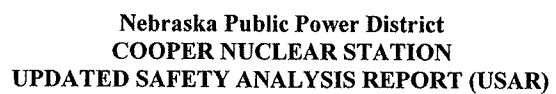
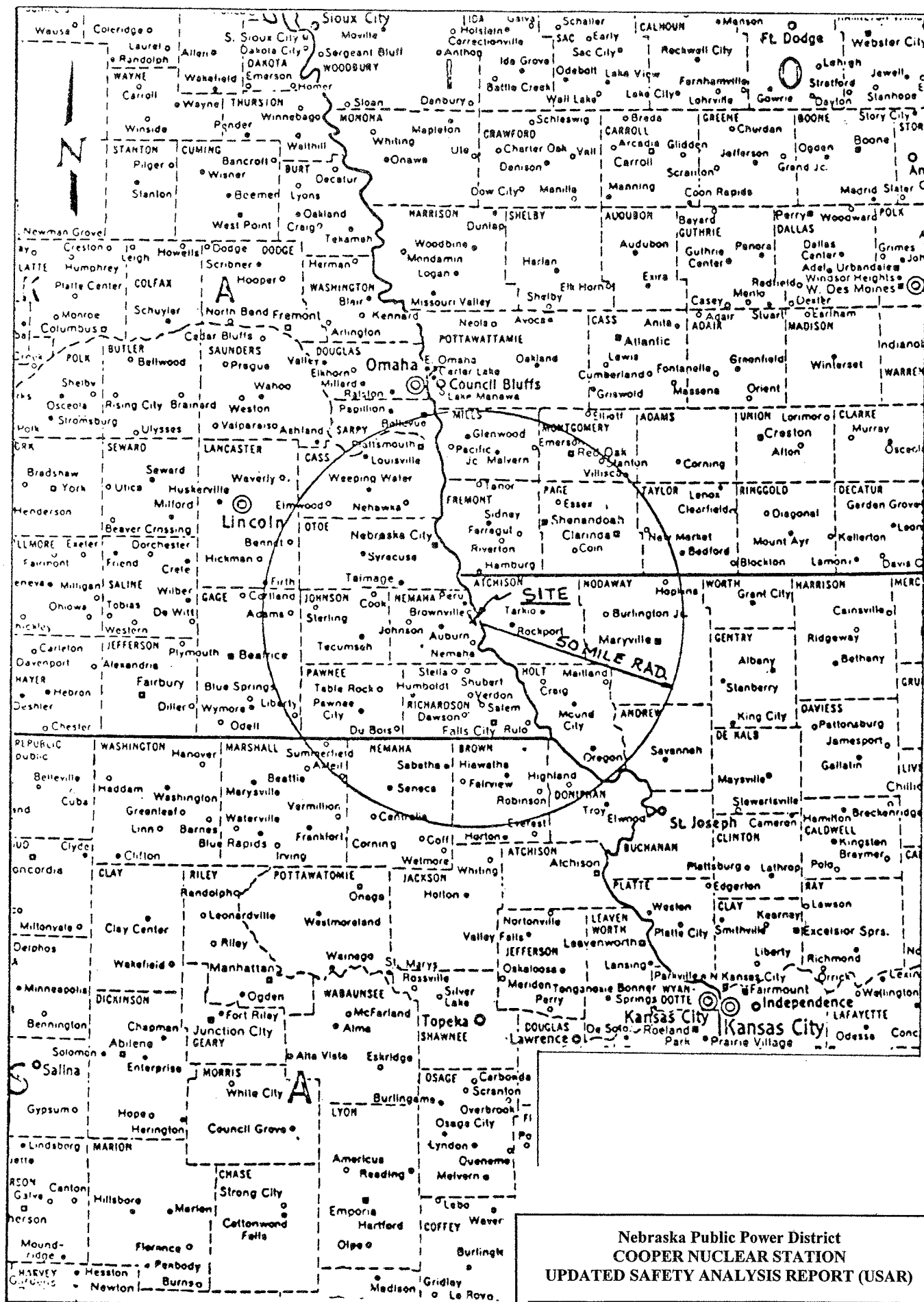


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COOPER NUCLEAR STATION  
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Site Map Depicting Location of  
Nearest Airport  
Figure II -1-1  
1/16/01



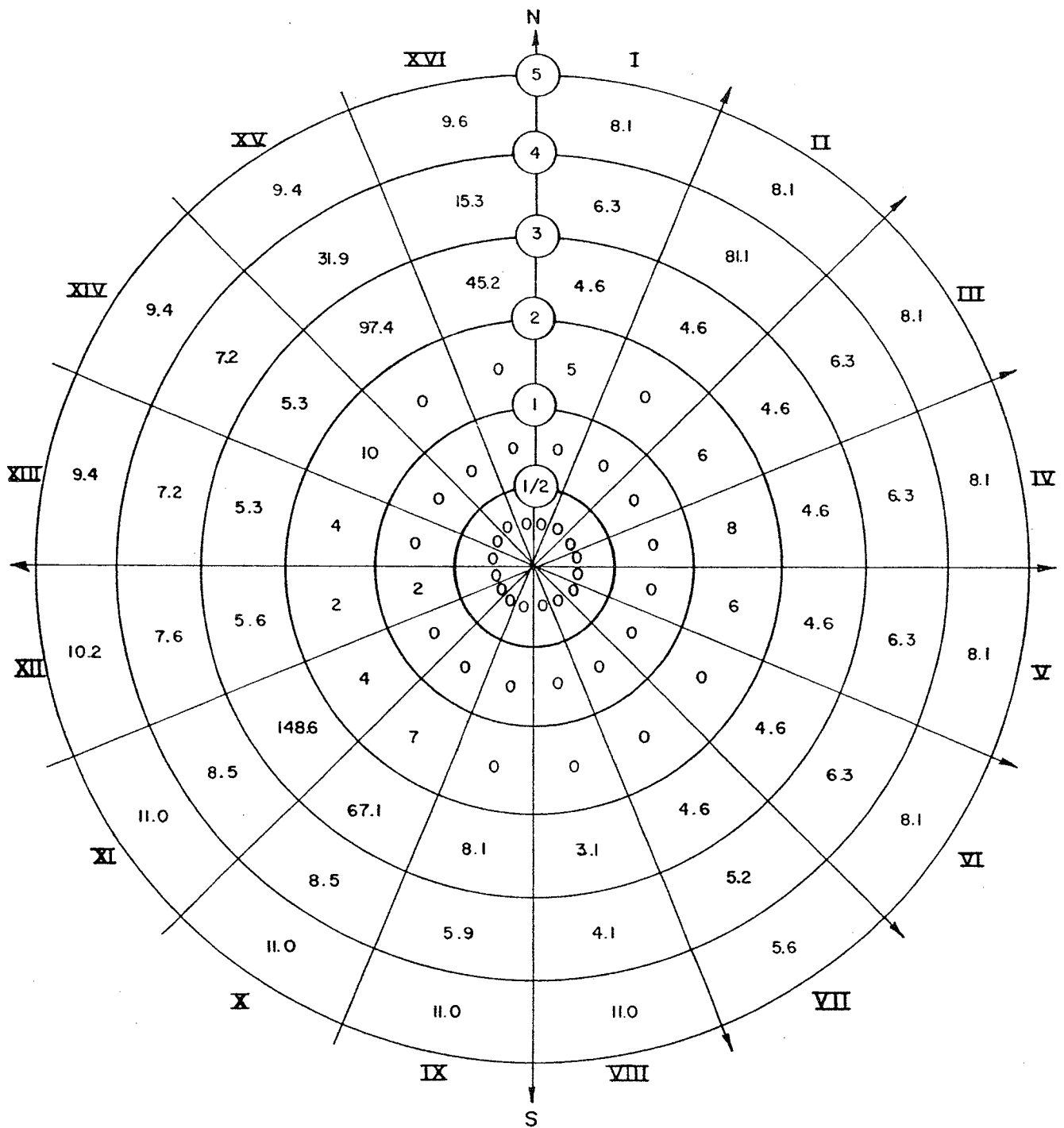
*Aerial Photograph of Site*  
*Figure II-2-1*  
*1/16/01*



Site Location Plan

Figure II-2-2

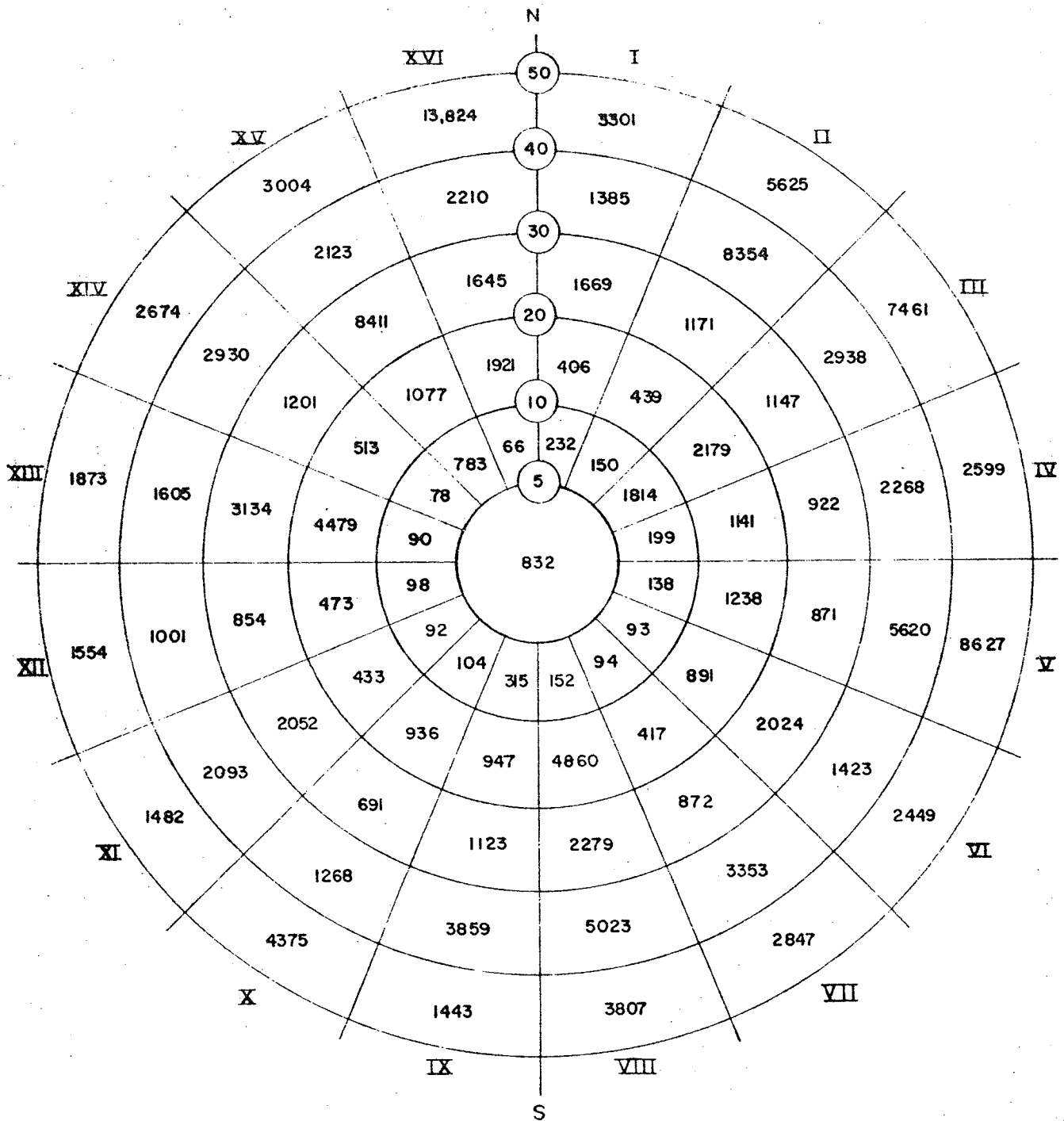
1/16/01



○ - FIGURES IN CIRCLE INDICATE RADIAL DISTANCE IN MILES FROM COOPER NUCLEAR STATION

Nebraska Public Power District  
COOPER NUCLEAR STATION  
UPDATED SAFETY ANALYSIS REPORT (USAR)

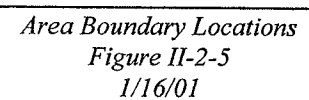
Population Distribution  
(0-5 Miles Radial Distance from Site)  
Figure II-2-3  
1/16/01

