NPS Form 10-900
(Rev. 8-86)

OMB No. 1024-0018

1007

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NATIONAL REGISTER

United States Department of the Interior
National Park Service

National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations of eligibility for individual properties or districts. See instructions in *Guidelines for Completing National Register Forms* (National Register Bulletin 16). Complete each item by marking "x" in the appropriate box or by entering the requested information. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, styles, materials, and areas of significance, enter only the categories and subcategories listed in the instructions. For additional space use continuation sheets (Form 10-900a). Type all entries.

1. Name of Property

historic name Harms Mill Hydroelectric Station
other names/site number N/A

2. Location

street & number State Highway 15 at Elk River, 5 miles SW of Fayetteville N/A [ ] not for publication
city, town Fayetteville [X] vicinity
state Tennessee code TN county Lincoln code 103 zip code 37334

3. Classification

Ownership of Property	Category of Property	Number of Resources within Property	
		Contributing	Noncontributing
[X] private	[ ] building(s)	1	____ buildings
[ ] public-local	[X] district	____	____ sites
[ ] public-State	[ ] site	1	____ structures
[ ] public-Federal	[ ] structure	____	____ objects
	[ ] object	2	0 Total

Name of related multiple property listing:
Pre-TVA Hydroelectric Development in Tennessee, 1901-1933

Number of contributing resources previously listed in the National Register 0

4. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1966, as amended, I hereby certify that this [X] nomination [ ] request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property [X] meets [ ] does not meet the National Register criteria. [ ] See continuation sheet.

Herbert L. Harper — 5/22/90
Signature of certifying official — Date

Deputy State Historic Preservation Officer
Tennessee Historical Commission
State or Federal agency and bureau

In my opinion, the property [ ] meets [ ] does not meet the National Register criteria. [ ] See continuation sheet.

Signature of commenting or other official — Date

State or Federal agency and bureau

5. National Park Service Certification

I, hereby, certify that this property is:

[✓] entered in the National Register. [ ] See continuation sheet.
[ ] determined eligible for the National Register. [ ] See continuation sheet.
[ ] determined not eligible for the National Register.
[ ] removed from the National Register.
[ ] other, (explain:) ____

Entered in the
Mark L. Behm — National Register — 5 July 1990

for
Signature of the Keeper — Date of Action

6. Function or Use

Historic Functions (enter categories from instructions)

INDUSTRY: energy facility

Current Functions (enter categories from instructions)

NOT IN USE

7. Description

Architectural Classification (enter categories from instructions)

N/A

Materials (enter categories from instructions)

foundation CONCRETE
walls CONCRETE
roof N/A
other N/A

Describe present and historic physical appearance.

Harms Mill Hydroelectric Station is located on the Elk River, in rural south-central Tennessee in Lincoln County (population 26,483), about five miles southwest of the county seat, Fayetteville, at Elk River Mile 77.1. The site, approximately 500 feet from State Highway 15, is accessible by a one-lane, crushed stone drive. (See Appendix A)

A water-powered frame textile mill was built on the location in 1870 by the Harms Brothers, and in 1905 a seventy-five horsepower hydroelectric generator was installed with the immediate and limited objective of providing power for the operation of the textile factory. This adaptation in the textile factory would be crucial in determining the actual shape of the hydroelectric station. In 1920 the factory was purchased by the Fayetteville Light and Power Company, and a new concrete dam (with a fish ladder) and seventy-five by eighteen foot reinforced concrete flat-roofed powerhouse (extant today) were completed by 1922 on the right (north) bank of the Elk River. The steel powerhouse roof supports are clearly visible today.

The site includes the concrete gravity dam, seven feet high and 325 feet long which features a 250 foot uncontrolled ogee overflow spillway. A unique open flume water conducting system fed by an intake system consisting of four forebays, three of which feature two seven foot wide slide gates, while the remaining forebay has a nine foot wide slide gate.

TEPCO, the statewide electric power monopoly, purchased the facilities in 1929. The plant was equipped with four turbines, three of which were fifty inch Leffel vertical shaft, single runner, Francis-types, with a fifty horsepower rating. The fourth was similar with a forty-five inch runner that had a forty-five horsepower rating. All four turbines drove a single electrical generator through a system of wooden bevel gears and a "lay" shaft. Perhaps no better example of the heterogeneity characteristic of the second and third eras of early electrical development can be found in Tennessee. Moreover, its horizontal design, together with its remarkably whimsical turbine/generator alignment - strongly reminiscent of the textile factory that immediately preceded it - is contrary to other more

