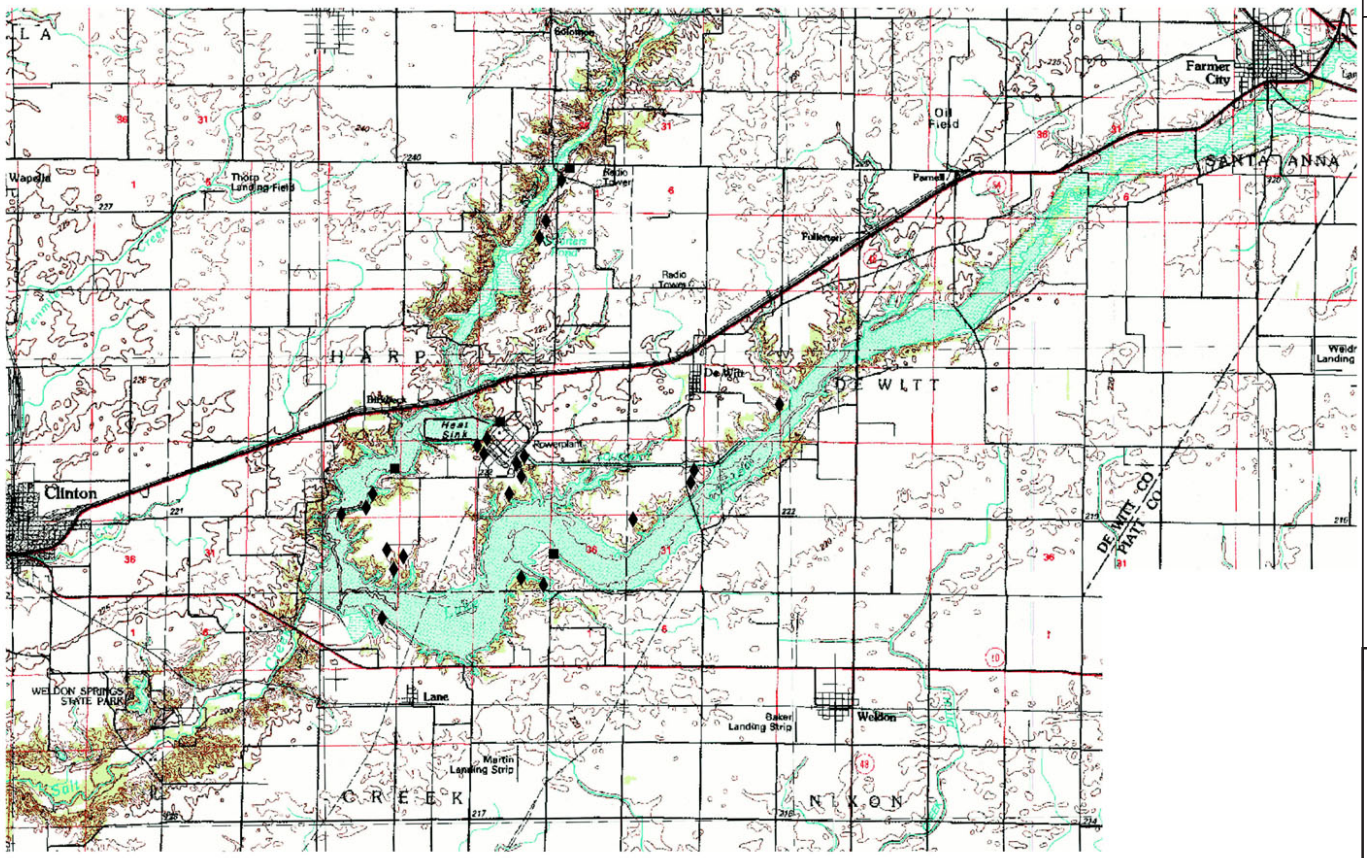
Site Safety Analysis Report for
the EGC Early Site Permit