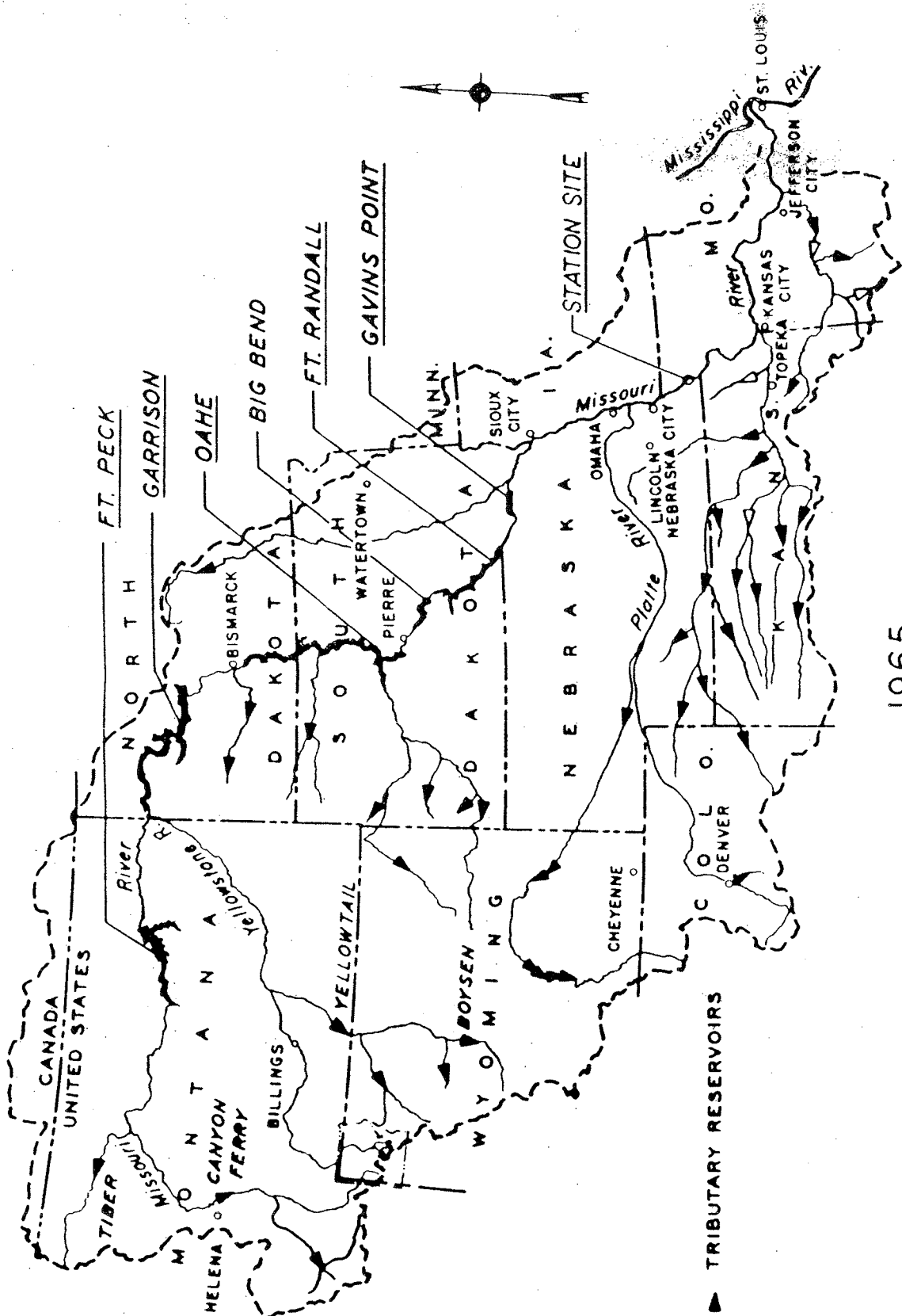


○=FIGURES IN CIRCLE INDICATE RADIAL DISTANCE  
IN MILES FROM COOPER NUCLEAR STATION

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COOPER NUCLEAR STATION  
UPDATED SAFETY ANALYSIS REPORT (USAR)

Population Distribution  
(5-50 Miles Radial Distance from Site)  
Figure II-2-4  
1/16/01





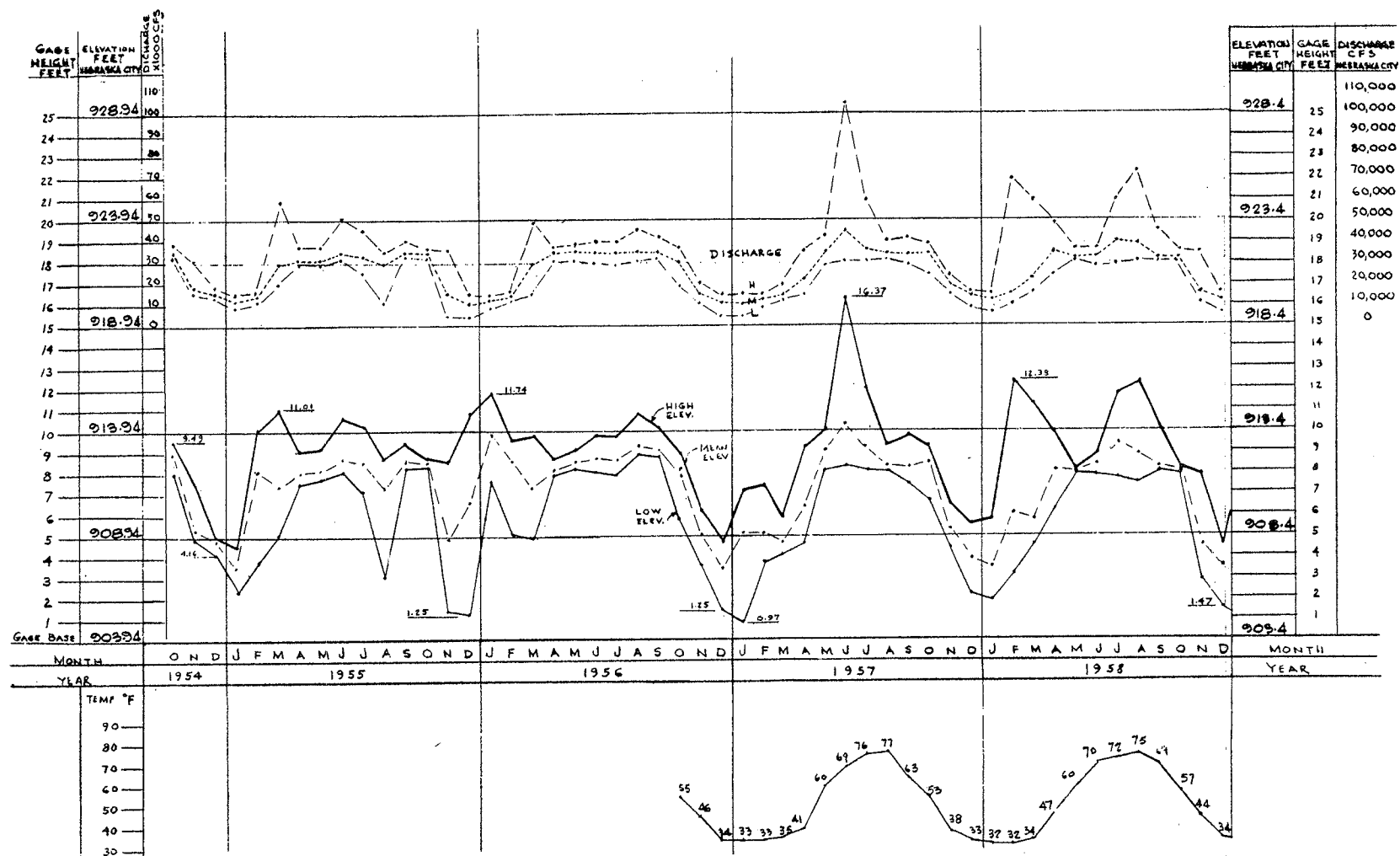
1965

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Location of Upstream Dams

Figure II-4-1

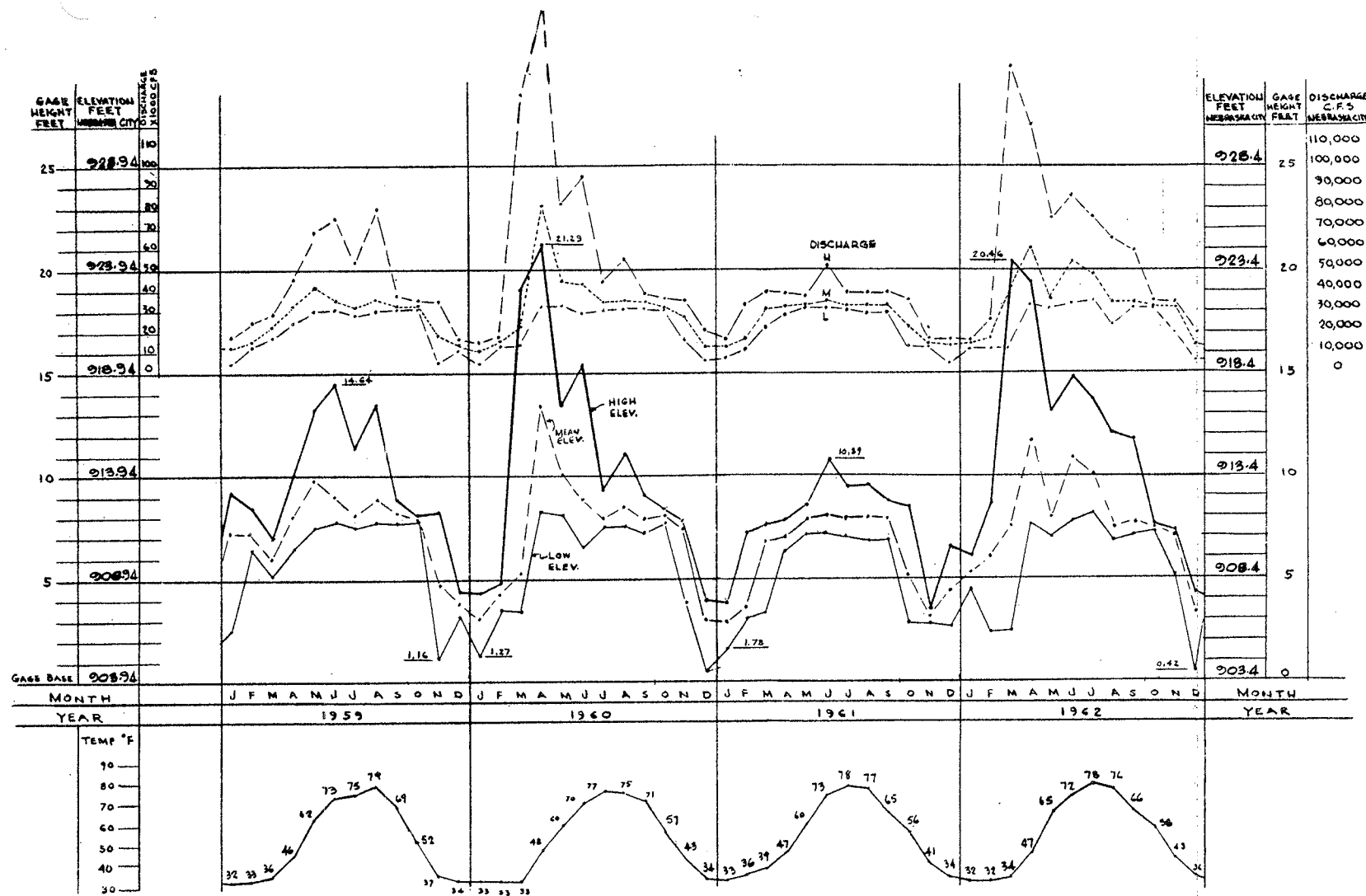
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 COOPER NUCLEAR STATION  
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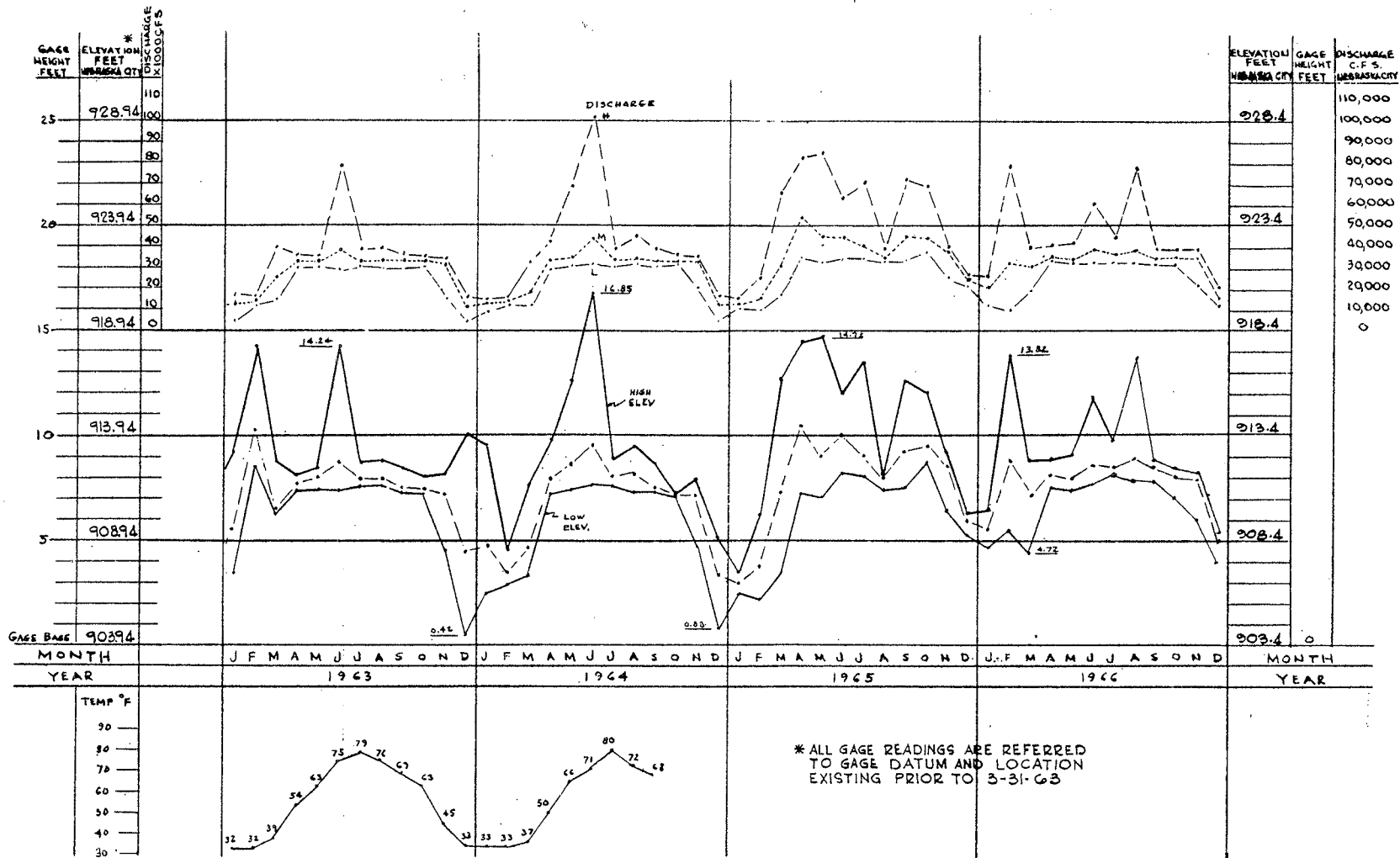
Missouri River Hydraulic Data,  
 1955-1958  
 Figure II-4-2  
 1/16/01





