRESS
7. APPLICANT'S PHONE NOS. W/AREA CODE a. Residence b. Business (701) 223-0441	10. AGENT'S PHONE NOS. W/AREA CODE

STATEMENT OF AUTHORIZATION

I, \_\_\_\_\_, authorize \_\_\_\_\_ to act in my behalf as my agent in the processing of this application and to provide any additional supplemental information in support of this permit application.

APPLICANT'S SIGNATURE

DATE

NAME, LOCATION AND DESCRIPTION OF PROJECT OR ACTIVITY

13. PROJECT NAME OR TITLE (SEE INSTRUCTIONS) Transmission Line Restoration - Line 24, Lake Nicholson	14. PROJECT STREET ADDRESS (if applicable)
15. NAME OF WATERBODY, IF KNOWN (SEE INSTRUCTIONS) Lake Nicholson	
16. LOCATION OF PROJECT Caddington COUNTY STATE SD	

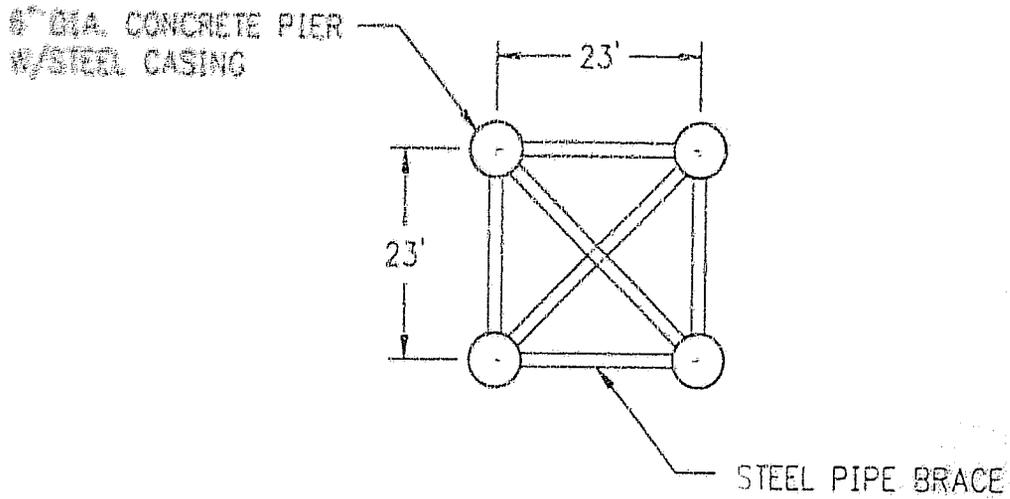
17. OTHER LOCATION DESCRIPTIONS, IF KNOWN. (SEE INSTRUCTIONS)

1/18/91, 8:54W, Sec. 13

18. OBSTRUCTIONS TO THE SITE

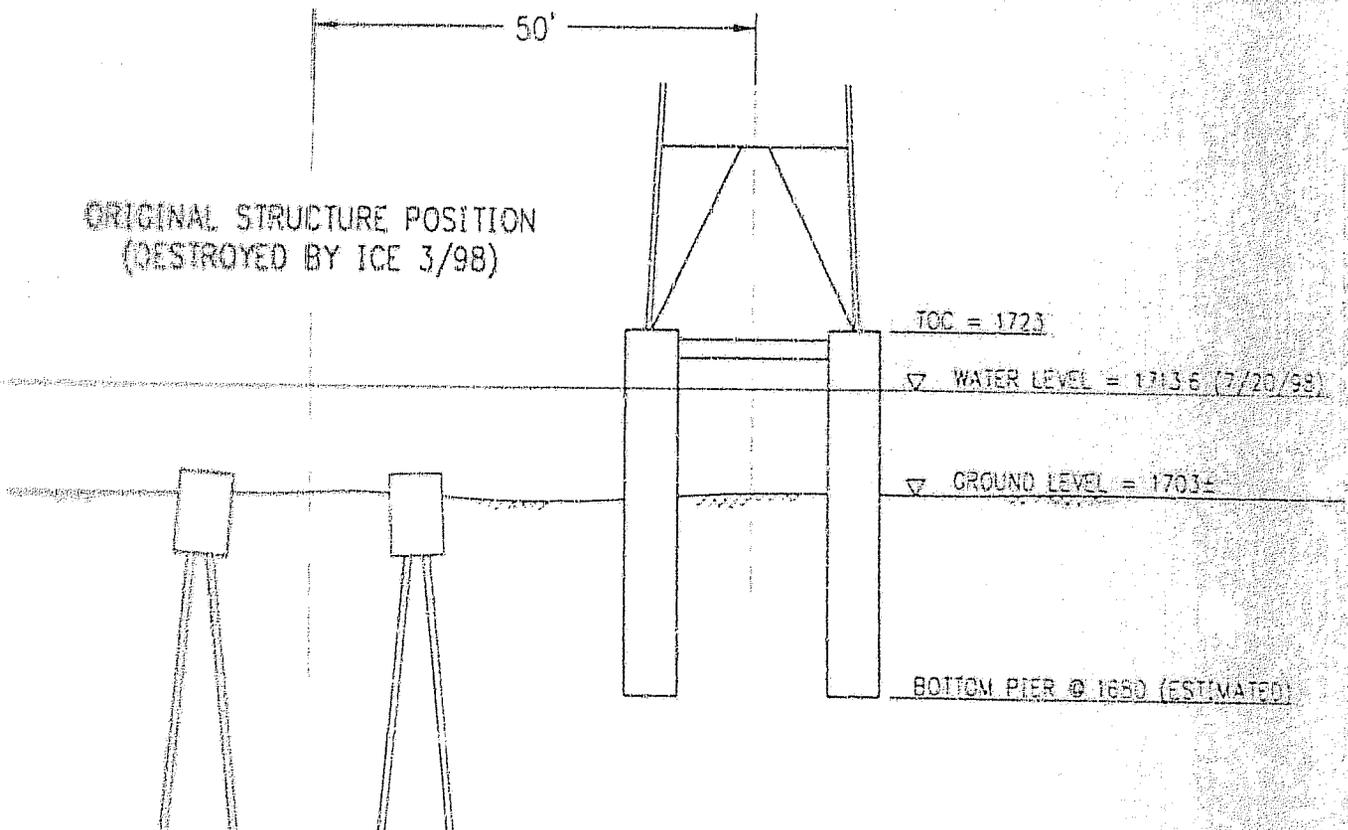
1 mile south of Florence, SD, 2.5 miles west





