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Docket No: 50-410

Mr. Gerald K. Rhode, Vice President
Niagara Mohawk Power Corporation
300 Erie Boulevard West
Syracuse, New York 13202

Dear Mr. Rhode:

SUBJECT: AMENDMENT TO CONSTRUCTION PERMIT FOR NINE MILE POINT NUCLEAR STATION, UNIT 2

Your letter of February 6, 1978, as amended by letter of August 16, 1978, transmitted a request for amendment of Construction Permit CPPR-112 for Nine Mile Point Nuclear Station, Unit 2, to add Central Hudson Gas & Electric Corporation, New York State Electric & Gas Corporation, Long Island Lighting Company, and Rochester Gas and Electric Corporation as co-owners of and co-applicants for that facility.

We have reviewed your request for amendment and have concluded that the above-named utilities are financially qualified to participate in the ownership of Nine Mile Point 2. We have also concluded that inclusion of these utilities as co-owners and co-applicants does not involve a significant hazards consideration, does not constitute an unreasonable risk to the health and safety of the public, and is not inimical to the common defense and security. The bases for these conclusions are set forth in the enclosed safety evaluation.

In addition, we have concluded that this amendment involves an action which is insignificant from the standpoint of environmental impact and pursuant to 10 CFR Section 51.5(d)(4) that an environmental impact statement or negative declaration and environmental impact appraisal need not be prepared in connection with the issuance of these amendments inasmuch as no changes in design, construction or operation are involved.

OFFICE ➤						
SURNAME ➤						
DATE ➤						

Enclosed are Amendment No. 1 to CPPR-112 for Nine Mile Point Unit 2 which reflects the changes discussed above, and a copy of a related notice which has been forwarded to the Office of the Federal Register for publication.

Sincerely,

Original signed by
D. F. Ross

Roger S. Boyd, Director
Division of Project Management
Office of Nuclear Reactor Regulation

Enclosures:
1. Safety Evaluation
2. Amendment 1 to CPPR-112
3. Federal Register Notice

OELD
10/25/78

10/23/78

OFFICE	DPM:LWR #4	DPM:LWR #4	QAO	DPM:LWR/AD	DPM:DEP DIR	DPM:DIR
SURNAME	HSilver	SVarga	JPeterson	DVassallo	DRoss	RBoyd
DATE	10/23/78	10/ /78	10/ /78	10/26/78	10/ /78	10/ /78

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Mr. Robert P. Jones
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OCT 27 1978

SAFETY EVALUATION REPORT

SUPPORTING AMENDMENT NO. 1 TO CPPR-112

INTRODUCTION

Construction permit CPPR-112 was issued on June 24, 1974 to the Niagara Mohawk Power Corporation (NMPC) as applicant and owner of the Nine Mile Point Nuclear Station, Unit 2 (NMP-2) generating facility. On September 22, 1975, NMPC entered into an agreement with Central Hudson Gas and Electric Corporation, Long Island Lighting Company, New York State Electric & Gas Corporation and Rochester Gas & Electric Corporation to sell ownership interests in the plant to the above-named companies. The New York Public Service Commission approved the transfer of ownership interests to the above-noted companies on December 5, 1977.

By letter dated February 6, 1978, Niagara Mohawk Power Corporation filed a request for amendment to the construction permit to include the above noted companies as co-owners of NMP-2. By letter of August 16, 1978, the request for amendment was modified to conform to the Atomic Safety and Licensing Board's decision in ALAB-459 (Marble Hill) which required that co-owners of a facility also be co-applicants in any licensing action. The August 16, 1978, modification to the amendment also stated that the Tri Counties Construction Trust (Construction Trust) would finance Long Island Lighting Company's (LILCO) ownership interest in the Nine Mile Point Unit 2 facility during the 1978-80 period. The Staff understands that approval of this financing arrangement has been obtained from the New York Public Service Commission. The Staff has also ascertained that the Construction Trust, while having legal ownership for security purposes during construction, will not have any involvement whatsoever in the design and construction of the Nine Mile Point Unit 2 facility. Beneficial ownership of its interest in the facility will remain with LILCO at all times. Accordingly, the Construction Trust has not been named as a co-applicant or co-owner.

The application states that NMPC has the responsibility for licensing, design, procurement, construction, operation, and all related functions, and that the owners have delegated to NMPC the authority to act on their behalf in facility and materials license applications and amendments as may be required.

The application further states that none of the co-owners is owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government.

ANALYSIS

We have reviewed the application for Amendment No. 1 to CPPR-112 and conclude that since NMPC will retain responsibility for the design, construction, and operation of NMP-2, addition of co-owners would not involve a significant hazards consideration inasmuch as it does not involve an increase in the probability of an accident, an increase in the consequences of an accident, or a decrease in safety margins. We therefore conclude that the activities authorized by this amendment would not constitute an unreasonable risk to the health and safety of the public.

Since the application for amendment states that the co-owners are not owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government, we conclude from our review that the activities authorized by this amendment would not be inimical to the common defense and security.

We have evaluated the financial qualifications of the above-named companies to participate with NMPC as co-owners of NMP-2 as presented below.

Financial - General

The NRC regulations relating to the determination of an applicant's financial qualifications appear in Section 50.33(f) and Appendix C to 10 CFR Part 50. These regulations state that there must be reasonable assurance that an applicant can obtain the necessary funds to cover the estimated construction cost of a proposed nuclear power plant and its related fuel cycle costs. This standard of reasonable assurance, however, must be viewed in light of the extended period of time from the start of construction to the date of commercial operation. The earliest date for commercial operation of the NMP-2 facility is estimated to be March 1983.

Consequently, we must make certain basic assumptions in our financial analysis about future conditions. Our analysis of the applicants' financial qualifications assumes that there will be rational regulatory policies with respect to the setting of rates and that viable capital markets will exist. The former assumption implies that rates will be set by the appropriate regulatory agencies to at least cover the cost of service, including the cost of capital. The latter assumption implies that capital will be available at some price. Given these fundamental assumptions, our evaluation is then focused on the reasonableness of the applicants' financial planning.

The applicants have submitted financial information in support of their application. The following analysis summarizes our review of the information, and gives the qualifications of each applicant to finance its respective share of the costs of the design and construction of the facility.

Financial - Construction Cost Estimates

The most recent cost estimates for NMP-2 are provided in the NMPC letter of May 26, 1978. The cost estimates are summarized as follows:

	(millions of dollars)
Total nuclear production plant costs - - - - - -	$1,018.3
Transmission, distribution, and general plants costs - - - - - - - - - - - - - - - - -	7.6
Nuclear fuel inventory cost for the first core -	71.5
TOTAL	$1,097.4

We have compared the cost of the nuclear production plant estimated by the applicants with the cost projected by the costing model (CONCEPT) developed by the Department of Energy. This analytical model projected the cost of NMP-2 to be $1,202.0 million, compared with the applicants' estimate of $1,097.4 million. Since the CONCEPT model is used primarily as a rough check of the cost estimate made by the applicants and is not intended to be a substitute for detailed engineering cost estimates, we conclude that it is reasonable to use the applicants' estimate in our financial analysis.

Sources of Construction Funds

The ownership, costs, and electrical output of the proposed facility will be shared according to the following percentages:

Niagara Mohawk Power Corporation	41%
Central Hudson Gas & Electric Corporation	9%
Long Island Lighting Company	18%
New York State Electric & Gas Corporation	18%
Rochester Gas and Electric Corporation	14%

The percent allocation is based on the agreement signed by the four parties on September 22, 1975. Each owner will pay its ownership percentage of the cost of constructing the project and bear its ownership percentage of all liabilities in connection with the project.