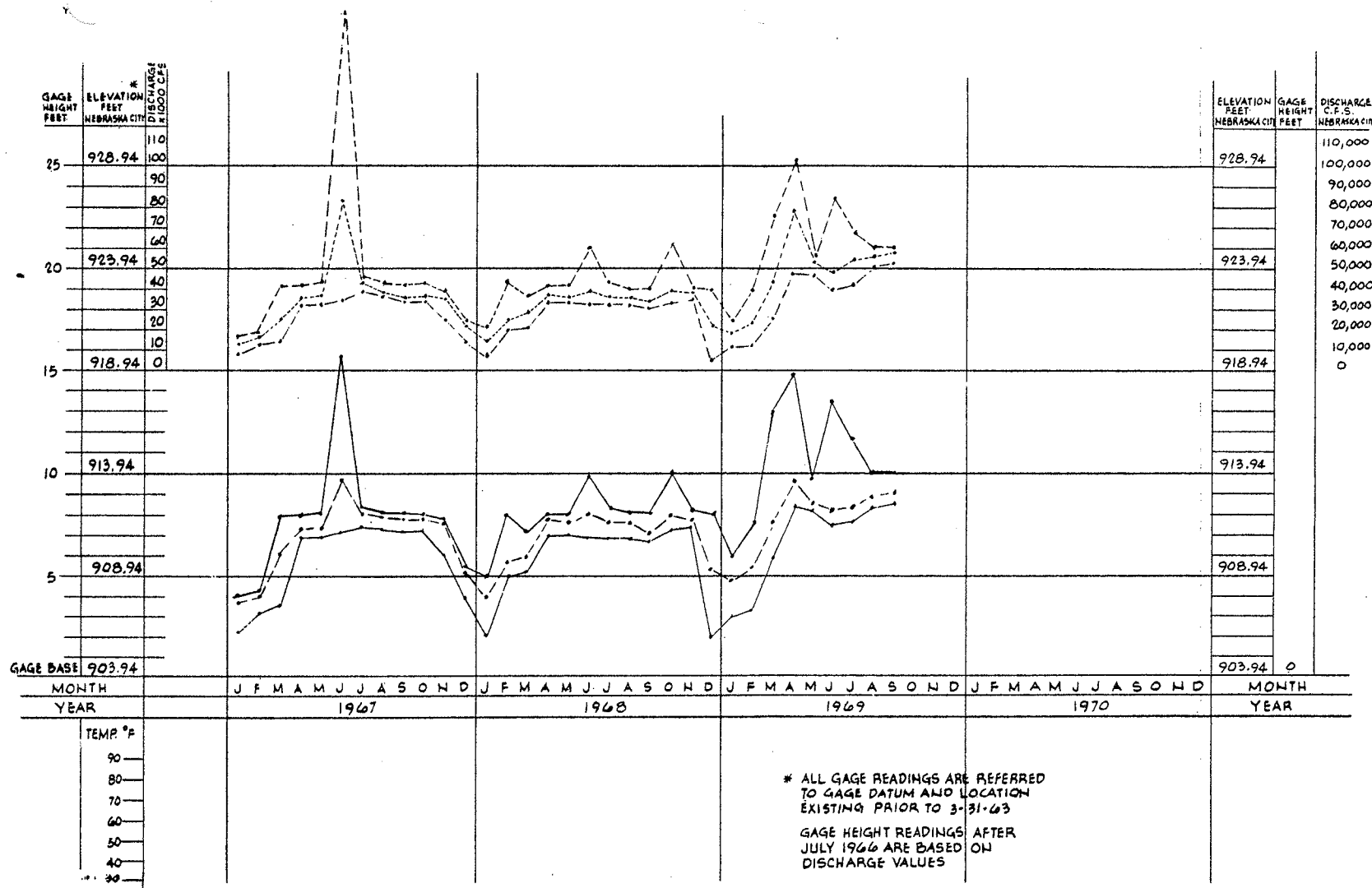
Nebraska Public Power District  
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UPDATED SAFETY ANALYSIS REPORT (USAR)

Missouri River Hydraulic Data,  
1959-1962  
Figure II-4-3  
1/16/01



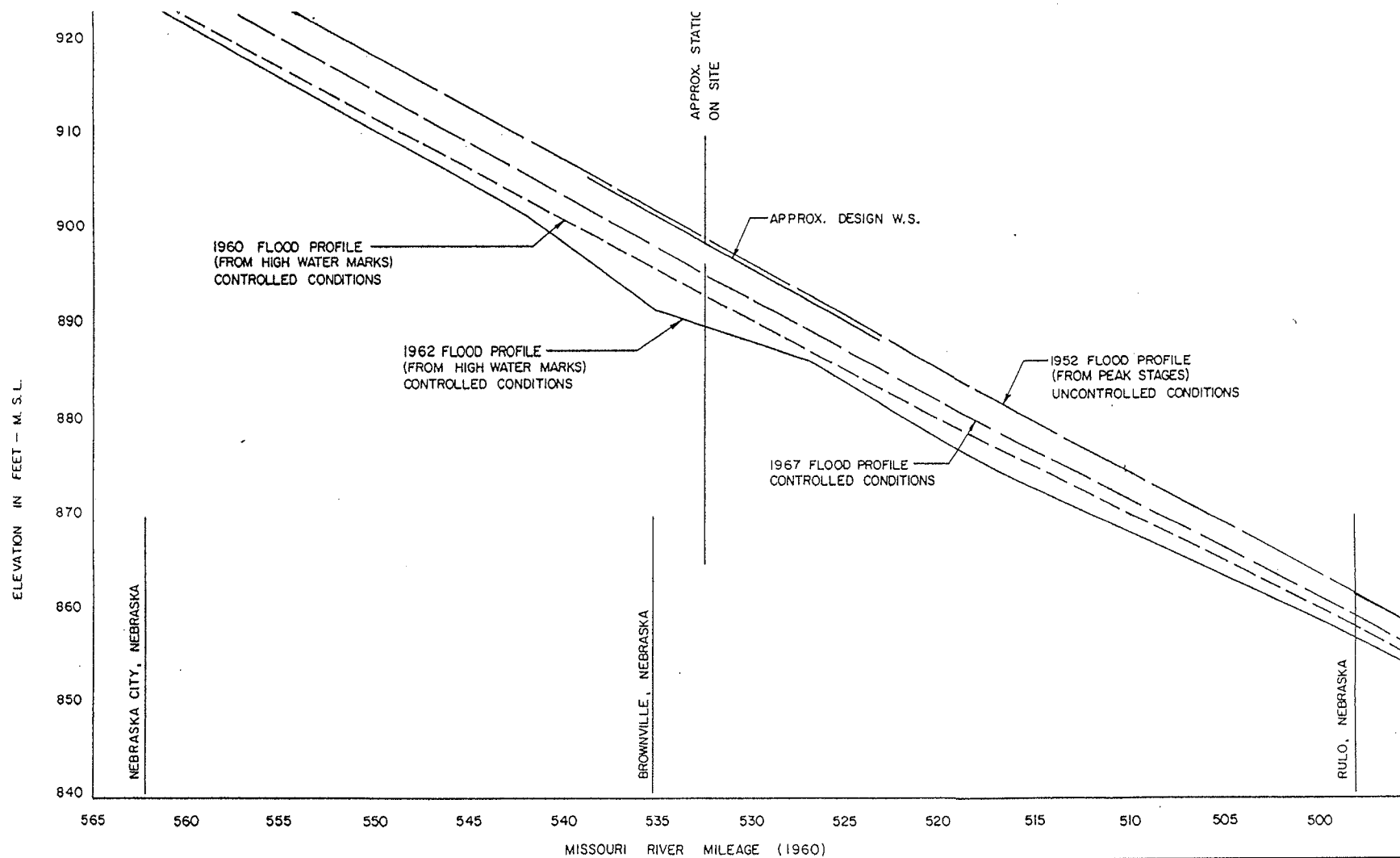
**Nebraska Public Power District  
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UPDATED SAFETY ANALYSIS REPORT (USAR)**

*Missouri River Hydraulic Data,  
1963-1966  
Figure II-4-4  
1/16/01*



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 COOPER NUCLEAR STATION  
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*Missouri River Hydraulic Data,  
 1967-1969  
 Figure II-4-5  
 1/16/01*