Figure 2.4-21
Springs in the Vicinity of the Site



Legend

- ■ Observed Spring
- ♦ Described by Farmer

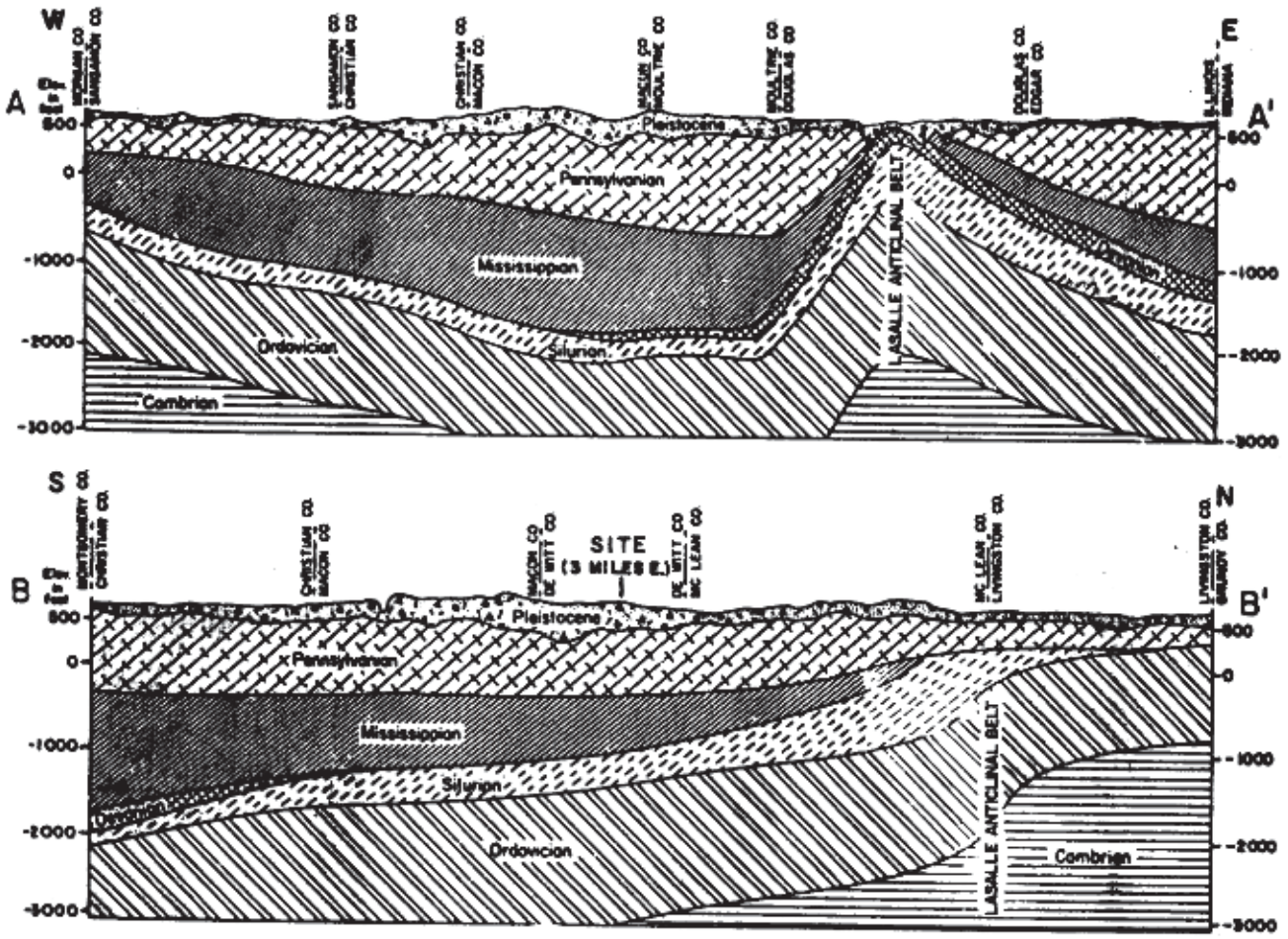
Data Source:
CPS, 2002

N

Not to Scale

Figure 2.5-1

Regional Geologic Cross Sections



Notes:
1. Reprinted from: CPS, 2002