The applicants will finance their respective ownership costs from internal funds, external sales of debt and equity, and short term borrowing. Available funds from these sources in 1977, after debt payments and retirements, totaled $32.2 million for Central Hudson Gas & Electric Corporation; $333.8 million for Long Island Lighting Company; $152.6 million for New York State Electric & Gas Corporation; $99.6 million for Rochester Gas and Electric Corporation; and $255.8 million for Niagara Mohawk Power Corporation.

Financial Analysis

The ability of an investor-owned utility to finance a construction program over a future period is a function of a number of variables, the most important of which is the level of profitability. Profitability can be assessed by referring to the return a utility earns on the capital it employs in its business and comparing it to the risk-adjusted returns earned elsewhere in the economy. The concept of the fair rate of return on investment is deeply ingrained in public utility reguation. The capability of an electric utility to finance a construction program requiring large amounts of external financing will depend, in part, on its ability to earn such a fair rate of return. Further, a fair rate of return on total capital will also result in the return on common equity being fair and reasonable, since common equity is a component of total capital. All other things being equal, the return on common equity is the best indication of a company's profitability and will have a substantial impact on other facets of a company's financial performance.

Although a fair rate of return might be characterized as the most significant variable affecting an applicant's ability to finance its propsed construction program, it must also be coupled with a properly balanced capital structure to provide reasonable assurance that adequate coverages on its senior securities will result, thereby maintaining their marketability. Historically, the average investor-owned electric utility has had a capital structure comprised of around 50 to 55 percent long-term debt, 10 to 15 percent preferred stock, and 30 to 40 percent common equity. Given a particular capital structure with its embedded costs of debt and preferred stock, the return on common equity will determine the level of interest coverage and preferred dividend coverage. These coverages, in turn, will significantly affect the ratings assigned to a company's senior securities by the principal rating agencies and, consequently, the interest rate demanded by investors to purchase these securities. The return on common equity will also affect the company's common stock. When large amounts of securities need to be sold to finance a construction program, the ability to sell common stock is the key to maintaining a reasonably balanced capital structure. In addition, the return on common equity affects the level of internally generated funds through its impact on retained earnings, although the primary source of internally generated funds is depreciation.

Since a lengthy and uncertain future period is involved in the analysis of an applicant's financial qualification, we do not look solely at historical data. For this reason, we have requested each applicant to submit a projected system-wide "sources and uses of funds" statement covering the period of construction, demonstrating how anticipated construction expenditures might be met by internal and external sources of funds. Our analysis of the submitted projections then focuses on the reasonableness of these projections and their underlaying assumptions.

The projected "sources and uses of funds" statements submitted by the five applicants for the period from 1978 to 1983 together with the underlying assumptions, are presented in the attached Tables 1 through 5.

The applicants project a rate of return on year-end common equity in the range of 10 - 13 percent, during the six-year construction period. Based on information submitted by the applicants, a rate of return on this order of magnitude has been determined to be just and reasonable by State Public Utilities Commissions in their respective service areas. Given prevailing and reasonably forseeable capital market conditions, we conclude that the applicants' assumptions with respect to rates of return on common equity are within a reasonable range.

The assumed capital structures for the applicants are 49 to 52 percent long-term debt; 10 to 14 percent preferred stock; and 36 to 40 percent common equity. As noted above, these assumed capital structures are historically typical of the electric utility industry and, in our judgment, are within the zone of reasonableness. Furthermore, the projected rates of return, when applied to these capital structures, will result in adequate coverages of fixed charges (i.e., total interest charges and amortization of debt discount expense)for each applicant.

Conclusions on Financial Qualifications

Based on our analysis, we conclude that Niagara Mohawk Power Corporation, Central Hudson Gas & Electric Corporation, Long Island Lighting Company, New York State Electric & Gas Corporation, and Rochester Gas and Electric Corporation have reasonable assurance of obtaining the necessary funds to cover the estimated construction cost of the NMP-2 facility and its related fuel cycle costs. Our conclusion is based upon an assessment that the financial projections submitted by the applicants constitute reasonable financing plans. We do not consider these financial projections to be a forecast of the financing which will actually occur. We require only that the applicants demonstrate one possible method by which their planned construction program, including the subject facility, might be reasonably financed. Since we are dealing with future events, we naturally expect that financing plans will change from time to time to accommodate changing conditions. Nevertheless, the financing projections submitted by the applicants are in accordance with general industry practice and the underlying assumptions, although not susceptible to precise measurement against absolute criteria, are consistent with the postulated conditions. Consequently, since we find that the applicants' financial projections are reasonable, we conclude that the standard of reasonable assurance has been satisfied. Accordingly, we find the applicants financially qualified to design and construct the proposed NMP-2 facility.

In accordance with the provisions of Section 50.71(b) of 10 CFR Part 50, the applicants will be filing annual certified financial statements with the Director of Nuclear Reactor Regulation. Information in these statements will be used by the staff in its monitoring of the applicants' construction program, including the NMP-2 facility.

SAFETY CONCLUSIONS

For reasons stated in the above analysis, we conclude that activities authorized by this amendment (1) do not involve a significant hazards consideration; (2) would not constitute an unreasonable risk to the health and safety of public; and (3) are not inimical to the common defense and security.

Based on our evaluation of financial information provided in the application for the amendment as summarized in the above analysis, we conclude that there is reasonable assurance the the above-named co-owners are financially qualified to participate in the ownership of NMP-2.

Harley Silver, Project Manager
Light Water Reactors Branch No. 4
Division of Project Management

Steven A. Varga, Chief
Light Water Reactors Branch No. 4
Division of Project Management

OCT 27 1978

TABLE 1

Applicant: CENTRAL HUDSON GAS & ELECTRIC CORPORATION Nuclear Plant: Nine Mile Point Unit 2

PRO FORMA SOURCES OF FUNDS FOR SYSTEM-WIDE CONSTRUCTION EXPENDITURES AND CAPITAL STRUCTURE
DURING PERIOD OF CONSTRUCTION OF SUBJECT NUCLEAR POWER PLANT
(Millions of Dollars)

	Construction Years of Subject Nuclear Power Plant					
	1978	1979	1980	1981	1982	1983
EXTERNAL FINANCING						
Common stock	$10.3	$12.9	$12.9	$	$17.6	$
Preferred stock				18.0		
Long-term debt:	30.0	25.0	25.0	25.0	35.0	15.0
Notes payable						
Contributions from parent-net						
Other funds-Short-term debt	14.7	(18.9)	(9.9)	(3.0)	18.4	23.0
Total External Funds	$55.0	$19.0	$28.0	$40.0	$71.0	$38.0
INTERNALLY GENERATED CASH						
Net income						
Less:						
preferred dividends						
common dividends						
Retained earnings	4.7	6.3	7.1	7.7	8.4	10.0
Deferred taxes	3.2	4.4	4.1	2.8	5.4	5.4
Invest. tax cred.-deferred						
Depreciation and amort.	13.6	15.6	16.1	16.5	17.0	19.0
Change in working capital						
Less: AFDC	(5.0)	(6.0)	(6.8)	(7.4)	(8.0)	(9.5)
Total Internal Funds	$16.5	$20.3	$20.5	$19.6	$22.8	$24.9
TOTAL FUNDS	$71.5	$39.3	$48.5	$59.6	$93.8	$62.9
CONSTRUCTION EXPENDITURES*						
Nuclear power plants	$19.0	$22.6	$17.8	$28.7	$51.9	$39.5
Other	42.9	15.0	16.3	21.0	33.9	21.8
Total const. exp's	$61.9	$37.6	$34.1	$49.7	$85.8	$61.3
Subject nuclear plant	$16.8	$17.3	$12.9	$10.7	$ 7.1	$ 2.9

*Exclusive of AFDC

TABLE 1 (continued)

	Construction Years of Subject Nuclear Power Plant 1978	1979	1980	1981	1982	1983
OTHER CAPITAL REQUIREMENTS						
Redemption of Maturing Bonds & Other Long-Term Debt	$ 8.0	$	$12.0	$ 8.0	$ 6.0	$
Acquisition of Bonds for Sinking Funds						
Miscellaneous Requirements- Working Capital, etc.	1.6	1.7	2.4	1.9	2.0	1.6
TOTAL CAPITAL REQUIREMENTS	$71.5	$39.3	$48.5	$59.6	$93.8	$62.

