

DUKE POWER COMPANY
POWER BUILDING
422 SOUTH CHURCH STREET, CHARLOTTE, N. C. 28242

WILLIAM O. PARKER, JR.
VICE PRESIDENT
STEAM PRODUCTION

January 31, 1980

TELEPHONE: AREA 704
373-4083

Mr. Harold R. Denton, Chief
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, DC 20555

Attention: Mr. R. L. Baer, Chief
Light Water Reactor Project Branch No. 2

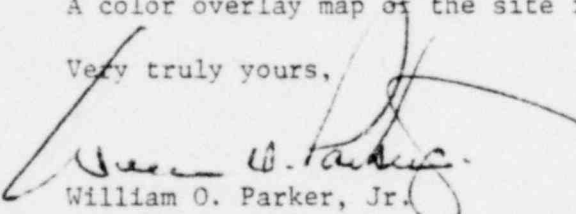
Re: McGuire Nuclear Station
Docket Nos.: 50-369 and -370

Dear Sir:

As requested by Mr. Brian K. Grimes' letter of November 29, 1979, evacuation time estimates for evacuation of various areas around the McGuire Nuclear Station are provided in Attachment 1.

A color overlay map of the site is provided as Attachment 2.

Very truly yours,


William O. Parker, Jr.

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Attachments

cc: County Civil Preparedness Agency (Mecklenburg, Gaston,
Iredell, Lincoln, York)



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DUKE POWER COMPANY
McGuire Nuclear Station

Attachment 1

Evacuation Time Estimates

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Evacuation time estimates (including notification) for the areas identified on the attached site map are provided below:

1. Area 1 includes the WSW, SW, SSW, S, SSE, SE, ESE and the East sectors. Population total is 318. There are no special facilities within this area. There are no population concentrations in this area.

| | |
|----------------------------------|------------|
| Notification Time: | 15 minutes |
| Best Estimate Evacuation Time: | 20 minutes |
| Adverse Weather Evacuation Time: | 35 minutes |
| Evacuation Confirmation Time: | 30 minutes |

2. Area 2 includes the ENE, NE, NNE, N, NNW, NW, WNW and the West sectors. Population total is 3,765 of which 3,525 are peak attendance at recreational areas on Lake Norman. There are no special facilities within this area. Population concentrations are at or near the 2 mile line.

| | |
|----------------------------------|------------|
| Notification Time: (see note 3) | 30 minutes |
| Best Estimate Evacuation Time: | 45 minutes |
| Adverse Weather Evacuation Time: | 60 minutes |
| Evacuation Confirmation Time: | 45 minutes |

3. Area 3 includes the SSE, SE, ESE, and East sectors, 2 miles from the station out to 5 miles from the station. Population total is 1,413 with no peak attendance people. There are no Special Facilities in this area. There are no population concentrations in this area.

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|----------------------------------|------------|
| Notification Time: | 15 minutes |
| Best Estimate Evacuation Time: | 30 minutes |
| Adverse Weather Evacuation Time: | 45 minutes |
| Evacuation Confirmation Time: | 30 minutes |

4. Area 4 includes the ENE, NE, NNE and North sectors, 2 miles from the station out to 5 miles from the station. Population total is 10,185 of which 8,931 are peak attendance at recreational areas on Lake Norman. There are no special facilities in this area. There are no population concentrations in this area.

| | |
|----------------------------------|------------|
| Notification Time: | 30 minutes |
| Best Estimate Evacuation Time: | 55 minutes |
| Adverse Weather Evacuation Time: | 70 minutes |
| Evacuation Confirmation Time: | 45 minutes |

5. Area 5 includes the NNW, NW, WNW, and the West sectors, 2 miles from the station out to 5 miles from the station. Population total is 2,573 of which 1,466 are peak attendance at recreational areas on Lake Norman. There are two schools in the area. There are no population concentrations in this area.

| | |
|----------------------------------|------------|
| Notification Time: (see note 3) | 30 minutes |
| Best Estimate Evacuation Time: | 55 minutes |
| Adverse Weather Evacuation Time: | 70 minutes |
| Evacuation Confirmation Time: | 45 minutes |

6. Area 6 includes the WSW, SW, SSW, and South sectors, 2 miles from the station out to 5 miles from the station. Population total is 1,147. There are no special facilities in this area and there are no population concentrations in area 6.

| | |
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| Notification Time: | 15 minutes |
| Best Estimate Evacuation Time: | 30 minutes |
| Adverse Weather Evacuation Time: | 45 minutes |
| Evacuation Confirmation Time: | 30 minutes |