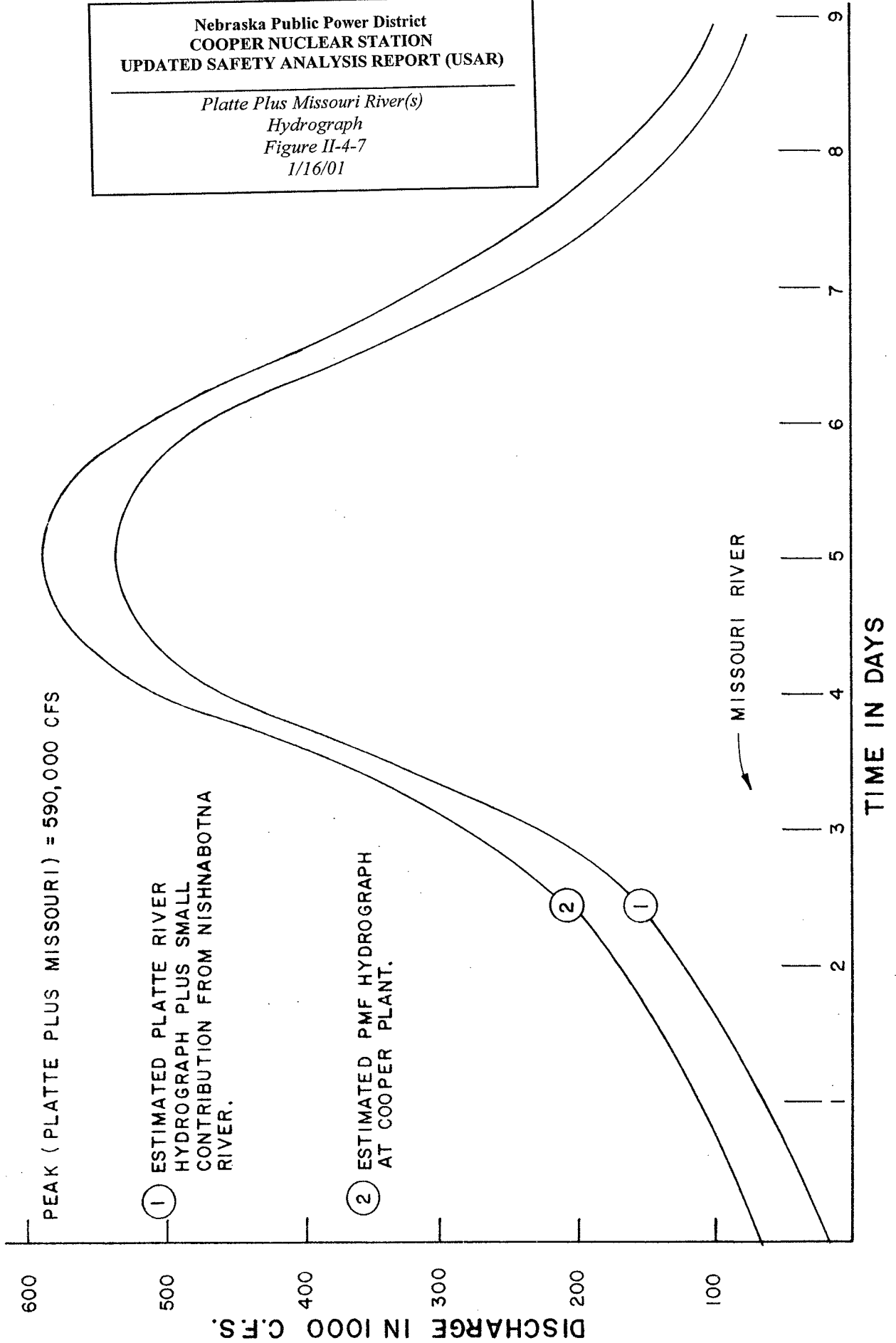


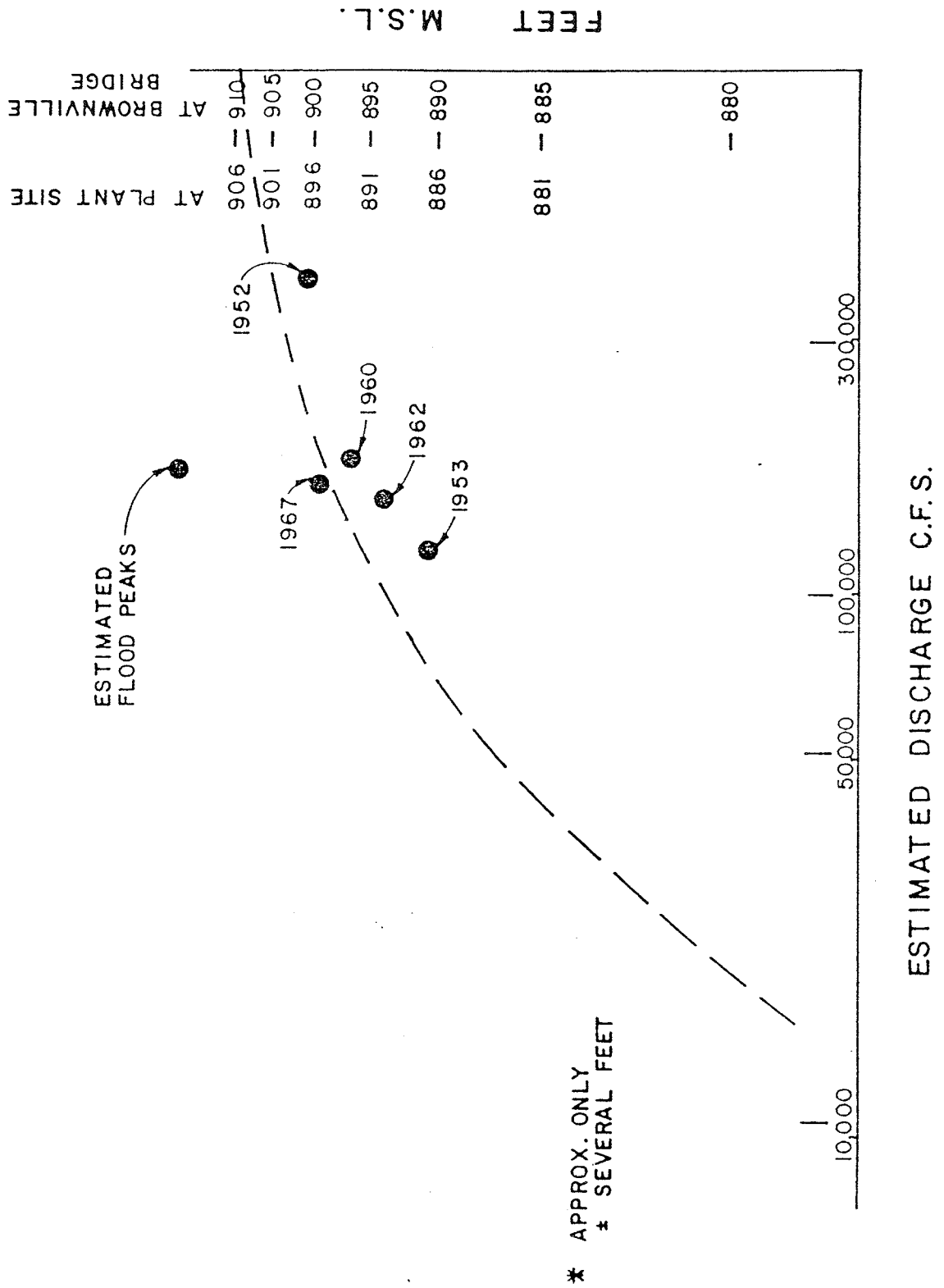
**Nebraska Public Power District  
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UPDATED SAFETY ANALYSIS REPORT (USAR)**

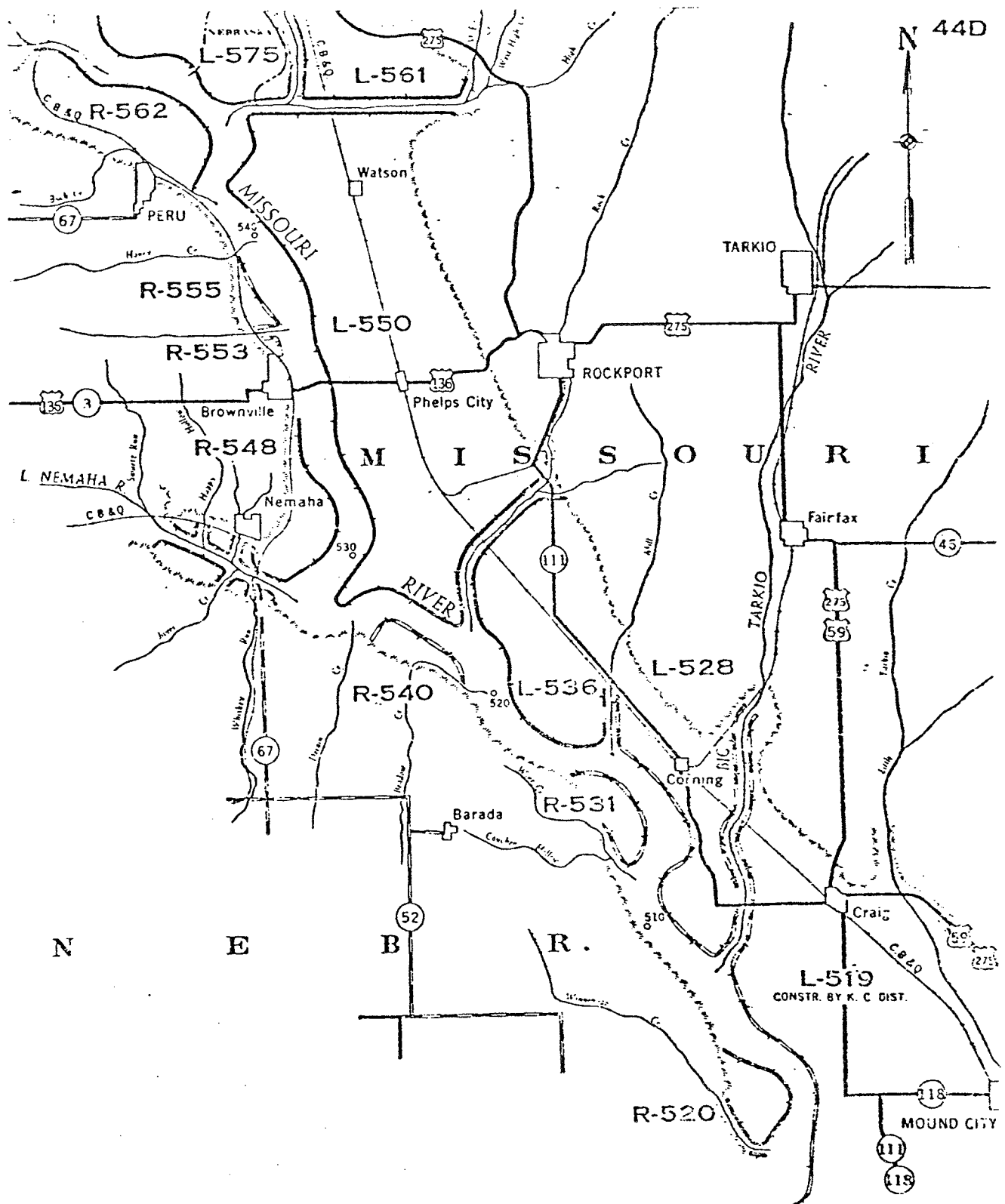
*Flood Profiles  
Figure II-4-6  
1/16/01*

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*Platte Plus Missouri River(s)*  
*Hydrograph*  
*Figure II-4-7*  
*1/16/01*