CAPITAL STRUCTURE ($ & %)	1978 $	1978 %	1979 $	1979 %	1980 $	1980 %	1981 $	1981 %	1982 $	1982 %	1983 $	1983 %
Long-term debt	$197.6	49.5%	$222.4	50.2%	$235.2	49.4%	$252.1	48.6%	$280.9	48.9%	$295.7	49.4%
Preferred stock	61.0	15.3	61.0	13.8	61.0	12.8	79.0	15.2	79.0	13.8	79.0	13.2
Common equity	140.4	35.2	159.7	36.0	180.3	37.8	188.0	36.2	214.0	37.3	224.0	37.4
TOTAL	$399.0	100.0%	$443.1	100.0%	$476.5	100.0%	$519.1	100.0%	$573.9	100.0%	$598.7	100.0%

Assumptions upon which "Sources of Funds" statement is based

a) Return on common equity: 12% in 1979-1982; 13% in 1983
   Based on relationship between rates allowed by PSC and those actually realized
b) Preferred Stock dividend rate: 9%
c) Long-term debt interst rate: 9%
   Short-term debt interest rate: 8%
d) Market to Book Ratio for
   Common Stock Offerings: 90% 1979; 100% 1980-1983
e) Common Stock dividend payout ratio: 65%
f) Structure per above schedule
g) Coverages: Mortgage Indenture - range from 2.71 to 2.99
   Pre-Tax Interest - range from 2.74 to 2.88
h) No assumptions were required with respect to growth in kWh. sales and kWh. unit prices since the projection for retained earnings is a function of return on equity and payout ratio.

NOTE: With respect to above items, it has been assumed that AFDC would be limited to 33-1/3% of income available to common.

TABLE 2

Applicant: Long Island Lighting Company Nuclear Plant: Nine Mile Point Unit 2

PRO FORMA SOURCES OF FUNDS FOR SYSTEM-WIDE CONSTRUCTION EXPENDITURES AND CAPITAL STRUCTURE
DURING PERIOD OF CONSTRUCTION OF SUBJECT NUCLEAR POWER PLANT
(Millions of Dollars)

	Construction Years of Subject Nuclear Power Plant					
	1978	1979	1980	1981	1982	1983
EXTERNAL FINANCING						
Common stock	$ 96.4	$ 96.3	$ 13.4	$ 13.4	$ 13.4	$ 13.4
Preferred stock						
Long-term debt	75.0	100.0		205.0	65.0	[illegible].0
Notes payable						
Contributions from parent-net						
Other funds (Trust-Nuclear Fuel)	59.9	35.7	34.1	33.5	43.0	45.5
(Trust-Nine Mile Point)	101.7	19.3	44.7	(165.7)		
Total External Funds	333.0	251.3	92.2	86.2	121.4	118.9
INTERNALLY GENERATED CASH						
Net Income	142.3	167.7	195.2	201.8	211.4	221.3
Less: preferred dividends	30.7	30.7	30.5	29.8	29.2	28.5
common dividends	78.0	93.6	103.2	116.1	123.0	130.1
Retained earnings	33.6	43.4	61.5	55.9	59.2	62.7
Deferred taxes	(0.8)	1.4	2.6	26.3	26.7	27.9
Invest tax credit deferred	11.4	23.5	23.6	-	-	-
Other	19.4	11.0	35.0	11.3	13.4	12.8
Depreciation and amort.	51.9	55.9	69.0	105.1	107.7	113.0
Change in working capital						
Less: AFDC	(59.1)	(58.4)	(41.7)	(24.6)	(43.3)	(4[illegible].6)
Total Internal Funds	56.4	76.8	150.0	174.0	163.7	170.8
TOTAL FUNDS	$389.4	$328.1	$242.2	$260.2	$285.1	$289.7
CONSTRUCTION EXPENDITURES*						
Nuclear power plants	$237.9	$171.9	$ 79.9	$ 53.5	$ 75.0	$112.7
Other	116.3	141.6	115.8	122.3	119.7	128.6
Total const. exp.'s	354.2	313.5	195.7	175.8	194.7	241.3
Subject nuclear plant	$ 31.9	$ 34.3	$ 25.7	$ 17.8	$ 11.9	$ 3.0

*Exclusive of AFDC

TABLE 2 (continued)

	Construction Years of Subject Nuclear Power Plant					
	1978	1979	1980	1981	1982	1983
OTHER CAPITAL REQUIREMENTS						
Redemption of Maturing Bonds	30.0	-	20.0	60.0	70.0	25.0
Acquisition of Preferred Stock for Sinking Funds	-	1.1	7.9	7.9	7.9	7.9
Miscellaneous Requirements (Trust Interest)	5.2	13.5	18.6	16.5	12.5	15.5
TOTAL CAPITAL REQUIREMENTS	$389.4	$328.1	$242.2	$260.2	$285.1	$289.7
CAPITAL STRUCTURE (WITH TRUSTS INCL. IN LONG-TERM DEBT) ($ & %)						
Long-term debt	1,338.6	1,493.6	1,552.4	1,565.2	1,603.2	1,683.7
Preferred stock	393.4	392.3	385.4	377.4	369.6	361.7
Common equity	953.6	1,093.3	1,168.2	1,237.5	1,310.1	1,386.2
TOTAL	2,685.6	2,979.2	3,106.0	3,180.2	3,282.9	3,431.6
Long-term debt	49.8%	50.1%	50.0%	49.2%	48.8%	49.1%
Preferred stock	14.7	13.2	12.4	11.9	11.3	10.5
Common equity	35.5	36.7	37.6	38.9	39.9	40.4
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

The assumptions upon which the "Source of Funds" statement were based are:

(a) The rate of return on average common stock equity was assumed to be 12.5% in 1978 and 14.3% for the years 1979 through 1983. The 1979-83 return was that requested by the Company in its recent rate case filing.

(b) An assumption that the issue of new preferred stock was not required throughout the period 1978-1983 was made and, therefore, a preferred stock dividend rate projection for new issues was not necessary.

(c) The long-term debt rate was assumed to be 9.5% for new issues and the short-term debt rate was 8.0%.

(d) Dollars of new common stock issues were derived by the annual requirement of common equity to meet the target capital structure reduced by the estimated annual amount of retained earnings. Projections of the amounts of common stock financing to be realized by the Automatic Dividend reinvestment Plan and the Employee Stock Purchase Plan were made based on current participation.

(e) Payout ratios assumed for common stock dividends were 70% in 1978, 68% in 1979, 63% in 1980 and 67.5% in 1981-83. The common stock dividend was increased at an annual rate of 7¢ per share in March 1978. This modest increase was extended through the year 1980 and the payout ratio was increased to 67.5% objective in the years 1981-83.

(f) The target capital structure used was Long-term Debt 50% and Preferred and Common Equity 50%. Nuclear fuel capital expenditures were financed through a resources trust throughout the period 1978-83. The LILCO portion of Nine Mile Point #2 Nuclear Plant Construction was financed through a construction trust in the years 1978-80 and within the Company capital structure in the years 1981-83.