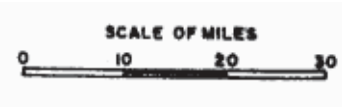
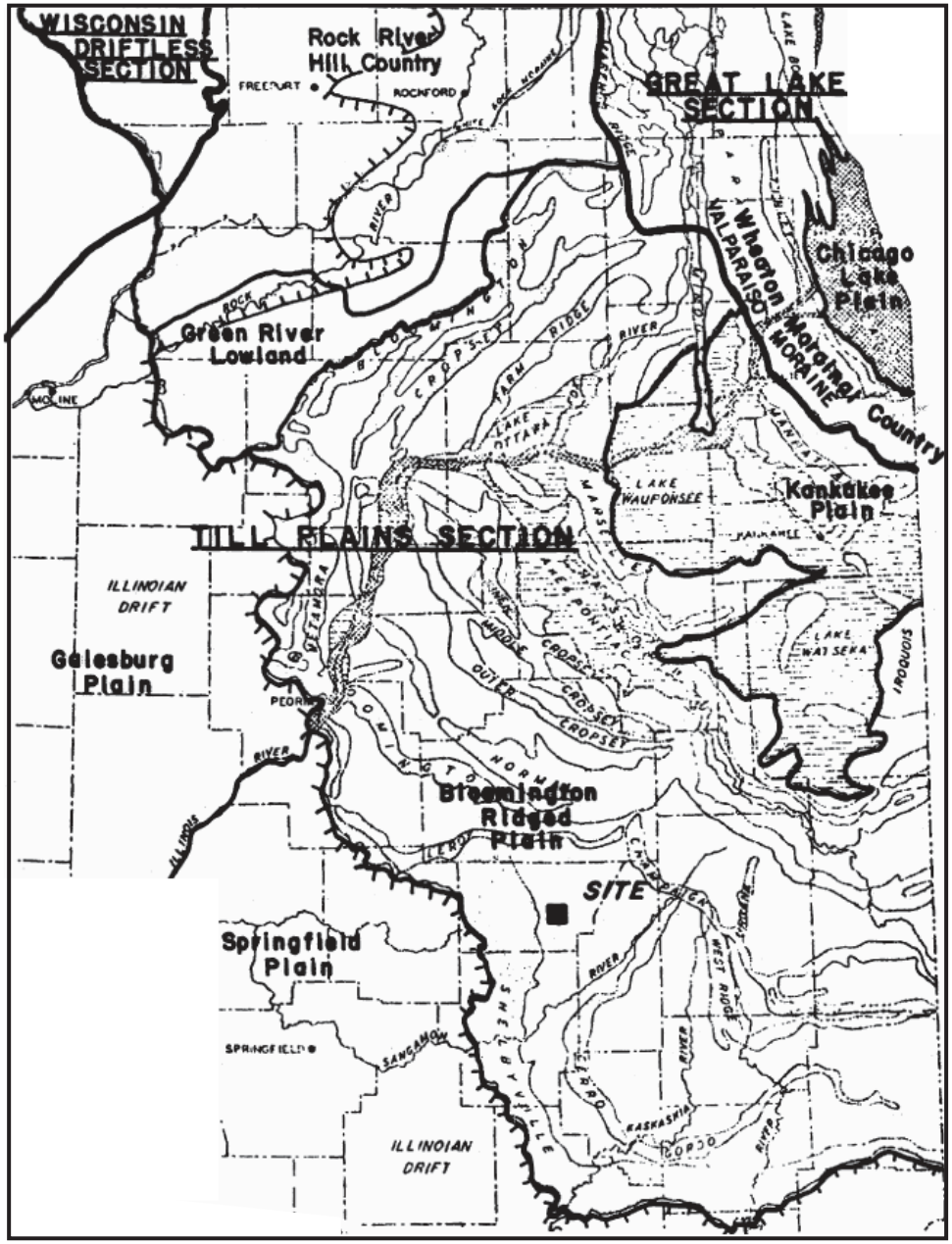


Figure 2.5-2

Regional Glacial Map and Physiographic Divisions



Legend

- Moraines
- Kankakee Torrent Area
- Lake Chicago and Outlet
- Limit of Wisconsinan Glaciation in Illinois