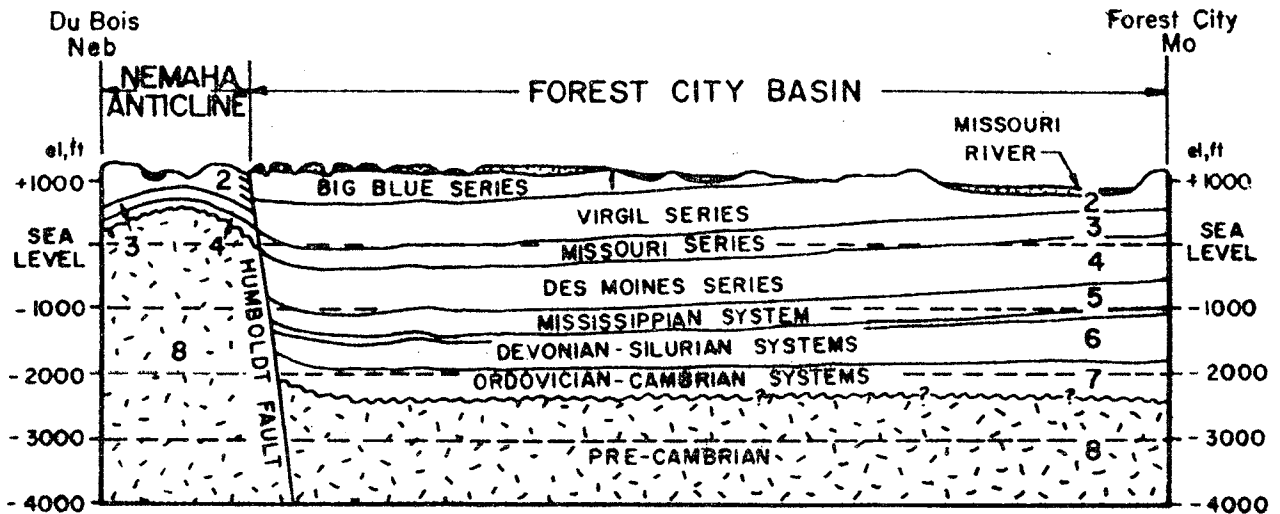
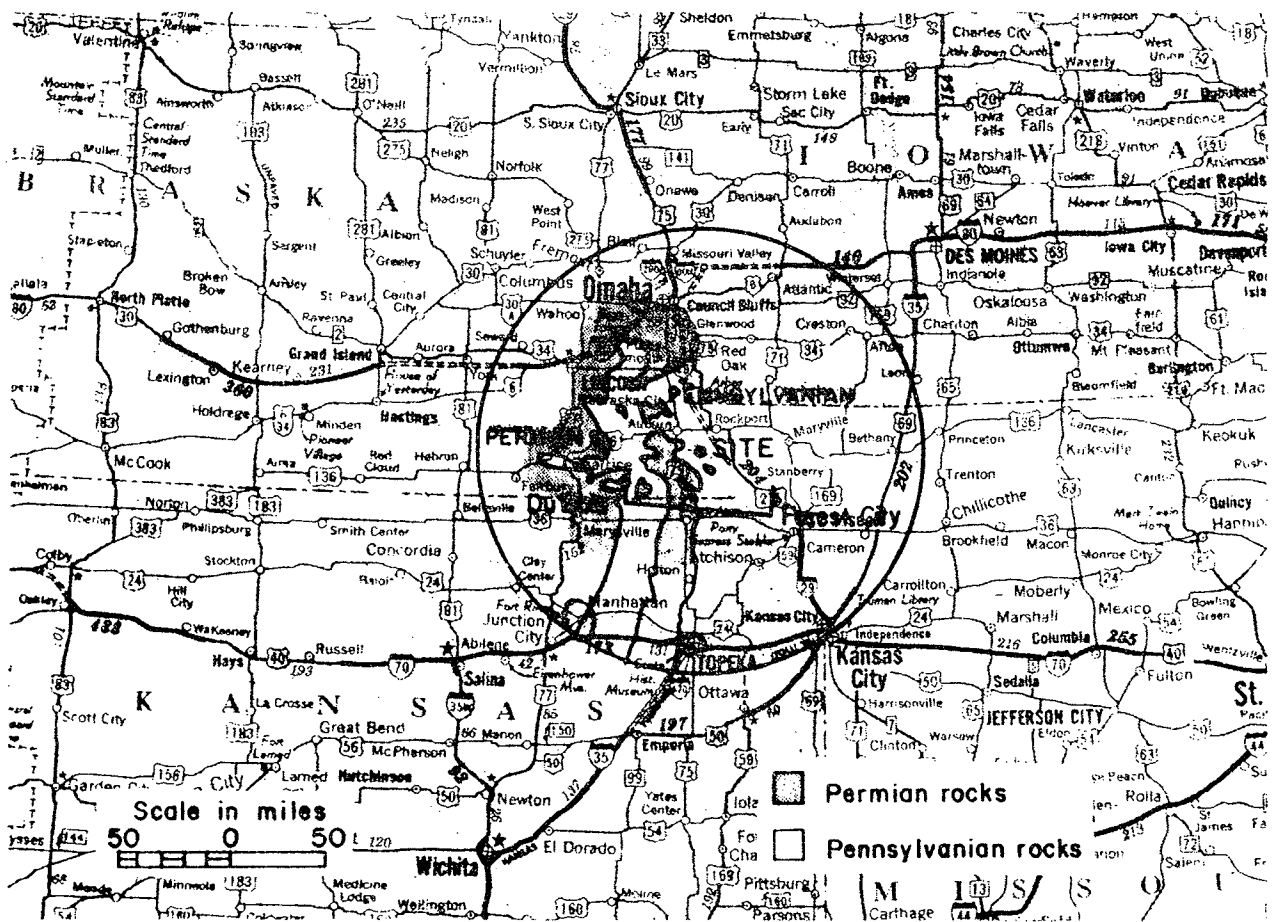






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*Levee System/Flood Control Project  
Missouri River  
Figure II-4-9  
1/16/01*

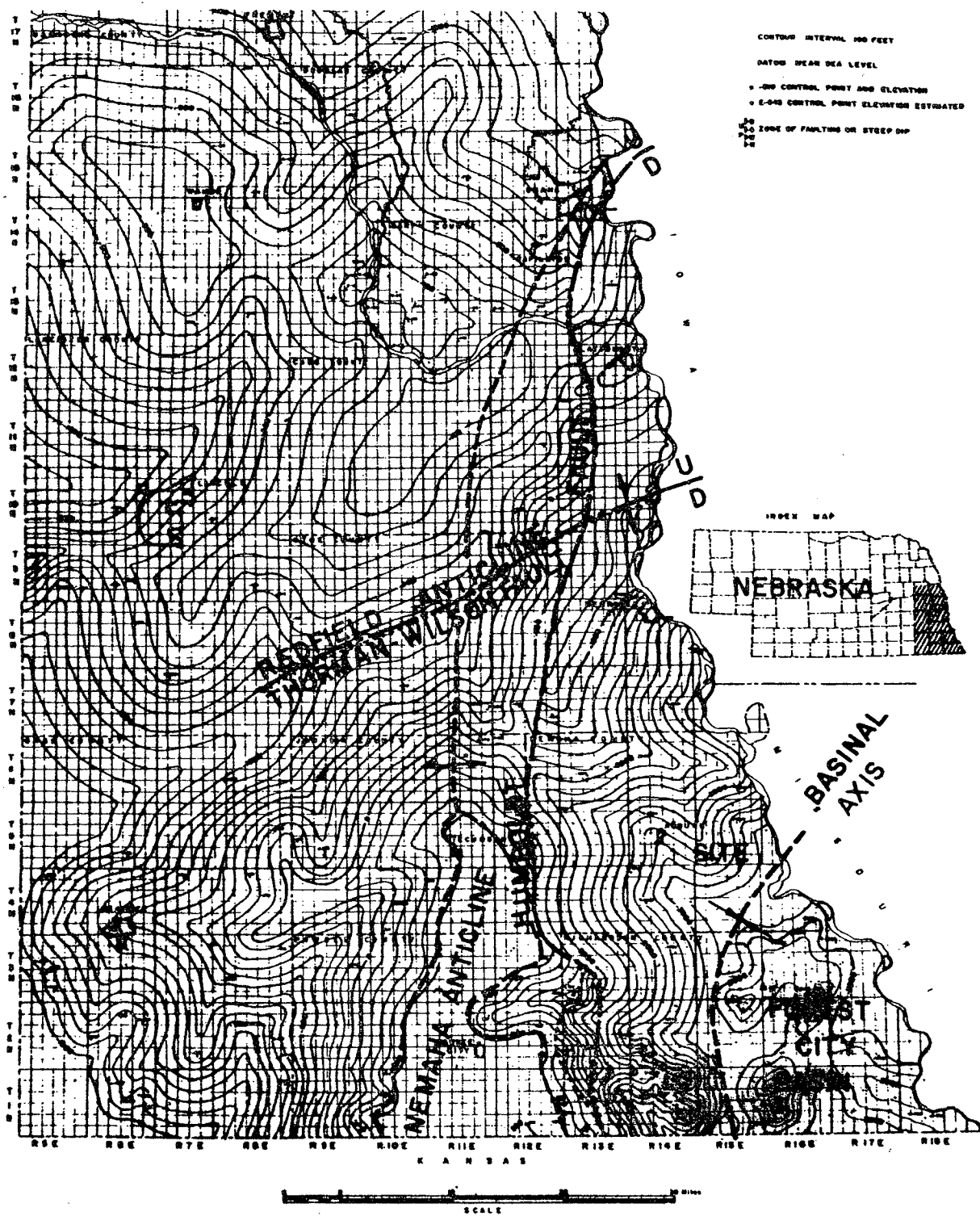


(Map after Humble Oil & Refining Co, 1964;)  
Cross section after Condra 1935

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Regional Bedrock Geology and  
Cross-Section  
Figure II-5-1  
1/16/01



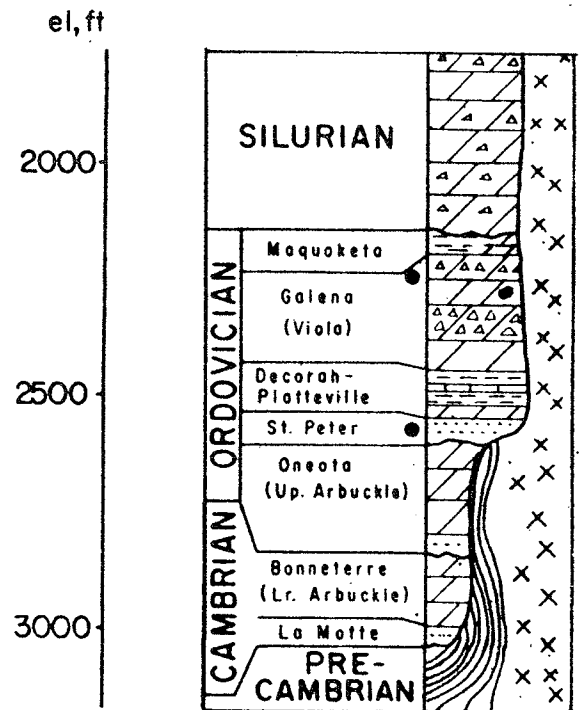
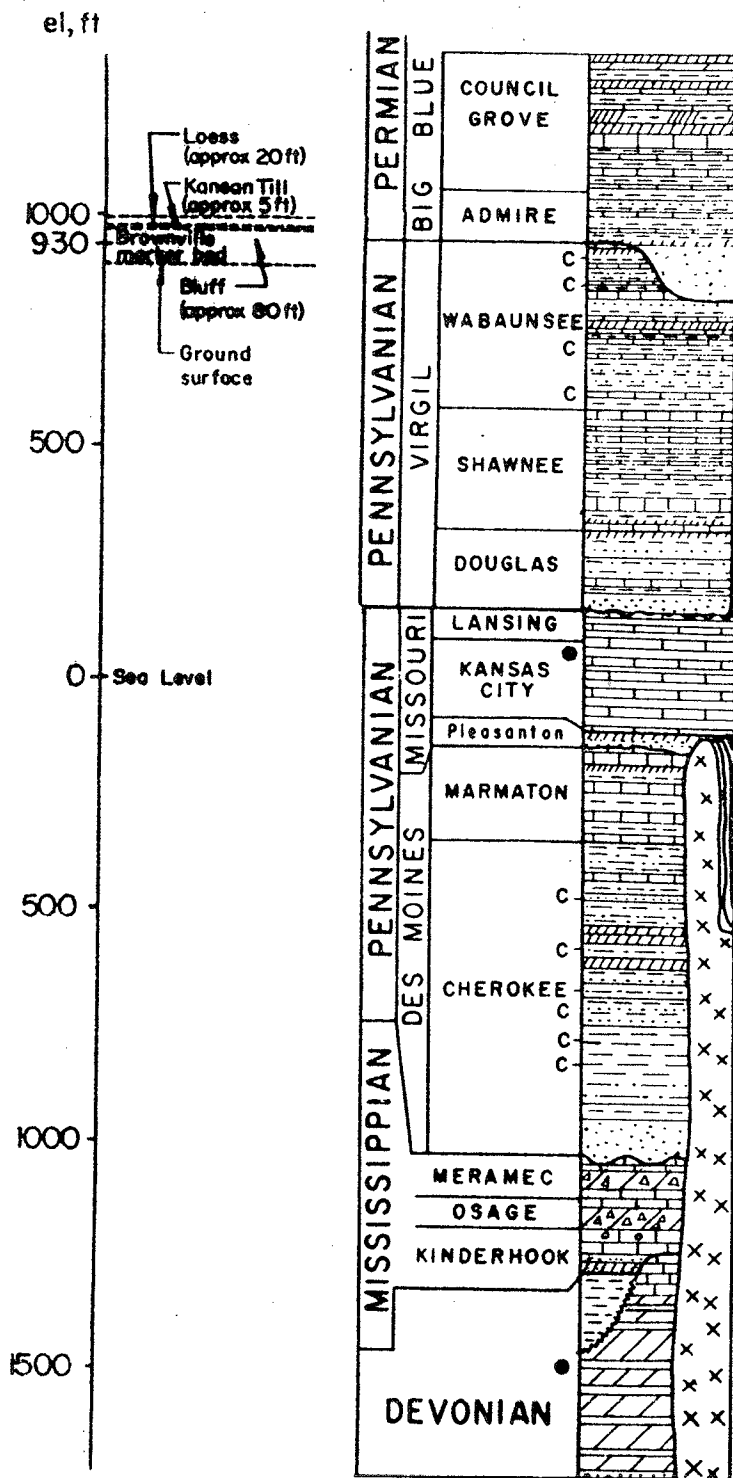