(g) The resultant SEC and Indenture interest coverages over the period of Construction were:

	SEC Coverage	Indenture Coverage
1978	2.77	2.48
1979	2.88	2.94
1980	3.03	3.56
1981	3.34	3.78
1982	3.40	3.92
1983	3.42	3.89

(h) Growth rate 1977-1983

Dollars - Millions	Base Year 1977	Year 1983	1977-1983 Growth Rate Amount	%
1. Capitalization	$2,350.0	$3,431.6	$1,081.6	46
2. Operating Income	135.6	289.1	153.5	113
3. Income Before Interest Expense	217.9	339.1	121.2	56
4. Interest	85.5	117.8	32.3	38
5. Net Income	132.4	221.3	88.9	67
6. Preferred Dividends	30.7	28.5	(2.2)	(7)
7. Balance for Common	101.7	192.8	91.1	90

TABLE 3

Applicant: NEW YORK STATE ELECTRIC & GAS CORPORATION   Nuclear Plant: Nine Mile Point Unit 2

PRO FORMA SOURCES OF FUNDS FOR SYSTEM-WIDE CONSTRUCTION EXPENDITURES AND CAPITAL STRUCTURE
DURING PERIOD OF CONSTRUCTION OF SUBJECT NUCLEAR POWER PLANT
(Millions of Dollars)

	Construction Years of Subject Nuclear Power Plant					
	1978	1979	1980	1981	1982	1983
EXTERNAL FINANCING						
Common stock	$ 74.0	$ 37.0	$ 80.0	$ 80.0	$100.0	$ 80.0
Preferred stock	-	30.0	30.0	50.0	50.0	50.0
Long-term debt	100.0	50.0	150.0	275.0	175.0	200.0
Notes payable	48.0	69.0	41.0	15.0	43.0	37.0
Contributions from parent-net	-	-	-	-	-	[illegible]
Other funds (describe)	-	-	-	-	-	-
Total External Funds	222.0	186.0	301.0	420.0	368.0	367.0
INTERNALLY GENERATED CASH						
Net Income	72.0	72.0	90.0	106.0	125.0	146.0
Less:						
preferred dividends	13.0	14.0	17.0	20.0	24.0	29.0
common dividends	39.0	43.0	49.0	57.0	66.0	75.0
Retained earnings	20.0	15.0	24.0	29.0	35.0	42.0
Deferred taxes	2.0	1.0	10.0	9.0	7.0	6.0
Invest. tax cred-deferred	3.0	2.0	6.0	4.0	2.0	--
Depreciation & amortization	44.0	46.0	49.0	52.0	55.0	59.0
Change in working capital	(3.0)	(1.0)	(5.0)	(3.0)	(1.0)	-
Less: AFDC	17.0	22.0	32.0	50.0	72.0	87.0
Total Internal Funds	49.0	41.0	52.0	41.0	26.0	20.0
TOTAL FUNDS	$271.0	$227.0	$353.0	$461.0	$394.0	[illegible]
CONSTRUCTION EXPENDITURES*						
Nuclear power plants	(1) $ 61.0	(1) $ 33.0	$ 58.0	$ 65.0	$ 93.0	$133.0
Other	123.0	136.0	208.0	240.0	272.0	206.0
Total const. exp's.	$184.0	$169.0	$266.0	$305.0	$365.0	$339.0
Subject nuclear plant	$ 32.9	$ 34.4	$ 25.7	$ 17.2	$ 11.1	$ 5.8

* Exclusive of AFDC

(1) Net - on a monthly basis from October 1978 through September 1979, Long Island Lighting Company to reimburse for ½ expenses incurred through September 1978 on NYSE&G #1 and #2 Nuclear Project.

TABLE 3 (continued)

Applicant: NEW YORK STATE ELECTRIC & GAS CORPORATION Nuclear Plant: Nine Mile Point Unit 2

	Construction Years of Subject Nuclear Power Plant					
	1978	1979	1980	1981	1982	1983
OTHER CAPITAL REQUIREMENTS						
Redemption of Maturing Bonds	6.0	10.0	13.0	110.0	-	-
Acquisition of Bonds for Sinking Funds	-	-	-	-	3.0	3.0
Miscellaneous Requirements (detail)(2)	81.0	48.0	74.0	46.0	26.0	45.0
TOTAL CAPITAL REQUIREMENTS	271.0	227.0	353.0	461.0	394.0	387.0
CAPITAL STRUCTURE ($ & %)						
Long-term debt (includes notes)	$818.0	$879.0	$988.0	$1,127.0	$1,327.0	$1,519.0
Preferred stock	176.0	206.0	231.0	277.0	316.0	364.0
Common equity	537.0	590.0	694.0	804.0	938.0	1,060.0
TOTAL	$1,531.0	$1,675.0	$1,913.0	$2,208.0	$2,581.0	$2,943.0
Long-term debt (includes notes)	53%	53%	52%	51%	52%	52%
Preferred stock	12%	12%	12%	13%	12%	12%
Common equity	35%	35%	36%	36%	36%	36%
TOTAL	100%	100%	100%	100%	100%	100%

(2) Notes - prior year-end and Preferred Stock Sinking Funds.

TABLE 3 (continued)

Assumptions upon which "Sources of Funds" statement is based

(a) Rate of return on Common Stock equity - 12½% - See note.
(b) Preferred Stock dividend rate - 9%.
(c) Long term interest rate - 9%.
Short term interest rate - 6 - 8½%.
(d) Market/book ratio with respect to projected Common Stock offerings - 90%.
(e) Common Stock dividend payout ratio - approximately 65%.
(f) Target and year by year capital structure - See attached.
(g) Resultant SEC and indenture coverages over the period of construction -

Type Coverage	1977	1978	1979	1980-1983
Mortgage Indenture	2.05	2.38	2.24	N/A No detailed
SEC - Fixed Charges Actual	2.18	2.26	2.10	income forecast
- Fixed Charges Annualized	1.90	2.12	2.06	

Note: The Company does not have a detailed income forecast beyond 1979. Therefore, 1980-1983 is estimated based upon a rate of return on common equity of 12½%.

TABLE 4

Applicant: NIAGARA MOHAWK POWER CORPORATION Nuclear Plant: Nine Mile Point Unit 2

PRO FORMA SOURCES OF FUNDS FOR SYSTEM-WIDE CONSTRUCTION EXPENDITURES AND CAPITAL STRUCTURE
DURING PERIOD OF CONSTRUCTION OF SUBJECT NUCLEAR POWER PLANT
(Millions of Dollars)

	Construction Years of Subject Nuclear Power Plant					
	1978	1979	1980	1981	1982	1983
EXTERNAL FINANCING						
Common stock	$ 76.1	$ 59.0	$ 19.4	$ 31.6	$ 42.3	$ 56.2
Preferred stock	74.0	30.0	36.9	43.0	49.2	59.0
Long-term debt		140.0	179.4	260.7	141.5	2[illegible].0
Notes payable	37.8	(34.0)				
Contributions from parent-net						
Other funds (describe)						
Total External Funds	$ 187.9	$ 195.0	$ 235.7	$ 335.3	$ 233.0	$ 349.2
Internally Generated Cash						
Net Income	130.5	139.5	187.9	201.9	218.4	238.0
Less:						
preferred dividends	28.6	30.9	32.1	35.1	38.7	43.0
common dividends	79.7	88.3	101.2	108.4	116.8	126.7
Retained earnings	22.2	20.3	54.6	58.4	62.9	68.3
Deferred taxes	9.4	(7.4)	14.5	14.9	14.8	18.0
Invest. tax credit - deferred	7.2	7.4	9.2	(1.9)	(1.9)	(1.9)
Depreciation and amort.	105.4	101.7	113.0	121.3	122.3	134.0
Change in working capital	(26.9)	33.2	(13.8)	(14.1)	(30.7)	(15.9)
Less: AFDC	47.4	58.7	55.5	73.1	88.1	[illegible].2
Total Internal Funds	$ 69.9	$ 96.5	$ 122.0	$ 105.5	$ 79.3	$ 1[illegible].3
TOTAL FUNDS	$ 257.8	$ 291.5	$ 357.7	$ 440.8	$ 312.3	$ 457.5
Construction Expenditures*						
Nuclear power plants	$ 75.0	$ 82.8	$ 72.0	$ 77.8	$ 61.5	$ 61.7
Other	139.2	159.3	157.8	167.1	185.8	247.4
Total const. exp's.	$ 214.2	$ 242.1	$ 229.8	$ 244.9	$ 247.3	$ 309.1
Subject nuclear plant	$ 71.8	$ 76.0	$ 54.8	$ 33.9	$ 18.9	$ 6.5