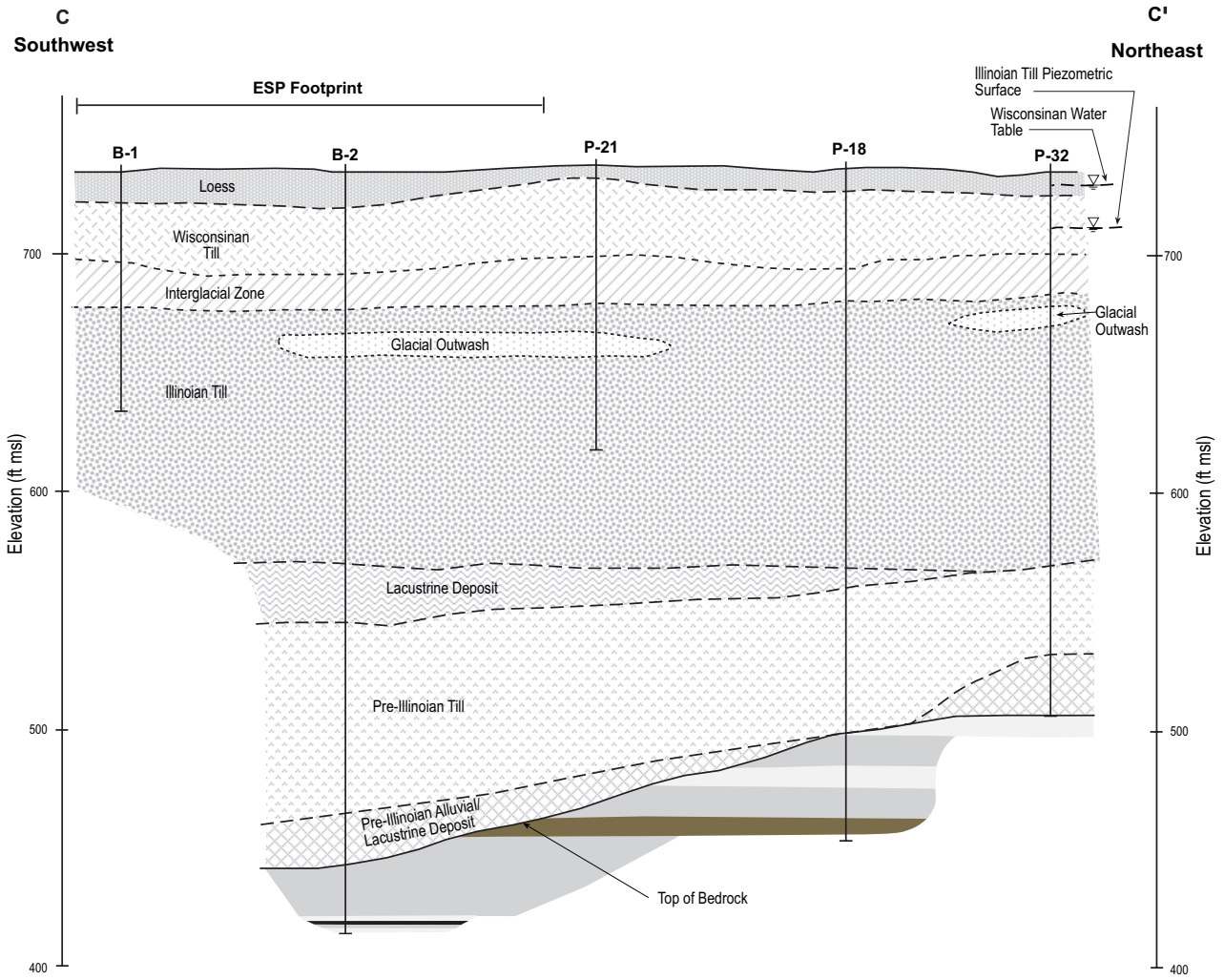
Notes:

1. These physiographic sections and subsections are part of the central lowland physiographic province.
2. The areas shown in white are primarily glacial drift and ground moraine except for the Wisconsin driftless section and parts of the Green River lowland.
3. Reprinted from: CPS, 2002

N

0 10 20 ml

Scale in miles



Site Safety Analysis Report for the EGC Early Site Permit

Figure 2.5-3 Representative Soil Cross Section

Legend

Quaternary

Wisconsinan

LOESS - Brown to mottled brown and gray clayey silt or silty clay with trace fine sand; Weathered

WISCONSINAN GLACIAL TILL - Brownish-gray to gray clayey silt or silty clay with sand and gravel; Contains irregular and discontinuous lenses of sand and silt throughout (glacial outwash and possibly local lacustrine deposits)

Sangamonian

INTERGLACIAL ZONE - Includes dark gray to gray organic clayey silt or silty clay (colluvial soils), greenish to bluish-gray clayey silt with sand and gravel (reworked Illinoian Glacial Till)

Illinoian

ILLINOIAN GLACIAL TILL - Brownish-gray to gray clayey silt with sand and gravel to very sandy silt or silty sand with some clay and gravel; Interbedded outwash deposits in upper horizons

GLACIAL OUTWASH - Gray silty sand and sandy silt, interlayered

Yar-Mouthian

LACUSTRINE DEPOSIT - Brownish-gray to black and gray clayey silt to silt, organic in zones; Includes greenish to bluish-gray clayey silt with sand and gravel (reworked and weathered pre-Illinoian Glacial Till); Assignment to Yarmouthian Glacial Stage is tentative