[X] See continuation sheet

commonly observed vertically emphasized examples of "hydrostyle" distinctness in Tennessee.[1]

[1] System Control News, February 1, 1973, No. 58, pp. 2-4; "Preliminary Survey Generating Stations Southern Cities Power Company" ca. 1929, in unprocessed Jo Conn Guild Collection held by TVA; Small Hydro Program Reconnaissance Report for Harms Dam, TVA Report No. WR28-2-510-103, May, 1980, p. 2; Correspondence with Dr. Reuben Crawford, Lincoln County Historian, January 27, 1989, and; Thomas P. Hughes, Networks of Power: Electrification in Western Society, 1880-1930, (Baltimore: Johns Hopkins University Press, 1983), p. 366.

8. Statement of Significance

Certifying official has considered the significance of this property in relation to other properties:

☐ nationally ☒ statewide ☐ locally

Applicable National Register Criteria ☒ A ☐ B ☒ C ☐ D

Criteria Considerations (Exceptions) ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G N/A

Areas of Significance (enter categories from instructions)
COMMERCE
ENGINEERING

Period of Significance
1920-1933

Significant Dates
1920

Cultural Affiliation
N/A

Significant Person
N/A

Architect/Builder
unknown

State significance of property, and justify criteria, criteria considerations, and areas and periods of significance noted above.

The Harms Mill Hydroelectric Station is significant under criterion C for engineering because it represents the kind of hydroelectric engineering projects typical at the time of its construction on the smaller rivers of the State of Tennessee. Its design is unique among its genre in the Volunteer State, especially in the presence of the rectangular design reminiscent of the textile factory which preceded it, as well as its horizontal emphasis and use of four turbines to drive one generator. It operated from 1922 to 1940 when the TVA retired it from service.

The Harms Mill Hydroelectric Station is likewise significant under criterion A, as it represents a change in the business of manufacturing, trading, commerce, services and commodities, and the gradual introduction of electricity into everyday human existence during the twentieth century in Tennessee.

The Harms Mill Hydroelectric Station meet the registration requirements as set forth in the MPDF, Pre-TVA Hydroelectric Development in Tennessee, 1901 - 1933. The site retains sufficient integrity in its dam and powerhouse to convey the original purpose of its construction and role in the early development of hydroelectricity in Tennessee.

☐ See continuation sheet

9. Major Bibliographical References

[X] See continuation sheet

Previous documentation on file (NPS): N/A

- [ ] preliminary determination of individual listing (36 CFR 67) has been requested
- [ ] previously listed in the National Register
- [ ] previously determined eligible by the National Register
- [ ] designated a National Historic Landmark
- [ ] recorded by Historic American Buildings Survey # _____
- [ ] recorded by Historic American Engineering Record # _____

Primary location of additional data:

- [X] State historic preservation office
- [ ] Other State agency
- [ ] Federal agency
- [ ] Local government
- [ ] University
- [ ] Other

Specify repository: _____

10. Geographical Data

Acreage of property approximately 2 acres

UTM References

	Zone	Easting	Northing
A	16	532000	3818960
B			
C			
D			

[ ] See continuation sheet

Boonshill, TN 73NN

Verbal Boundary Description

The boundaries for the Harms Mill Hydroelectric Station include the footprints of the dam and of the powerhouse. See map.

[X] See continuation sheet

Boundary Justification

The boundaries are sufficient to protect the integrity of the site.

[ ] See continuation sheet

11. Form Prepared By

name/title James B. Jones, Jr., Historic Preservation Specialist
organization Tennessee Historical Commission date May 1990
street & number 701 Broadway telephone (615) 742-6718
city or town Nashville state TN zip code 37243-0442

BIBLIOGRAPHY:

