McGuire Nuclear Station Environmental Report Operating License Renewal Stage Attachments

Attachment G

Letter from William M. Miller, Duke Energy to
Jamal Alavai, North Carolina Department of Transportation Statewide Planning Branch dated April 26, 2000.



Duke Energy Corporation 526 South Church Street P.O. Box 1006 Charlotte, NC 28201-1006 Mail Code EC12ZB

April 26, 2000

Mr. Jamal Alavi
NC Department of Transportation
Statewide Planning Branch
PO Box 25201
Raleigh, NC 27611

Subject: Duke Energy, McGuire Nuclear Station, Mecklenburg County, NC Traffic Levels in the Vicinity of McGuire Nuclear Station

Dear Mr. Alavi:

Duke Energy is preparing an application to extend the operating license for the McGuire Nuclear Station. This facility is located in Mecklenburg County, on highway NC 73, on the southern end of Lake Norman, west of the town of Huntersville, NC. The operating licenses for the McGuire units currently expire in the years 2021 (Unit 1) and 2023 (Unit 2). The extended licenses would be for twenty years past these dates.

Unit	Current License Expiration	Proposed License Expiration
	Date	Date
Unit I	June 12, 2021	June 12, 2041
Unit 2	March 2, 2023	Depends on the date that the renewed license is issued

As part of preparing this application, Duke Energy is required to assess the impact of the continued operation of the McGuire Station on local transportation. This information will be submitted to the United States Nuclear Regulatory Commission (USNRC) as input to their evaluation of the environmental impacts of the continued operation of the station. Background information on this issue is provided in Attachment 1.

Duke Energy requests that the NC DOT provide information on the existing traffic levels on the highway NC 73 in the vicinity of the McGuire station. We are specifically requesting:

- 1. Traffic count information on the intersections noted on Figure 1;
- 2. Traffic count information on the plant entrance roads shown on Figure 2 (if available);
- 3. Information on the level-of-service designation for these roads in the vicinity of the plant.

Mr. Jamal Alavi April 26, 2000 Page 2

The specific road intersections where we are requesting this information are:

Lincoln County (See Figure 1)

Intersections of:

NC 73 and NC16 (South of Denver, NC) [Intersection L-1]

NC 73 and SR 1394 (just east of intersection of NC73 and NC 16) [Intersection L-2]

NC 73 and SR 1396 (just east of intersection of NC73 and NC 16) [Intersection L-3]

Mecklenburg County (See Figure 1)

Intersections of:

NC 73 and SR 2145 (Sam Furr Rd) located west of Huntersville, NC

[Intersection M-1]

NC 73 and SR 2136 (slightly west of previous intersection) [Intersection M-2]

Mecklenburg County (See Figure 2)

NC 73 and two entrances to McGuire Nuclear Station (East and West Entrances)

Thank you for your response to this request. If you need additional information, please contact me at 704-373-7900.

Sincerely,

William M. Miller, P.E.

Environmental Engineering

Attachments:

Attachment 1

Figure 1 - McGuire Nuclear Station - Intersections Near Plant

Figure 2 - McGuire Nuclear Station - Site Entrances

cc w/att: Bill Cox, Town of Huntersville Planning Department

Background

The Nuclear Regulatory Commission (NRC) license renewal process requires that all applicants shall assess the impact of highway traffic generated by the proposed project on the level of service of local highways during periods of license renewal refurbishment activities and during the term of the renewed license.

In the context of license renewal, refurbishment activities would be defined as major outages for replacement of plant components or construction related activities in excess of the activities associated with normal refueling and plant maintenance outages. Refurbishment activities usually require a large number of additional workers at the site for the term of the activities.

From our ongoing assessments, Duke Energy has not identified any refurbishment activities associated with license renewal that would require major refurbishments or the number of workers above what is normal for current plant outages.

Duke Energy does not anticipate the number of workers on site during normal plant operations (non-outage periods) to increase during the license renewal period. Duke Energy believes, with the influences of the deregulated electric utility business environment, that the number of workers at McGuire will remain the same or slightly decrease.

There currently are approximately 1345 workers at the McGuire site during normal plant operations (non-outage periods). These workers employed at McGuire primarily reside in Mecklenburg County and in adjoining counties. Table 1 provides the employee residence location information for employees employed during normal plant operation.

The McGuire site has taken the following steps to minimize the impacts to local traffic:

- The starting times for workers at the station has been staggered in order to minimize the impact of plant workers entering and leaving the site.
- Workers leaving the site and traveling east on NC 73 are requested to use the east entrance and those workers traveling west on NC 73 are requested to use the west entrance.

Table 1

Location of Residence	Number of Employees
Cabarrus County, NC	93
Catawba County, NC	121
Gaston County, NC	180
Iredell County, NC	155
Lincoln County NC	305
Mecklenburg County, NC	318
Rowan County, NC	63
Other NC Counties	48
South Carolina	41
Other States	21

There is an average of 1015 additional workers on site during plant outage periods. The plant outages last from 30 to 40 days and occur about every 17 to 18 months. Table 2 provides an approximate number of vehicles on site during normal operation and during outage periods.

Table 2 - Number of Vehicles on Site (Approximate)

Period	Normal Plant Operation	Plant Outage
Dayshift Monday – Thursday	1015	1615
Nights Monday – Thursday	250	550
Dayshift Friday – Sunday	170	870
Nightshift Friday – Sunday	100	400