Kansan

PRE-ILLINOIAN GLACIAL TILL - Grayish-brown to brown silty clay and clayey silt with some sand and gravel; Brown color and relatively high clay content is characteristic; Tentatively assigned to Kansan Glacial Stage on the basis of clay analysis by Illinois State Geological Survey

PRE-ILLINOIAN ALLUVIAL & LACUSTRINE DEPOSIT - Consists of grayish-brown, brown, and green clayey silt and silty clay with sand and some gravel (reworked glacial till) and gray to brown clayey silt with organic debris (lacustrine or low energy alluvial deposit); Included as part of the Mahomet bedrock deposit in areas where it is underlain by sandy outwash deposits

Pennsylvanian

BEDROCK - Interbedded layers of limestone, shale, and siltstone assigned to the McLeansboro Group, Modesto Formation on the basis of spore analysis of the coal encounter in boring B-31

LIMESTONE - Greenish-gray, gray and brown, fine to coarsely crystalline, silty, thin bedded to massive, numerous shale partings in zones, fossiliferous.

SHALE - Gray to dark gray shale, carcoraceous to calcareous; clayey in zones, expansive, slickensides; occasional concretion

SILTSTONE - Light gray siltstone, micaceous, fine sandy, cross-bedded in zones; occasional interbedded layer of silty sandstone