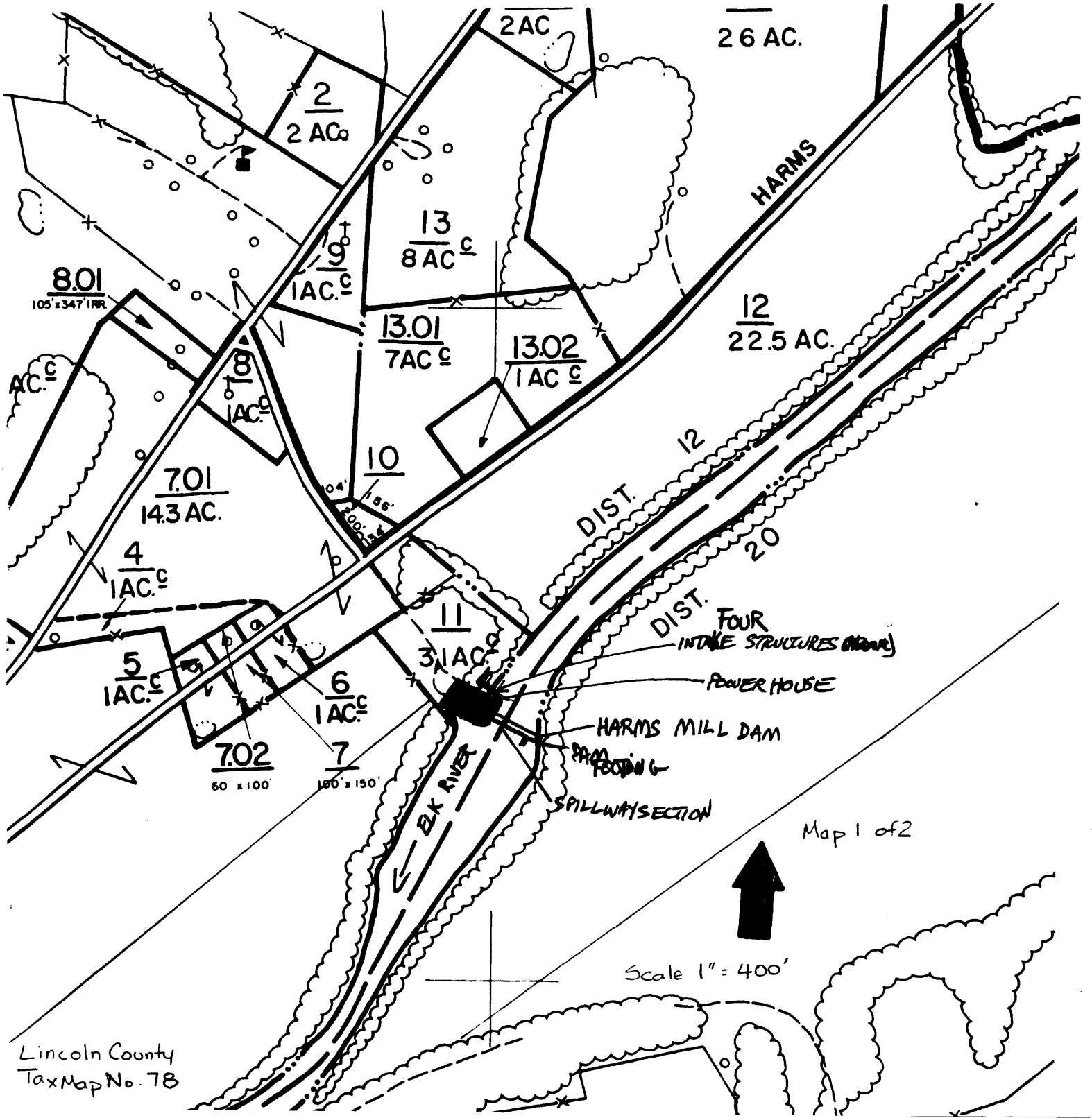
Correspondence with Dr. Reuben Crawford, Lincoln County Historian. January 27, 1989.