(After Burchett and Reed, 1967)

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Configuration of Precambrian Surface  
 and Principal Structural Features  
 in Southeastern Nebraska

Figure II-5-2  
 1/16/01



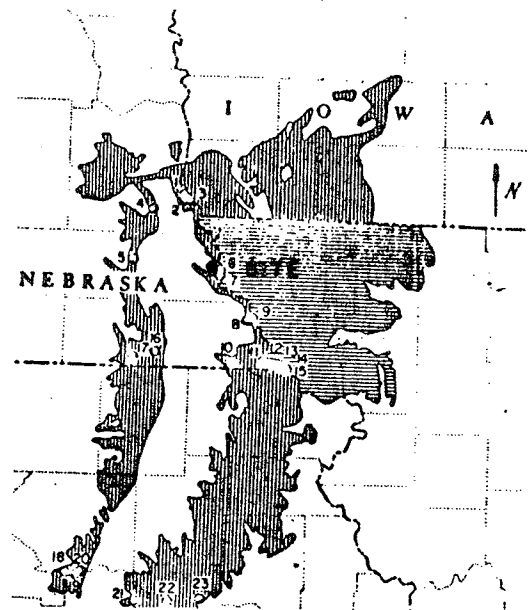
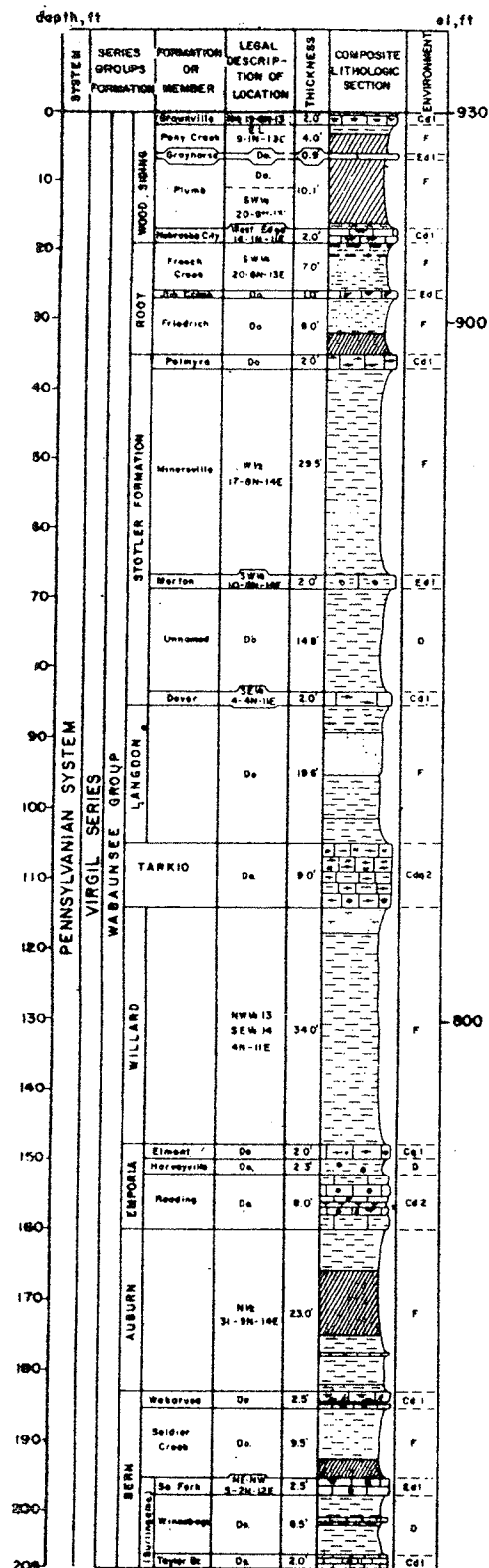
**KEY**

C	Coal	ΔΔ	Chert	///	Red Shale
•	Oil		Gypsum	xxx	Granite
+	Gas	+++	Salt	///	Metamorphic

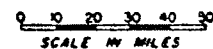
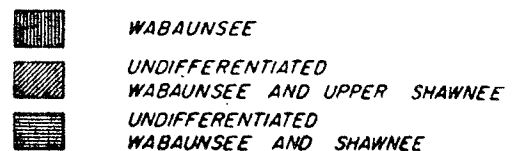
(After Burchett and Reed, 1967)

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Generalized Columnar Section of  
Rock Underlying Region  
Figure II-5-3  
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#### EXPLANATION



KEY TO LITHOLOGY	KEY TO SYMBOLS
Limestone	Oolites
Green or Gray Shale	Limestone Pebbles
Red Shale	Chert or Flint
Black Fossil Shale	Oolite
Coal	Brachiopods
Sandstone	Crinoid Stems
	Polychaetes
	Gastropods
	Fusulines
	Bryozoans
	Corals

#### KEY TO ENVIRONMENTAL CLASSIFICATION

- Limestones and Shales**
- A Marine, generally deep and quiet water, some humic contribution.
  - B Black and fissile shale: large humic contribution, anoxic environment.
  - C Marine, deep to shallow sea, disturbed to quiet water.
  - D Sander-colored shales, slow accumulation.
  - E Shallow marine to brackish conditions, molluscan fauna or fragmental fossils.
  - F Largely non-marine shales; generally rapid accumulation.
  - G Disturbed water, moderate argillaceous or siliceous contribution.
  - H Quiet water, low argillaceous or siliceous contribution.

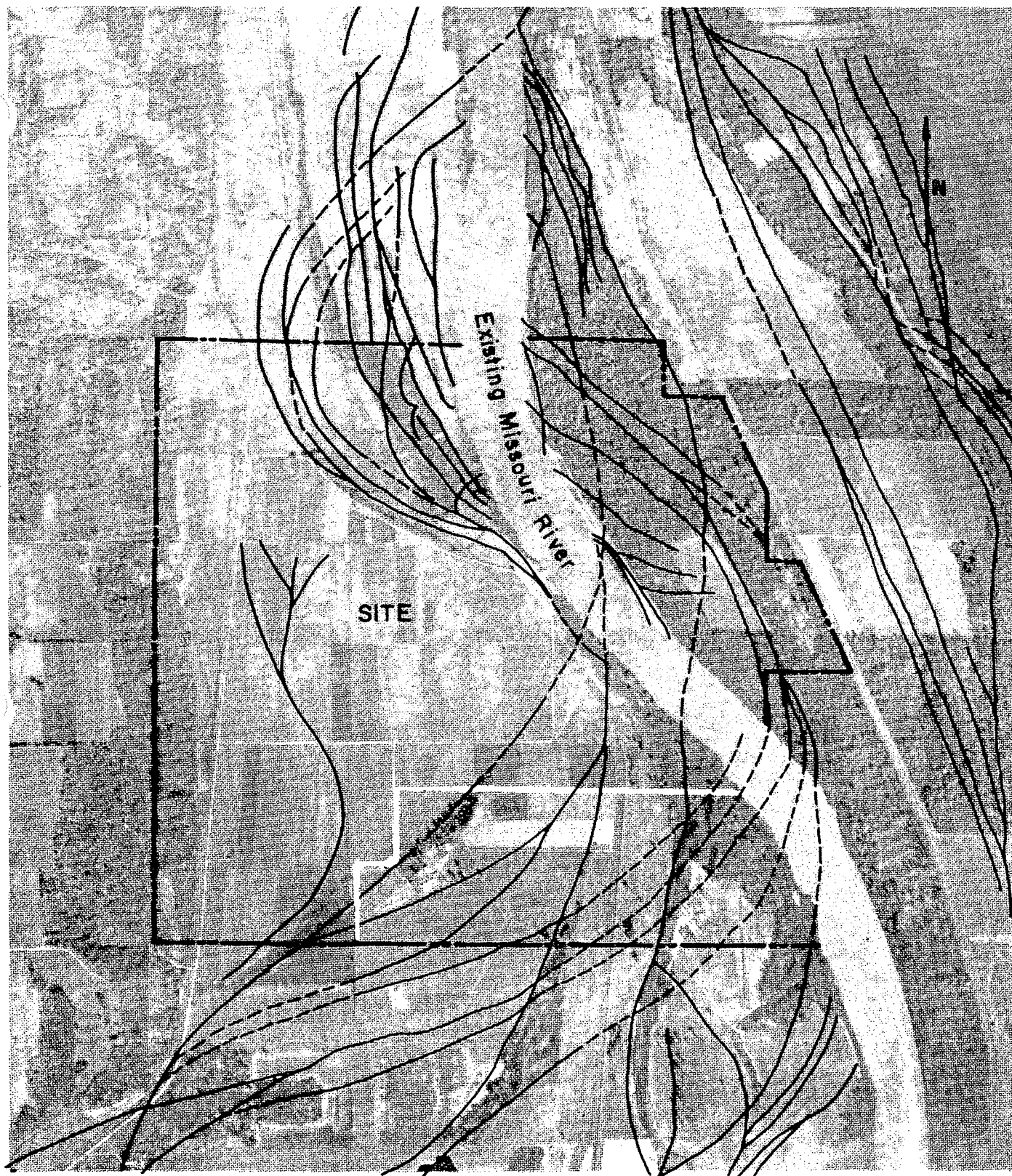
#### Limestone Thickness

- 1 Thin: less than three feet
- 2 Intermediate: three to ten feet thick
- 3 Thick: ten feet or more

(Chart after Burchett and Reed, 1967)  
(Plan after Girardot, 1962)

### Nebraska Public Power District COOPER NUCLEAR STATION UPDATED SAFETY ANALYSIS REPORT (USAR)

Stratigraphic Chart of Portions of  
Wabaunsee Group and a Plan of its  
Outcroppings in Southeastern Nebraska  
Figure II-5-4  
1/16/01