* Exclusive of AFDC

TABLE 4 (continued)

	Construction Years of Subject Nuclear Power Plant 1978	1979	1980	1981	1982	1983
Other Capital Requirements						
Redemption of Maturing Bonds	$	$	$ 80.0	$ 140.0	$	$ 65.0
Acquisition of Bonds and Preferred Stock for Sinking Funds	34.8	3.8	10.5	10.5	11.7	16.2
Miscellaneous Requirements (detail)(1)	8.8	45.6	37.4	45.4	53.3	67.2
Total Capital Requirements	$ 257.8	$ 291.5	$ 357.7	$ 440.8	$ 312.3	$ 457.5
Capital Structure ($ & %)						
Long-term debt	$1,401.5	$1,539.7	$1,637.6	$1,756.8	$1,896.0	$2,060.7
Preferred stock	410.5	438.6	466.5	500.6	540.4	587.4
Common equity	1,066.5	1,145.8	1,219.8	1,309.8	1,415.0	1,539.5
TOTAL	$2,878.5	$3,124.1	$3,323.9	$3,567.2	$3,851.4	$4,187.6
Long-term debt	48.7%	49.3%	49.3%	49.3%	49.2%	49.2%
Preferred stock	14.3	14.0	14.0	14.0	14.0	14.0
Common equity	37.0	36.7	36.7	36.7	36.8	36.8
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

(1) Item Comprising Miscellaneous Requirements on Pro Forma Sources of Funds (Millions of Dollars)

	Nuclear Fuel Purchases	Other Overheads Capitalized	Proceeds From Sales of Generating Unit	Total
1978	$19.9	$18.9	$(30.0)	$8.8
1979	23.6	22.0		45.6
1980	17.5	20.0		37.5
1981	22.8	22.6		45.4
1982	41.3	25.4	(13.4)	53.3
1983	41.2	26.0		67.2

TABLE 4 (continued)

Assumptions upon which "Sources of Funds" statement is based.

1. Return on Average Common Equity:

1978	10.0%
1979	9.8%
1980	13.3%
1981	13.3%
1982	13.3%
1983	13.3%

2. Assumed Cost of New Securities:

a.	Long-Term Debt	9.0%
b.	Short-Term Debt	7.5%
c.	Preferred Stock*	9.5%

* Except for the following 1978 Issues:

$40,000,000 of 8.375% Preferred Stock Issued in January, 1978.
$34,000,000 of 7.75% Preference Stock Contemplated for June, 1978.

3. Market/Book Ratio with Respect to Projected Common Stock Offerings:

	Market Price	Book Value*	Ratio
1978	$15.00	$17.14	.875
1979	$16.50	$17.42	.947
1980	$18.42	$18.25	1.009
1981	$20.25	$19.15	1.057
1982	$21.31	$20.11	1.060
1983	$22.35	$21.12	1.058

* At Year End

TABLE 4 (continued)

4. For 1978 and 1979, Common dividends were calculated on the basis of estimated shares outstanding for each quarter and the anticipated dividend rate for each quarter. For 1980 through 1983, a 65% payout ratio was assumed.

5. Target Capital Structure:

Long-Term Debt	49%
Preferred Stock*	14%
Common Equity	37%

*Includes Preference Stock

6. SEC and Indenture Interest Coverages:

	SEC	Indenture
1978	2.42	2.52
1979	2.25	2.12
1980	2.86	2.89
1981	2.67	2.74
1982	2.71	2.56
1983	2.67	2.48

7. Annual Growth Rate in KWH Sales:

1978 (3.3%), 1979 (2.4%), 1980 (2.5%), 1981, (2.9%), 1982 (2.8%), 1983 (2.9%)

Price Per KWH (Average):

1978 ($.031), 1979 ($.031), 1980 ($.037), 1981 ($.038), 1982 ($.040), 1983 ($.041)

Expenses were projected manually based on historical data and anticipated future developments. Interest, preferred dividends and balance for common equity requirements were based on the rates assumed above and projected financing through 1983. Federal Income Taxes were computed utilizing current Company practices.

TABLE 5

Applicant: ROCHESTER GAS AND ELECTRIC CORPORATION   Nuclear Plant: Nine Mile Point Unit 2

PRO FORMA SOURCES OF FUNDS FOR SYSTEM-WIDE CONSTRUCTION EXPENDITURES AND CAPITAL STRUCTURE
DURING PERIOD OF CONSTRUCTION OF SUBJECT NUCLEAR POWER PLANT
(Millions of Dollars)

	Construction Years of Subject Nuclear Power Plant					
	1978	1979	1980	1981	1982	1983
EXTERNAL FINANCING						
Common stock	$ 23.6	$ 24.2	$ 4.8	$ 25.5	$ 25.9	$ 26.4
Preferred stock	0	20.0	20.0	20.0	0	20.0
Long term debt	52.0	30.0	45.0	50.0	70.0	95.0
Notes payable	4.7	28.7	14.6	(10.5)	19.9	16.5
Contributions from parent-net	0	0	0	0	0	0
Other funds (describe)						
TOTAL EXTERNAL FUNDS	80.3	102.9	84.4	85.0	115.8	157.9
INTERNALLY GENERATED CASH						
Net Income	36.2	45.6	56.2	63.3	71.4	79.8
Less:						
preferred dividends	5.7	6.6	8.5	10.4	11.4	12.3
common dividends	18.9	21.3	23.4	25.3	29.3	[illegible]5
Retained earnings	0	0	0	0	0	0
Deferred taxes	(0.7)	(0.6)	(0.1)	0	0.1	1.3
Invest. tax cred. - deferred	1.0	0.5	2.8	7.8	6.1	1.6
Depreciation and amort.	38.3	40.5	45.9	48.7	50.4	53.9
Change in working capital	(0.8)	(2.7)	(1.1)	1.4	(1.5)	(0.8)
Less: AFDC	14.1	19.0	19.1	25.4	34.9	42.2
TOTAL INTERNAL FUNDS	35.3	36.4	52.7	60.1	50.9	47.8
TOTAL FUNDS	$115.6	$139.3	$137.1	$145.1	$166.7	$205.7

TABLE 5 (continued)