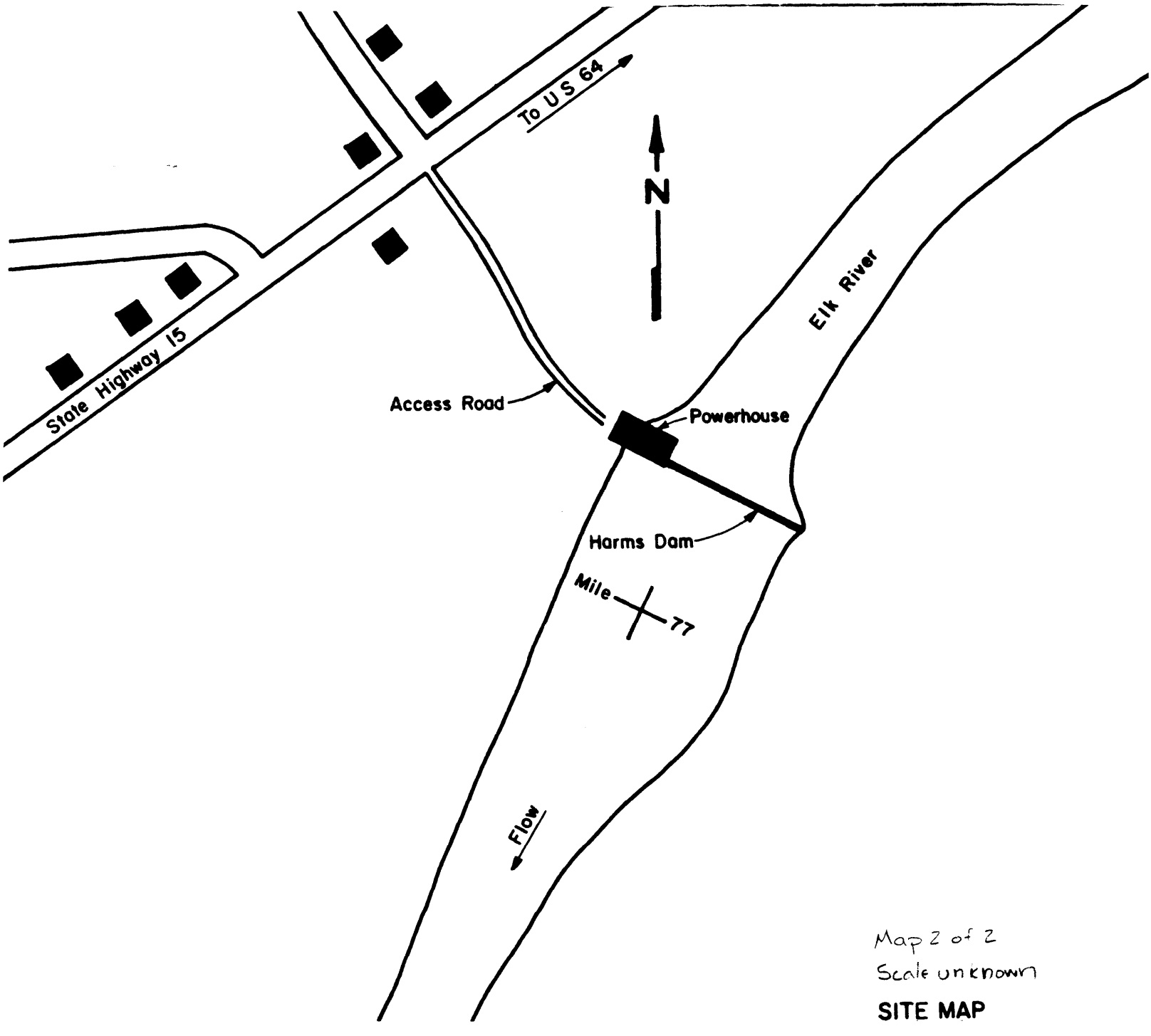
Hughes, Thomas P. Networks of Power: Electrification in Western Society, 1880-1930. Baltimore: Johns Hopkins University Press, 1983.

"Preliminary Survey Generating Stations Southern Cities Power Company." Jo Conn Guild Collection, TVA. ca. 1929. Norris, Tennessee.

Small Hydro Program Reconnaissance Report for Harms Dam, TVA Report No. WR28-2-510-103. May, 1980.

System Control News. No. 58. February 1, 1973.


2 AC
26 AC.
2
2 AC.
13
8 AC
9
1 AC.
8.01
105'x347' IRR.
13.01
7 AC
13.02
1 AC
12
22.5 AC.
HARMS
8
1 AC.
10
7.01
14.3 AC.
DIST. 12
DIST. 20
4
1 AC.
11
3 1 AC.
5
1 AC.
6
1 AC.
7.02
60' x 100'
7
100' x 150'
FOUR INTAKE STRUCTURES
POWER HOUSE
HARMS MILL DAM
DAM FOOTING
SPILLWAY SECTION
ELK RIVER
Map 1 of 2
Scale 1" = 400'
Lincoln County
Tax Map No. 78



Map 2 of 2
Scale unknown

SITE MAP

Harms Mill Hydroelectric Station
Elk River, about 5 miles SW of Fayetteville, off of State Highway 15.
Photographs by: James B. Jones, Jr.
Date: March, 1989
Negs: Tennessee Historical Commission, Nashville, TN
701 Broadway
Nashville, Tennessee

#1 of 9 - Upstream facade of Harms Mill, looking southeast.

#2 of 9 - Harms Mill intake structures, looking southwest.

#3 of 9 - View of Harms Mill, looking southeast.

#4 of 9 - View of intake structures and bank reinforcement in stone, looking southwest.