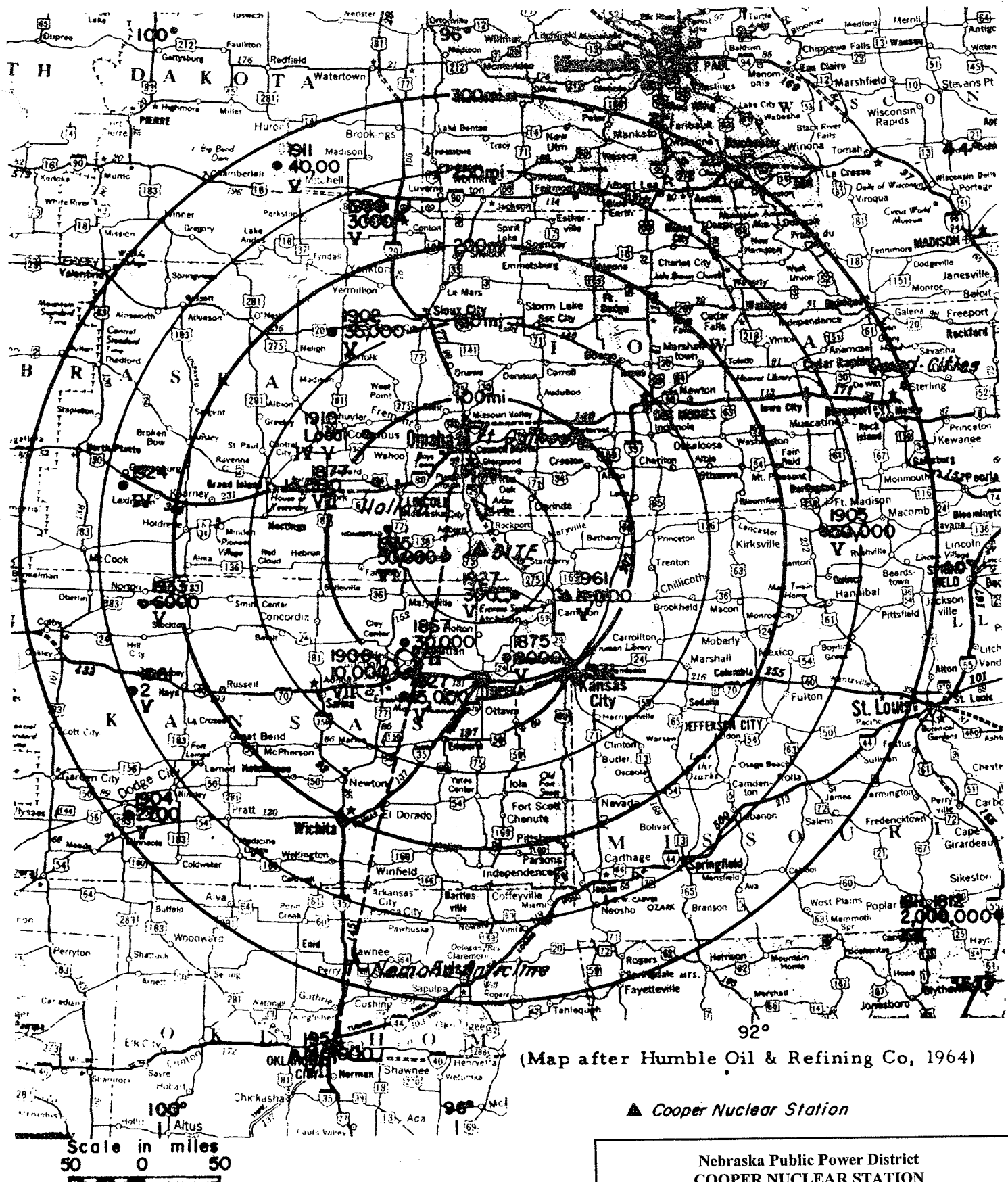


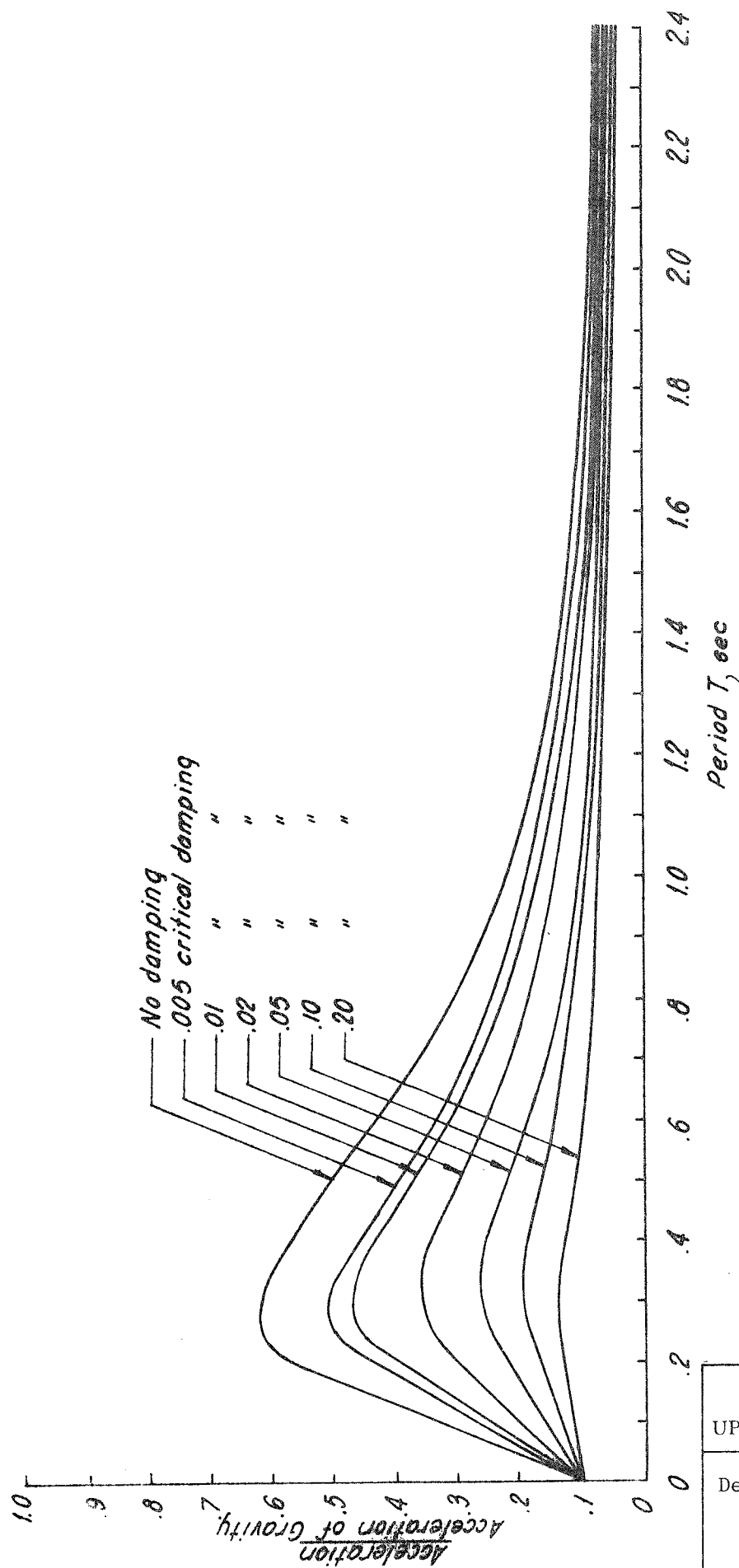
Scale 1:20,000

(Airphoto after USDA, 1964)

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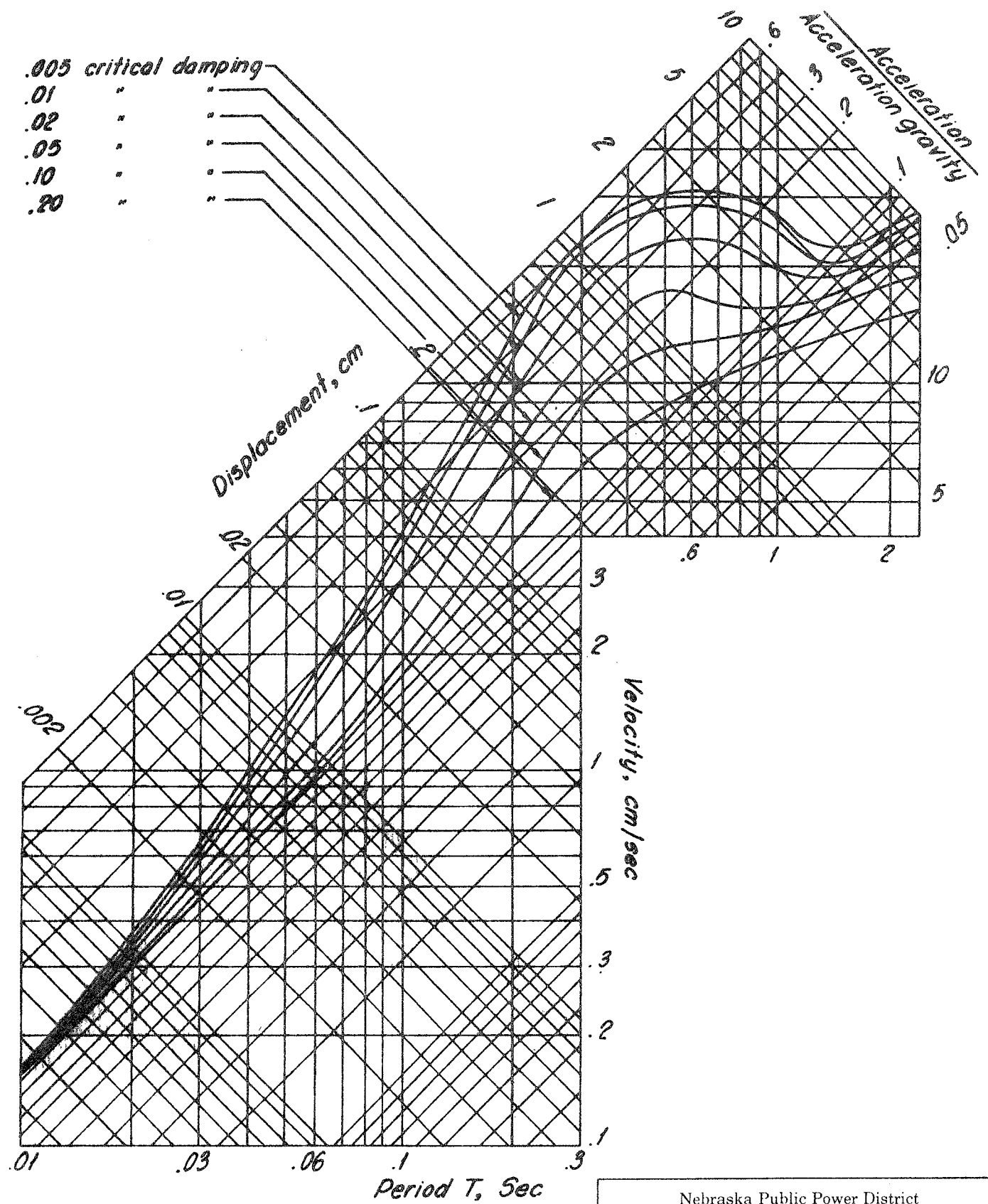
*Interpreted Location of  
Former Natural Levees  
Figure II-5-5  
1/16/01*





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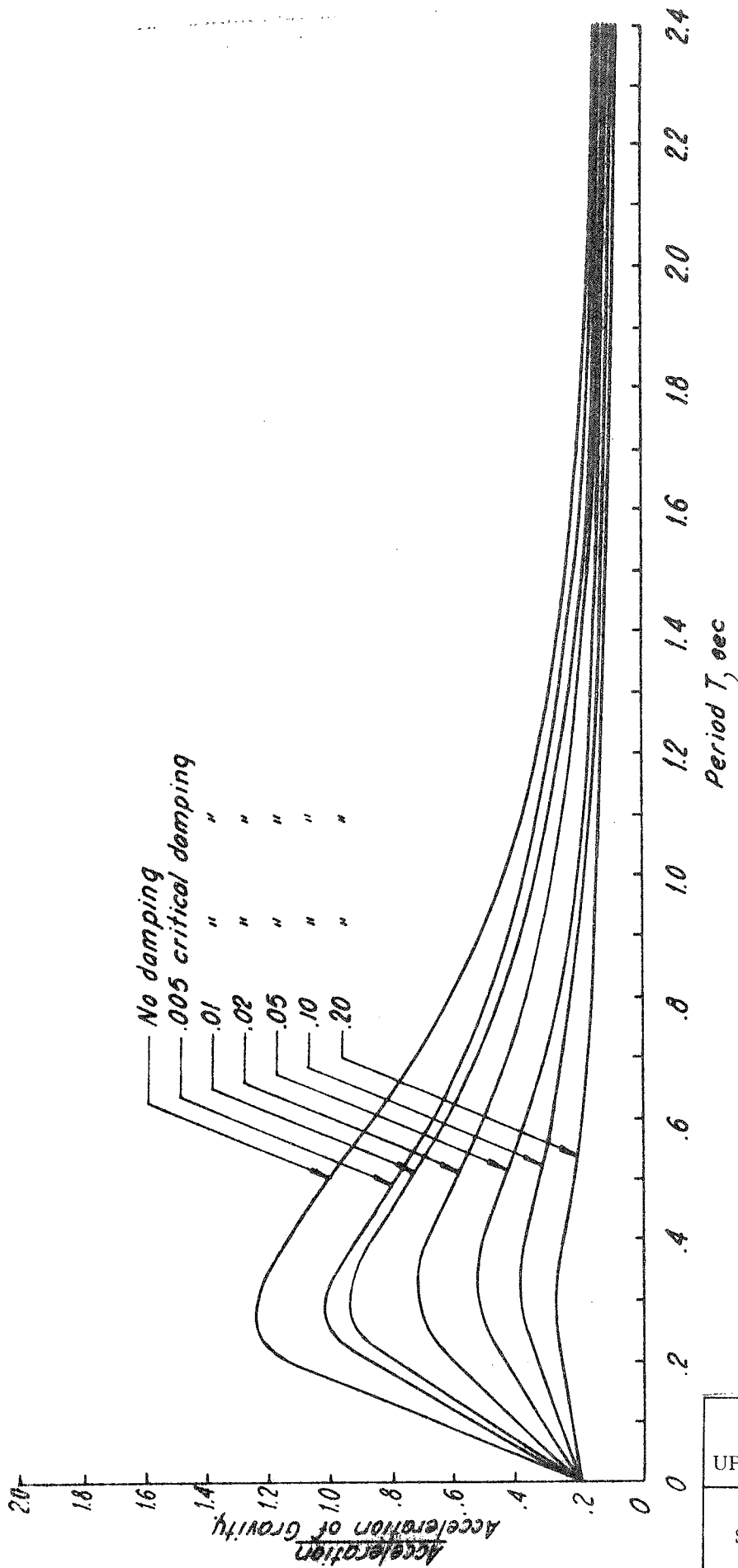
Design Acceleration Response Spectra  
for Maximum Probable Design  
Earthquake (Arithmetic Plot)  
Figure II-5-7