	Construction Years of Subject Nuclear Power Plant					
	1978	1979	1980	1981	1982	1983
CONSTRUCTION EXPENDITURES*						
Nuclear power plants	$ 28.3	$ 35.7	$ 42.4	$ 78.1	$ 71.6	$ 87.3
Other	87.3	86.9	82.7	67.0	89.1	88.7
Total const. exp's	$115.6	$122.6	$125.1	$145.1	$160.7	$176.0
Subject nuclear plant	$ 24.1	$ 26.9	$ 20.4	$ 19.5	$ 9.1	$[illegible].3
OTHER CAPITAL REQUIREMENTS						
Redemption of Maturing Bonds	0	16.7	12.0	0	6.0	29.7
Acquistion of Bonds for Sinking Funds	0	0	0	0	0	0
Misc. Requirements (detail)						
TOTAL CAPITAL REQUIREMENTS	$115.6	$139.3	$137.1	$145.1	$166.7	$205.7
CAPITAL STRUCTURE ($ & %)						
Long-term debt	$412.3	$425.6	$458.7	$508.7	$572.7	$638.0
Preferred stock	95.0	115.0	135.0	155.0	155.0	175.0
Common equity	317.9	359.2	387.7	440.1	496.2	555.9
TOTAL	$825.2	$899.8	$981.4	$1,108,8	$1,223.9	$1,368.9
Long-term debt	50.0%	47.3%	46.7%	46.1%	46.8%	4[illegible] 6%
Preferred stock	11.5	12.8	13.8	14.0	12.7	1[illegible] 8
Common equity	38.5	39.9	39.5	39.9	40.5	40.6
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

* Exclusive of AFDC

TABLE 5 (continued)

Assumptions upon which "Sources of Funds" Statement is based.

1. Rate of Return on Average Common Equity - Maintained between 11.4 and 11.6% (1979) and 12.7 and 12.9% (1980-1983)

2. Preferred Stock Dividend Rate - 9.5%
Short Term Interest Rate - 8%
Bond Interest Rate - 8.54% (1978) and 9-1/4% (1979-1983)
Market Price of Common Stock - $19.00 (1978) increasing $1.00 per year to $22.00 (1981) remaining constant through 1983
Common Stock Dividend Payout Ratio - 50%

3. Growth Rates:

Retail Sales (KWH) - 1979 (4.5%), 1980 (4.0%), 1981 (4.3%), 1982 (4.2%), 1983 (4.0%)

Revenues - Sufficient to maintain approximately 12.8% return on average equity

4. Target Capital Structure:

Bonds	44-47%
Preferred Stock	12-14%
Short Term Debt	0-3 %
Common Equity	38-41%

5. Operation and maintenance expenses were projected either manually or by the best fit of historical data to a least squares curve. Interest charges were actually calculated based on known and assumed financings and assumed interest rates. Net income was a result of all the above assumptions and projections.

6. Interest Coverages

Interest Coverages	1978	1979	1980	1981	1982	1983
SEC	2.32	2.42	2.70	2.87	2.76	2.53
Indenture	2.69	2.74	3.20	3.27	2.92	2.63

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-410

NINE MILE POINT NUCLEAR STATION, UNIT 2

NIAGARA MOHAWK POWER CORPORATION

CONTRAL HUDSON GAS & ELECTRIC CORPORATION

NEW YORK STATE ELECTRIC & GAS CORPORATION

LONG ISLAND LIGHTING COMPANY

ROCHESTER GAS AND ELECTRIC CORPORATION

AMENDMENT TO CONSTRUCTION PERMIT

Amendment No. 1
Construction Permit No. CPPR-112

1. The Nuclear Regulatory Commission (the Commission) having found that:

   A. The application for amendment to Construction Permit No. CPPR-112 transmitted by letter dated February 6, 1978 and amended by letter dated August 16, 1978 for the purpose of adding Central Hudson Gas & Electric Corporation, New York State Electric & Gas Corporation, Long Island Lighting Company, and Rochester Gas and Electric Corporation as co-owners of and co-applicants for the Nine Mile Point Nuclear Station Unit 2 (the facility) complies with the standards and requirements of the Atomic Energy Act of 1954, as amended, and the Commission's rules and regulations set forth in 10 CFR Chapter I;

   B. The above-named co-owners are qualified to finance their ownership interest in the facility;

   C. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

2. Accordingly, Construction Permit No. CPPR-112 is amended to reflect a change in the ownership of the facility, as follows:

   A. Paragraph 1.B is amended by deleting the parenthetical phrase "(the Applicant)" and substituting: "(which retains responsibility for the design, construction, and operation of the facility) for itself and for Central Husdon Gas & Electric Corporation, New York State Electric & Gas Corporation, Long Island Lighting Company, and Rochester Gas and Electric Corporation, (the Applicants),..."

   B. Paragraphs 1.D and 1.F are amended by deleting "Applicant wherever it appears and substituting "Niagara Mohawk Power Company."

C. Paragraphs 1.G., 2., 3.C., 3.E., 4., and 5. are amended by deleting "Applicant" wherever it appears and substituting "Applicants" and by revising associated verb and possessive forms accordingly.

3. This amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

DFRoss/for

Roger S. Boyd, Director
Division of Project Management
Office of Nuclear Reactor Regulation

Date of Issuance:
October 27, 1978

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-410

NINE MILE POINT NUCLEAR STATION, UNIT 2

NIAGARA MOHAWK POWER CORPORATION

CENTRAL HUDSON GAS & ELECTRIC CORPORATION

NEW YORK STATE ELECTRIC & GAS CORPORATION

LONG ISLAND LIGHTING COMPANY

ROCHESTER GAS AND ELECTRIC CORPORATION

NOTICE OF ISSUANCE OF AMENDMENT TO CONSTRUCTION PERMIT

Notice is hereby given that the U. S. Nuclear Regulatory Commission (the Commission) has issued Amendment No. 1 to Construction Permit No. CPPR-112, issued to the Niagara Mohawk Power Corporation. The amendment reflects a change in the ownership of Nine Mile Point Nuclear Station, Unit 2 (the facility), located in Oswego County, New York. The amendment is effective as of the date of its issuance.

The amendment adds the Central Hudson Gas & Electric Corporation, New York State Electric & Gas Corporation, Long Island Lighting Company, and Rochester Gas and Electric Corporation as co-owners of and co-applicants for the facility. Niagara Mohawk Power Corporation will retain responsibility for the design, construction, and operation of the facility.

The application for the amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the amendment.

Prior public notice of this amendment was not required since this amendment does not involve a significant hazards consideration.

For further details with respect to this action, see (1) the application for amendment dated February 6, 1978, and amendment dated August 16, 1978, (2) Amendment No. 1 to Construction Permit CPPR-112, and (3) the Commission's related safety evaluation.

All of these items and other related material are available for public inspection at the Commission's Public Document Room, 1717 H Street, N. W., Washington, D. C., and at the local Public Document Room located at the Oswego County Office Building, 46 East Bridge Street, Oswego, New York 13126.

A copy of item (2) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Project Management.

Dated at Bethesda, Maryland, this 27th day of October 1978.

FOR THE NUCLEAR REGULATORY COMMISSION

Steven A. Varga

Steven A. Varga, Chief
Light Water Reactors Branch No. 4
Division of Project Management

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-410

NINE MILE POINT NUCLEAR STATION, UNIT 2

NIAGARA MOHAWK POWER CORPORATION

CENTRAL HUDSON GAS & ELECTRIC CORPORATION

NEW YORK STATE ELECTRIC & GAS CORPORATION

LONG ISLAND LIGHTING COMPANY

ROCHESTER GAS AND ELECTRIC CORPORATION

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OFFICE➤						
SURNAME➤						
DATE➤						

Prior public notice of this amendment was not required since this amendment does not involve a significant hazards consideration.

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Dated at Bethesda, Maryland, this 27th day of October 1978.