Coal Seam

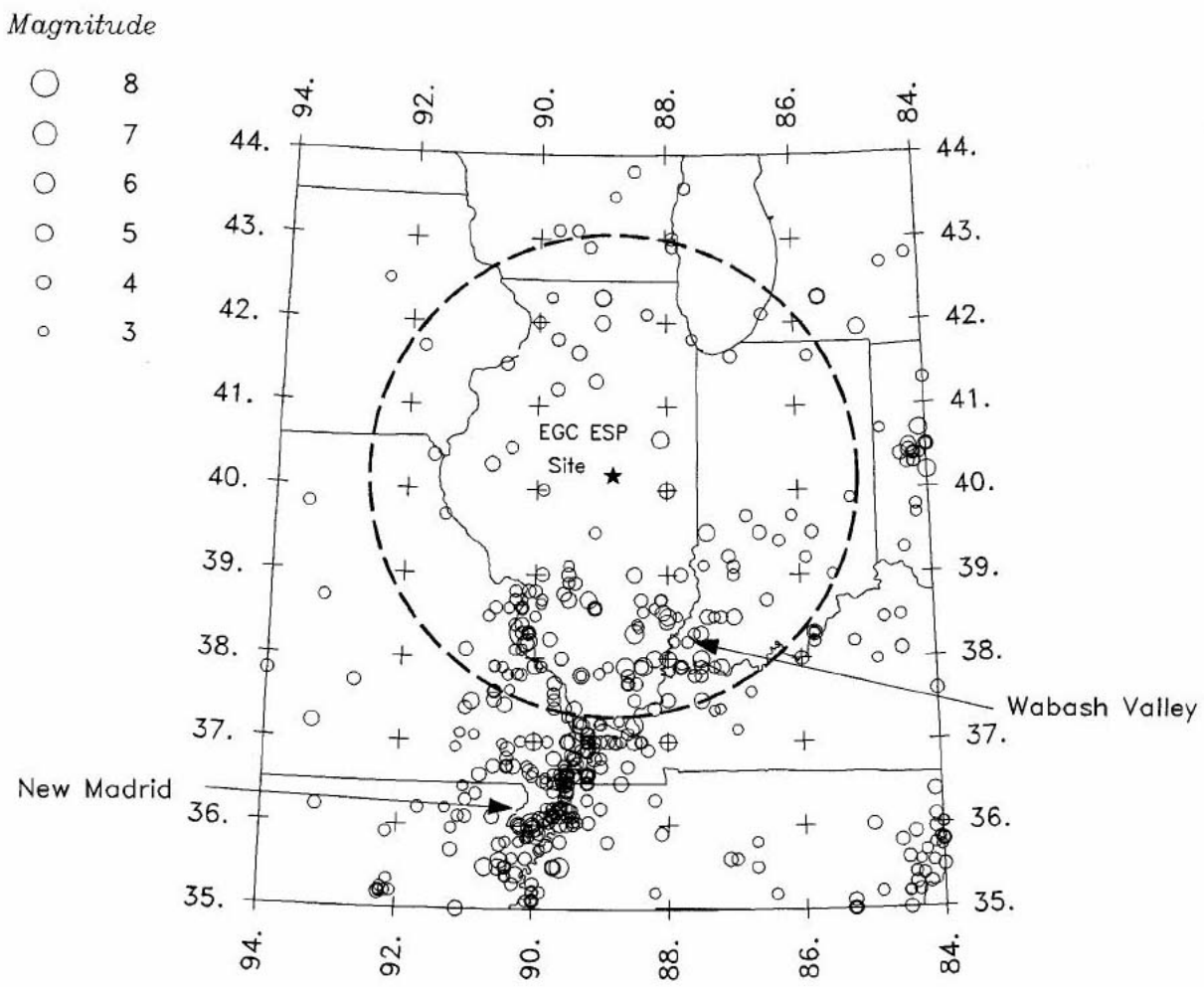
B-2 Borehole Number

Notes:
1. Elevations refer to the USGS Datum
2. See Figure 3-1 in Appendix A for cross section location

0 200 ft

Approximate Horizontal Scale

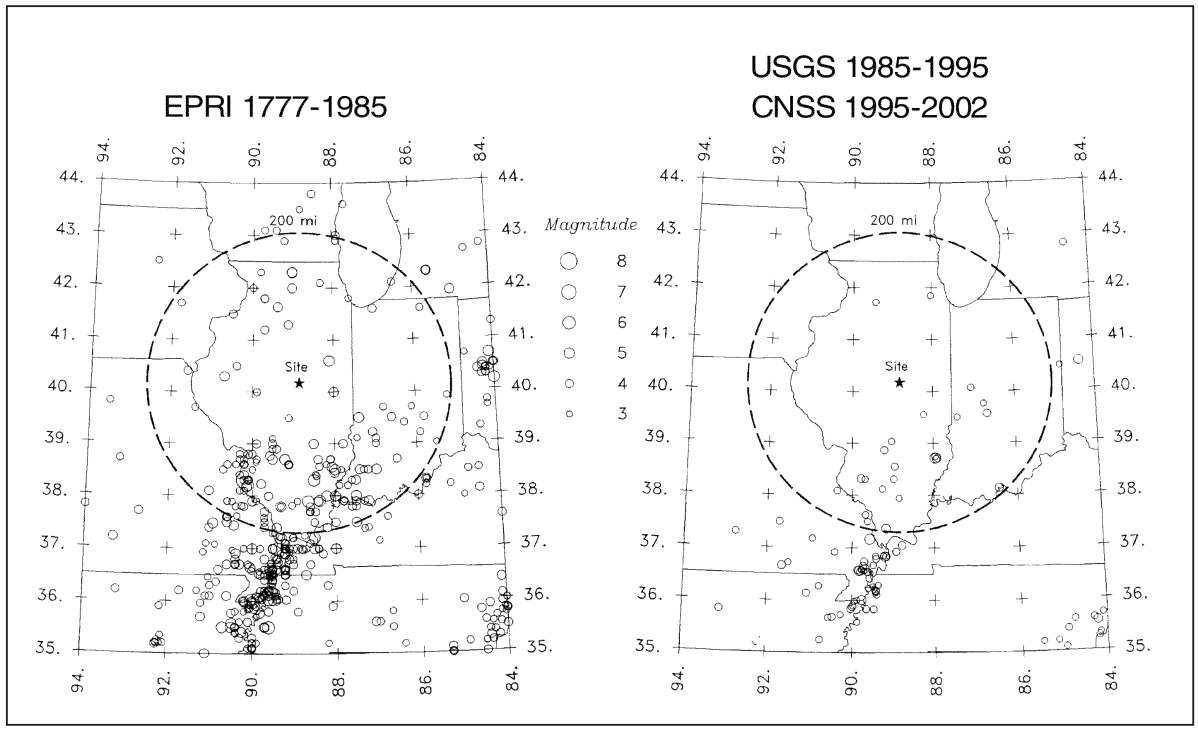
Figure 2.5-4
Regional Seismicity



Legend

Not to Scale

Figure 2.5-5
Comparison of EPRI-SOG Catalog to Updated Information



Legend

Notes:

1. See Section 2.1.3 of Appendix B for additional explanation.
2. Size of data point indicates estimated magnitude.

Not to Scale