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UPDATED SAFETY ANALYSIS REPORT (USAR)

Design Response Spectra for Maximum  
Probable Design Earthquake  
(Four Way Logarithmic Plot)  
Figure II-5-8



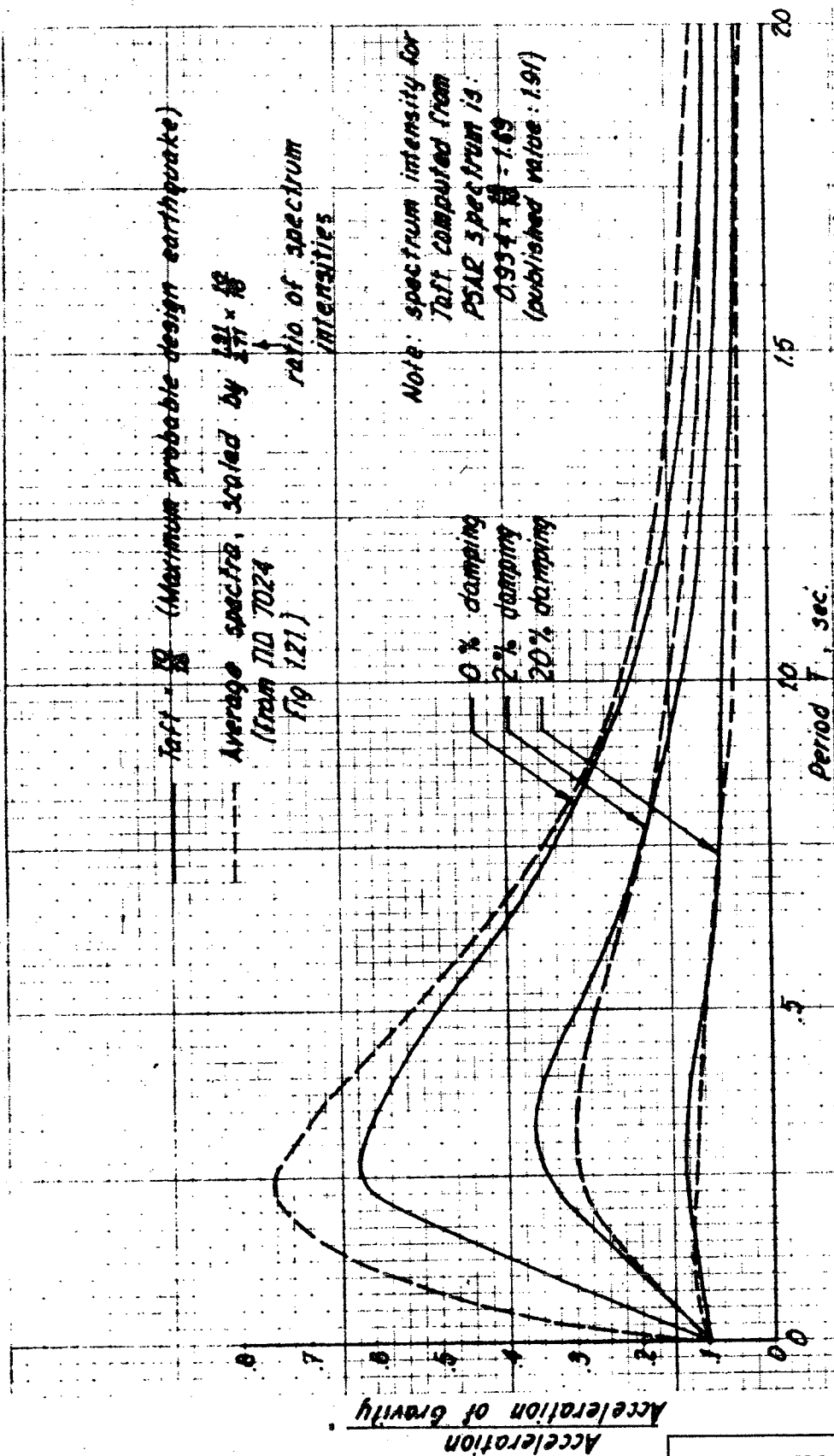


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Design Acceleration Response  
 Spectra for Hypothetical Maximum  
 Possible Design Earthquake  
 (Arithmetic Plot)  
 Figure II-5-9





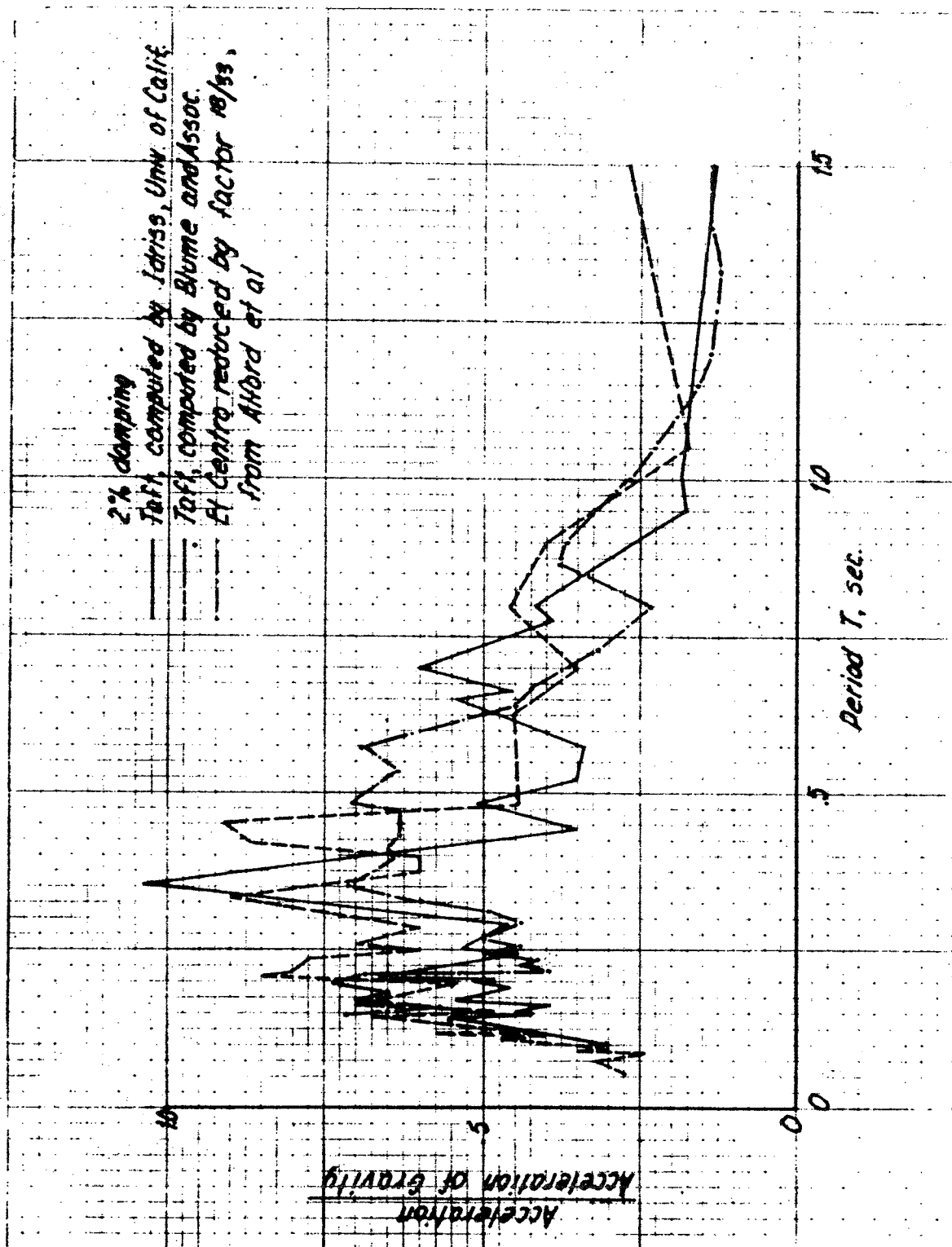


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Comparison Between FSAR Design  
 Acceleration Response Spectra and  
 Average Acceleration Spectra

Figure II-5-11

1/16/01

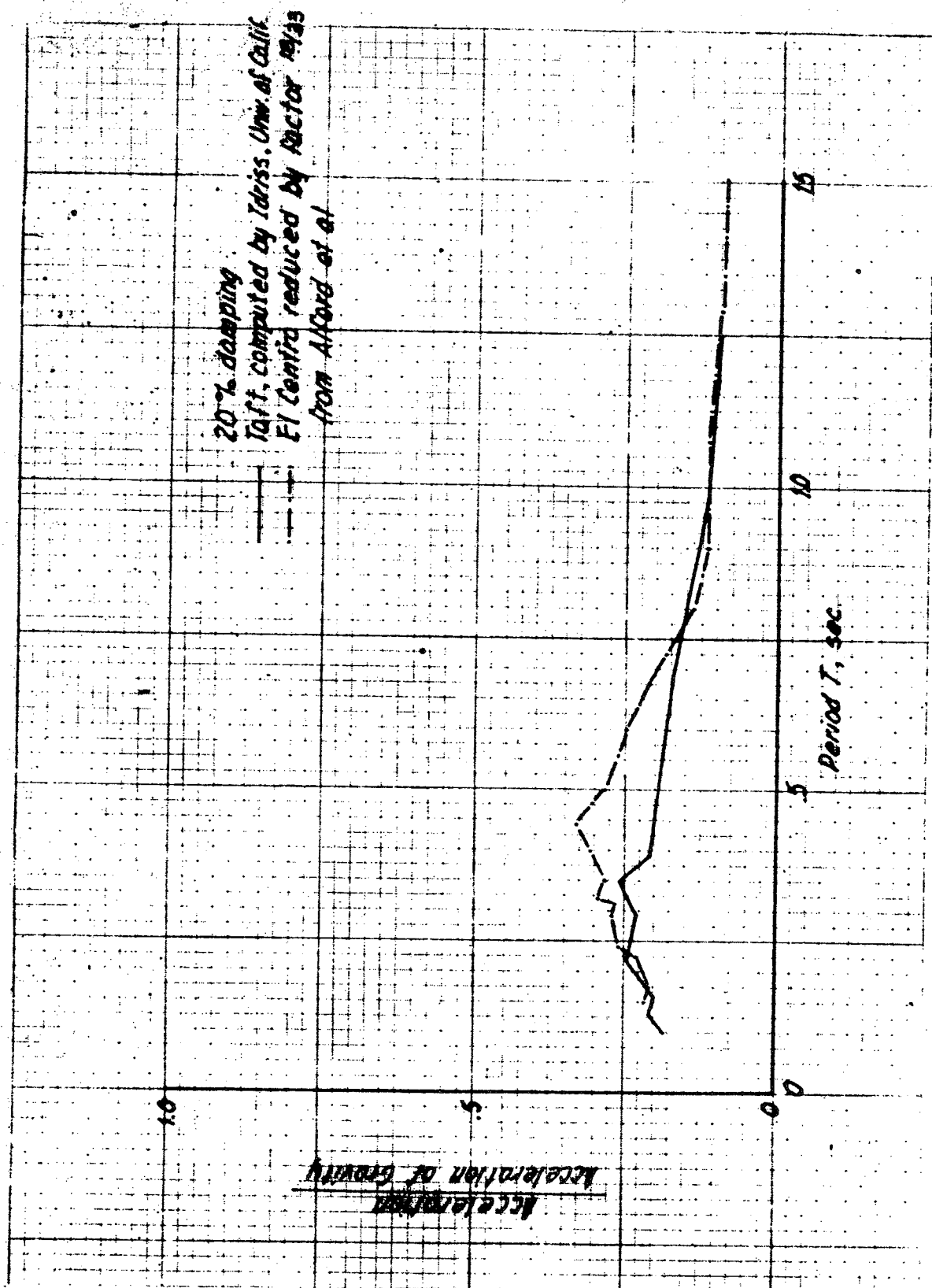


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Comparison of Unsmoothed Acceleration  
Response Spectra from Taft and El Centro  
Accelerograms for 2% Damping

Figure II-5-12

1/16/01



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Comparison of Unsmoothed Acceleration  
 Response Spectra from Taft and El Centro  
 Accelerograms for 20% Damping

Figure II-5-13

1/16/01