FOR THE NUCLEAR REGULATORY COMMISSION

Original signed by
Steven A. Varga

Steven A. Varga, Chief
Light Water Reactors Branch No. 4
Division of Project Management

OFFICE	DPM:LWR #4	DPM:LWR #4	OELD	DPM:LWR #4		
SURNAME	MService:lb	HSilver		SVarga		
DATE	10/23/78	10/23/78	10/27/78	10/27/78		

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-410

NINE MILE POINT NUCLEAR STATION, UNIT 2

NIAGARA MOHAWK POWER CORPORATION

CENTRAL HUDSON GAS & ELECTRIC CORPORATION

NEW YORK STATE ELECTRIC & GAS CORPORATION

LONG ISLAND LIGHTING COMPANY

ROCHESTER GAS AND ELECTRIC CORPORATION

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The amendment adds the Central Hudson Gas & Electric Corporation, New York State Electric & Gas Corporation, Long Island Lighting Company, and Rochester Gas and Electric Corporation as co-owners of and co-applicants for the facility. Niagara Mohawk Power Corporation will retain responsibility for the design, construction, and operation of the facility.

The application for the amendment complies with the standards and requirements of the Atomic Energy Act of 1954, as amended (the Act), and the Commission's rules and regulations. The Commission has made appropriate findings as required by the Act and the Commission's rules and regulations in 10 CFR Chapter I, which are set forth in the amendment.

Prior public notice of this amendment was not required since this amendment does not involve a significant hazards consideration.

For further details with respect to this action, see (1) the application for amendment dated February 6, 1978, and amendment dated August 16, 1978, (2) Amendment No. 1 to Construction Permit CPPR-112, and (3) the Commission's related safety evaluation.

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A copy of item (2) may be obtained upon request addressed to the U. S. Nuclear Regulatory Commission, Washington, D. C. 20555, Attention: Director, Division of Project Management.

Dated at Bethesda, Maryland, this 27th day of October 1978.

FOR THE NUCLEAR REGULATORY COMMISSION

Steven A. Varga

Steven A. Varga, Chief
Light Water Reactors Branch No. 4
Division of Project Management

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-410

NINE MILE POINT NUCLEAR STATION, UNIT 2

NIAGARA MOHAWK POWER CORPORATION

CONTRAL HUDSON GAS & ELECTRIC CORPORATION

NEW YORK STATE ELECTRIC & GAS CORPORATION

LONG ISLAND LIGHTING COMPANY

ROCHESTER GAS AND ELECTRIC CORPORATION

AMENDMENT TO CONSTRUCTION PERMIT

Amendment No. 1
Construction Permit No. CPPR-112

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   A. The application for amendment to Construction Permit No. CPPR-112 transmitted by letter dated February 6, 1978 and amended by letter dated August 16, 1978 for the purpose of adding Central Hudson Gas & Electric Corporation, New York State Electric & Gas Corporation, Long Island Lighting Company, and Rochester Gas and Electric Corporation as co-owners of and co-applicants for the Nine Mile Point Nuclear Station Unit 2 (the facility) complies with the standards and requirements of the Atomic Energy Act of 1954, as amended, and the Commission's rules and regulations set forth in 10 CFR Chapter I;

   B. The above-named co-owners are qualified to finance their ownership interest in the facility;

   C. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

2. Accordingly, Construction Permit No. CPPR-112 is amended to reflect a change in the ownership of the facility, as follows:

   A. Paragraph 1.B is amended by deleting the parenthetical phrase "(the Applicant)" and substituting: "(which retains responsibility for the design, construction, and operation of the facility) for itself and for Central Husdon Gas & Electric Corporation, New York State Electric & Gas Corporation, Long Island Lighting Company, and Rochester Gas and Electric Corporation, (the Applicants),..."

   B. Paragraphs 1.D and 1.F are amended by deleting "Applicant wherever it appears and substituting "Niagara Mohawk Power Company."

OFFICE➤						
SURNAME➤						
DATE➤						

C. Paragraphs 1.G., 2., 3.C., 3.E., 4., and 5. are amended by deleting "Applicant" wherever it appears and substituting "Applicants" and by revising associated verb and possessive forms accordingly.

3. This amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

Original signed by
D. F. Ross
Roger S. Boyd, Director
Division of Project Management
Office of Nuclear Reactor Regulation

Date of Issuance:
October 27, 1978

OELD
10/25/78

OFFICE	DPM:LWR #4	DPM:LWR #4	DPM:LWR #4	DPM:LWR/AD	DPM:DEP DIR	DPM:DIR
SURNAME	MService:tlb	HSilver	SVarga	DVassallo	DRoss	RBoyd
DATE	10/23/78	10/23/78	10/24/78	10/27/78	10/27/78	10/27/78

UNITED STATES NUCLEAR REGULATORY COMMISSION

DOCKET NO. 50-410

NINE MILE POINT NUCLEAR STATION, UNIT 2

NIAGARA MOHAWK POWER CORPORATION

CONTRAL HUDSON GAS & ELECTRIC CORPORATION

NEW YORK STATE ELECTRIC & GAS CORPORATION

LONG ISLAND LIGHTING COMPANY

ROCHESTER GAS AND ELECTRIC CORPORATION

AMENDMENT TO CONSTRUCTION PERMIT

Amendment No. 1
Construction Permit No. CPPR-112

1. The Nuclear Regulatory Commission (the Commission) having found that:

   A. The application for amendment to Construction Permit No. CPPR-112 transmitted by letter dated February 6, 1978 and amended by letter dated August 16, 1978 for the purpose of adding Central Hudson Gas & Electric Corporation, New York State Electric & Gas Corporation, Long Island Lighting Company, and Rochester Gas and Electric Corporation as co-owners of and co-applicants for the Nine Mile Point Nuclear Station Unit 2 (the facility) complies with the standards and requirements of the Atomic Energy Act of 1954, as amended, and the Commission's rules and regulations set forth in 10 CFR Chapter I;

   B. The above-named co-owners are qualified to finance their ownership interest in the facility;

   C. The issuance of this amendment will not be inimical to the common defense and security or to the health and safety of the public.

2. Accordingly, Construction Permit No. CPPR-112 is amended to reflect a change in the ownership of the facility, as follows:

   A. Paragraph 1.B is amended by deleting the parenthetical phrase "(the Applicant)" and substituting: "(which retains responsibility for the design, construction, and operation of the facility) for itself and for Central Husdon Gas & Electric Corporation, New York State Electric & Gas Corporation, Long Island Lighting Company, and Rochester Gas and Electric Corporation, (the Applicants),..."

   B. Paragraphs 1.D and 1.F are amended by deleting "Applicant wherever it appears and substituting "Niagara Mohawk Power Company."

C. Paragraphs 1.G., 2., 3.C., 3.E., 4., and 5. are amended by deleting "Applicant" wherever it appears and substituting "Applicants" and by revising associated verb and possessive forms accordingly.

3. This amendment is effective as of the date of its issuance.

FOR THE NUCLEAR REGULATORY COMMISSION

D F Ross / for

Roger S. Boyd, Director
Division of Project Management
Office of Nuclear Reactor Regulation

Date of Issuance:
October 27, 1978

SAFETY EVALUATION REPORT

SUPPORTING AMENDMENT NO. 1 TO CPPR-112

OCT 27 1978

INTRODUCTION

Construction permit CPPR-112 was issued on June 24, 1974 to the Niagara Mohawk Power Corporation (NMPC) as applicant and owner of the Nine Mile Point Nuclear Station, Unit 2 (NMP-2) generating facility. On September 22, 1975, NMPC entered into an agreement with Central Hudson Gas and Electric Corporation, Long Island Lighting Company, New York State Electric & Gas Corporation and Rochester Gas & Electric Corporation to sell ownership interests in the plant to the above-named companies. The New York Public Service Commission approved the transfer of ownership interests to the above-noted companies on December 5, 1977.