PLAN VIEW

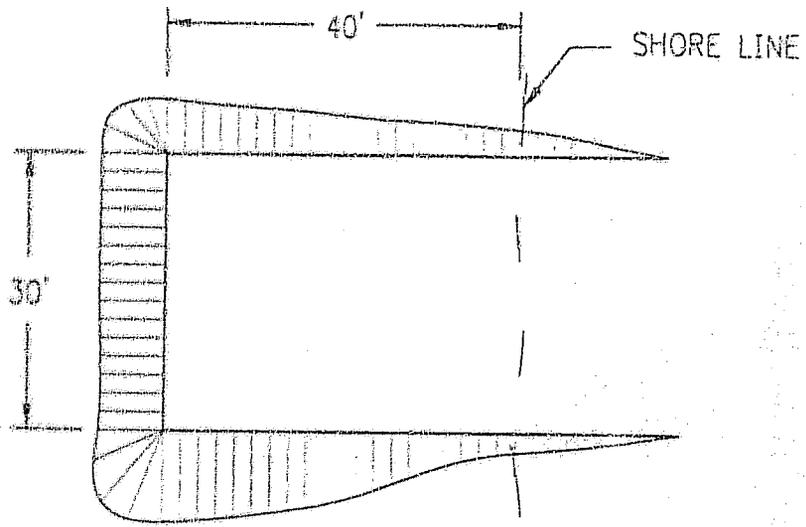
SCALE: 1"=20'



ELEV VIEW

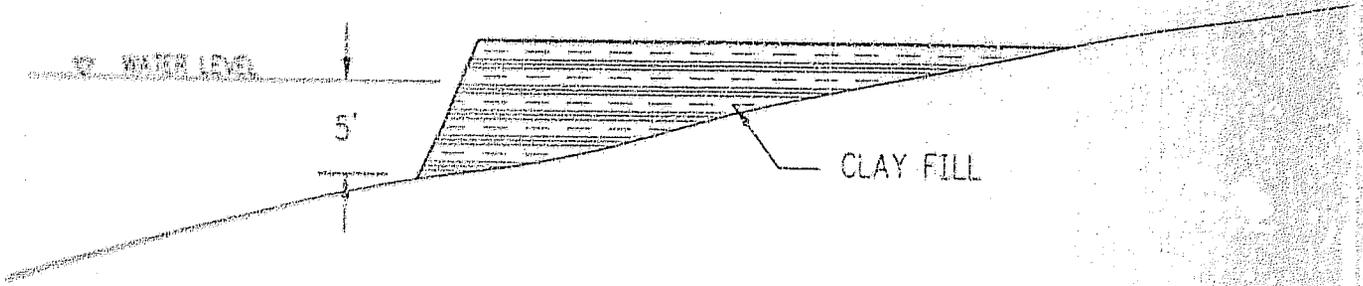
SCALE: 1"=20'

PRELIMINARY FOUNDATION REBUILD PLAN  
(STRUCTURE 24-496)



PLAN VIEW

SCALE: 1"=20'



ELEV VIEW

NOT TO SCALE

BARGE LOADING RAMP