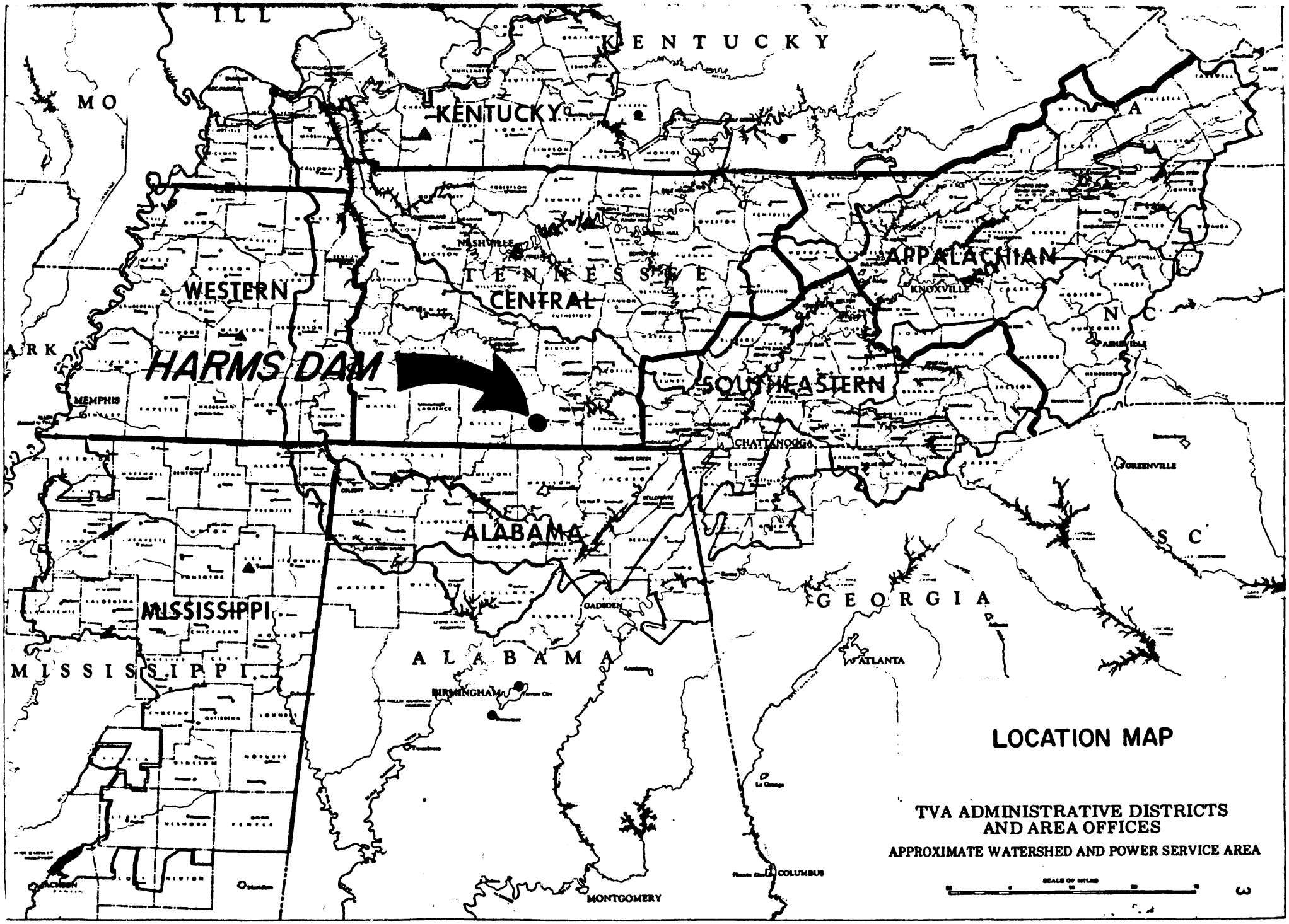
#5 of 9 - View of upstream side Harms Mill - note dam, looking southwest.

#6 of 9 - View of interior of Harms Mill, looking southeast.

#7 of 9 - View of interior of Harms Mill, looking northwest.

#8 of 9 - View of the turbine bays beneath Harms Mill hydrostation, looking southeast.

#9 of 9 - View of generator collar, looking northwest.


ILL
KENTUCKY
MO
KENTUCKY
WESTERN
CENTRAL
TENNESSEE
APPALACHIAN
SOUTHEASTERN
HARMS DAM
NASHVILLE
KNOXVILLE
MEMPHIS
CHATTANOOGA
GREENVILLE
ALABAMA
MISSISSIPPI
GEORGIA
ATLANTA
BIRMINGHAM
GADSDEN
MONTGOMERY
COLUMBUS
LOCATION MAP
TVA ADMINISTRATIVE DISTRICTS
AND AREA OFFICES
APPROXIMATE WATERSHED AND POWER SERVICE AREA