7. Area 7 includes the SSE, SE, ESE, and East sectors, 5 miles from the station out to 10 miles from the station. Population total is 21,704 of which 3,738 are peak attendance at recreational areas on Lake Norman. There is one hospital in this area (primarily geriatrics) with a normal patient load of 330 and a staff of 200 during the day and 45 on shift and weekends. There are 5 schools in this area and one State Prison Camp.

| | |
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| Notification Time: | 15 minutes |
| Best Estimate Evacuation Time: | 45 minutes |
| Adverse Weather Evacuation Time: | 65 minutes |
| Best Estimate Evacuation Time, Special Facilities: | 105 minutes |
| Best Estimate Evacuation Time, Adverse Weather for Special Facilities: | 135 minutes |
| Evacuation Confirmation Time: | 60 minutes |

8. Area 8 includes the ENE, NE, NNE and North sectors, 5 miles from the station out to 10 miles from the station. Population total is 19,368 of which 7,162 are peak attendance at recreational areas on Lake Norman. There are two schools and one College in this section and no special facilities.

| | |
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| Notification Time: | 15 minutes |
| Best Estimate Evacuation Time: | 45 minutes |
| Adverse Weather Evacuation Time: | 65 minutes |
| Evacuation Confirmation Time: | 45 minutes |

9. Area 9 includes the NNW, NW, WNW and the West sectors, 5 miles from the station out to 10 miles from the station. Population total is 8,094 of which 2,823 are peak attendance at recreational areas on Lake Norman. There are two schools in this sector and no special facilities.

| | |
|----------------------------------|------------|
| Notification Time: | 15 minutes |
| Best Estimate Evacuation Time: | 45 minutes |
| Adverse Weather Evacuation Time: | 65 minutes |
| Evacuation Confirmation Time: | 45 minutes |

10. Area 10 includes the WSW, SW, SSW and the South sectors, 5 miles from the station out to 10 miles from the station. Population total is 24,635 of which 663 are peak attendance at recreational areas on the Catawba River. There are 5 schools in the area and two population concentrations located near the 10 mile zone.

| | |
|----------------------------------|------------|
| Notification Time: | 15 minutes |
| Best Estimate Evacuation Time: | 45 minutes |
| Adverse Weather Evacuation Time: | 65 minutes |
| Evacuation Confirmation Time: | 60 minutes |

NOTES:

1. Population figures based on 1970 census and population projections to year 2015 for peak attendance at recreation areas on Lake Norman and the Catawba River and to year 2000 for permanent residences out to 10 miles from the station. Taken from McGuire FSAR Vol. I Figures 2.1.3-22 and 2.1.3-6, Rev. 7 Totals exclude special facilities populations.
2. Evacuation times based on studies of population density, road capacity to evacuation sites outside of the 10 mile zone, nearness of volunteer and municipal agencies responsible for the actual evacuation planning and experience and comments on the area Civil Preparedness Coordinator of N.C. Primary evacuation methods is via private automobile as the area within McGuire's 10 mile Emergency Planning Zone is primarily a rural area inhabited by a population not dependent on mass transportation facilities. Evacuation times for sectors outside of the 2 mile zone, incorporate transit times for personnel passing through to reach their predesignated evacuation site, thereby increasing traffic on evacuation routes and the distance to be traveled to exist evacuation zone.
3. Notification times are included for each 180 deg. and 90 deg. sector. Present means of notification is via local radio, TV and weather bureau facilities. Notification is also via police (County, municipal, and State) and local fire departments utilizing sirenes, bullhorns and house to house warning. Notification times for fishing and recreational boating on Lake Norman and river areas assumes that a lake and river search and direct contact will be made utilizing police, coast guard auxiliary and company boats to complete this notification. These times are calculated, based on county and state personnel being on ready standby to perform required notification.

4. There are no provisions in the North Carolina Emergency Response Plan to evacuate people to evacuation centers within the 10 mile zone for any purpose. Evacuation of any area would proceed to predesigned evacuation centers located outside the 10 mile Emergency Planning Zone. Evacuation times are calculated to evacuate only the required area, 2 mile, 5 mile, 10 mile, and not for evacuees to physically reach a designated evacuation site
5. Evacuation of schools is not included in Special Facilities. Bus and private auto transportation out of an evacuation zone from the schools in session or during special activities is provided and are close at hand.
6. In reference to Area 7, data shown concerning hospital is current as of January 15, 1980.
7. Local civil defense agencies were consulted in preparing the above evacuation time estimates. There were no areas of disagreement.

DUKE POWER COMPANY
McGuire Nuclear Station

Attachment 2

Site Map

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