By letter dated February 6, 1978, Niagara Mohawk Power Corporation filed a request for amendment to the construction permit to include the above noted companies as co-owners of NMP-2. By letter of August 16, 1978, the request for amendment was modified to conform to the Atomic Safety and Licensing Board's decision in ALAB-459 (Marble Hill) which required that co-owners of a facility also be co-applicants in any licensing action. The August 16, 1978, modification to the amendment also stated that the Tri Counties Construction Trust (Construction Trust) would finance Long Island Lighting Company's (LILCO) ownership interest in the Nine Mile Point Unit 2 facility during the 1978-80 period. The Staff understands that approval of this financing arrangement has been obtained from the New York Public Service Commission. The Staff has also ascertained that the Construction Trust, while having legal ownership for security purposes during construction, will not have any involvement whatsoever in the design

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and construction of the Nine Mile Point Unit 2 facility. Beneficial ownership of its interest in the facility will remain with LILCO at all times. Accordingly, the Construction Trust has not been named as a co-applicant or co-owner.

The application states that NMPC has the responsibility for licensing, design, procurement, construction, operation, and all related functions, and that the owners have delegated to NMPC the authority to act on their behalf in facility and materials license applications and amendments as may be required.
The application further states that none of the co-owners is owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government.

ANALYSIS

We have reviewed the application for Amendment No. 1 to CPPR-112 and conclude that since NMPC will retain responsibility for the design, construction, and operation of NMP-2, addition of co-owners would not involve a significant hazards consideration inasmuch as it does not involve an increase in the probability of an accident, an increase in the consequences of an accident, or a decrease in safety margins. We therefore conclude that the activities authorized by this amendment would not constitute an unreasonable risk to the health and safety of the public.

Since the application for amendment states that the co-owners are not owned, controlled, or dominated by an alien, a foreign corporation, or a foreign government, we conclude from our review that the activities

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authorized by this amendment would not be inimical to the common defense and security.

We have evaluated the financial qualifications of the above-named companies to participate with NMPC as co-owners of NMP-2 as presented below.

Financial - General

The NRC regulations relating to the determination of an applicant's financial qualifications appear in Section 50.33(f) and Appendix C to 10 CFR Part 50. These regulations state that there must be reasonable assurance that an applicant can obtain the necessary funds to cover the estimated construction cost of a proposed nuclear power plant and its related fuel cycle costs. This standard of reasonable assurance, however, must be viewed in light of the extended period of time from the start of construction to the date of commercial operation. The earliest date for commercial operation of the NMP-2 facility is estimated to be March 1983.

Consequently, we must make certain basic assumptions in our financial analysis about future conditions. Our analysis of the applicants' financial qualifications assumes that there will be rational regulatory policies with respect to the setting of rates and that viable capital markets will exist. The former assumption implies that rates will be set by the appropriate regulatory agencies to at least cover the cost of service, including the

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cost of capital. The latter assumption implies that capital will be available at some price. Given these fundamental assumptions, our evaluation is then focused on the reasonableness of the applicants' financial planning.

The applicants have submitted financial information in support of their application. The following analysis summarizes our review of the information, and gives the qualifications of each applicant to finance its respective share of the costs of the design and construction of the facility.

Financial - Construction Cost Estimates

The most recent cost estimates for NMP-2 are provided in the NMPC letter of May 26, 1978. The cost estimates are summarized as follows:

	(millions of dollars)
Total nuclear production plant costs - - - - - - -	$1,018.3
Transmission, distribution, and general plants costs - - - - - - - - - - - - - - - - - -	7.6
Nuclear fuel inventory cost for the first core -	71.5
TOTAL	$1,097.4

We have compared the cost of the nuclear production plant estimated by the applicants with the cost projected by the costing model (CONCEPT) developed by the Department of Energy. This analytical model projected the cost of NMP-2 to be $1,202.0 million, compared with the applicants' estimate of $1,097.4 million. Since the CONCEPT model is used primarily

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as a rough check of the cost estimate made by the applicants and is not intended to be a substitute for detailed engineering cost estimates, we conclude that it is reasonable to use the applicants' estimate in our financial analysis.

Sources of Construction Funds

The ownership, costs, and electrical output of the proposed facility will be shared according to the following percentages:

Niagara Mohawk Power Corporation	41%
Central Hudson Gas & Electric Corporation	9%
Long Island Lighting Company	18%
New York State Electric & Gas Corporation	18%
Rochester Gas and Electric Corporation	14%

The percent allocation is based on the agreement signed by the four parties on September 22, 1975. Each owner will pay its ownership percentage of the cost of constructing the project and bear its ownership percentage of all liabilities in connection with the project.

The applicants will finance their respective ownership costs from internal funds, external sales of debt and equity, and short term borrowing. Available funds from these sources in 1977, after debt payments and retirements, totaled $32.2 million for Central Hudson Gas & Electric Corporation; $333.8 million for Long Island Lighting Company; $152.6 million for New York State Electric & Gas Corporation; $99.6 million for Rochester Gas and Electric Corporation; and $255.8 million for Niagara Mohawk Power Corporation.

Financial Analysis

The ability of an investor-owned utility to finance a construction program over a future period is a function of a number of variables, the most important of which is the level of profitability. Profitability can be assessed by referring to the return a utility earns on the capital it employs in its business and comparing it to the risk-adjusted returns earned elsewhere in the economy. The concept of the fair rate of return on investment is deeply ingrained in public utility reguation. The capability of an electric utility to finance a construction program requiring large amounts of external financing will depend, in part, on its ability to earn such a fair rate of return. Further, a fair rate of return on total capital will also result in the return on common equity being fair and reasonable, since common equity is a component of total capital. All other things being equal, the return on common equity is the best indication of a company's profitability and will have a substantial impact on other facets of a company's financial performance.

Although a fair rate of return might be characterized as the most significant variable affecting an applicant's ability to finance its propsed construction program, it must also be coupled with a properly balanced capital structure to provide reasonable assurance that adequate coverages on its senior securities will result, thereby maintaining their marketability. Historically, the average investor-owned electric utility has had a capital structure

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comprised of around 50 to 55 percent long-term debt, 10 to 15 percent preferred stock, and 30 to 40 percent common equity. Given a particular capital structure with its embedded costs of debt and preferred stock, the return on common equity will determine the level of interest coverage and preferred dividend coverage. These coverages, in turn, will significantly affect the ratings assigned to a company's senior securities by the principal rating agencies and, consequently, the interest rate demanded by investors to purchase these securities. The return on common equity will also affect the company's common stock. When large amounts of securities need to be sold to finance a construction program, the ability to sell common stock is the key to maintaining a reasonably balanced capital structure. In addition, the return on common equity affects the level of internally generated funds through its impact on retained earnings, although the primary source of internally generated funds is depreciation.

Since a lengthy and uncertain future period is involved in the analysis of an applicant's financial qualification, we do not look solely at historical data. For this reason, we have requested each applicant to submit a projected system-wide "sources and uses of funds" statement covering the period of construction, demonstrating how anticipated construction expenditures might be met by internal and external sources of funds. Our analysis of the submitted projections then focuses on the reasonableness of these projections and their underlaying assumptions.

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The projected "sources and uses of funds" statements submitted by the five applicants for the period from 1978 to 1983 together with the underlying assumptions, are presented in the attached Tables 1 through 5.

The applicants project a rate of return on year-end common equity in the range of 10 - 13 percent, during the six-year construction period. Based on information submitted by the applicants, a rate of return on this order of magnitude has been determined to be just and reasonable by State Public Utilities Commissions in their respective service areas. Given prevailing and reasonably forseeable capital market conditions, we conclude that the applicants' assumptions with respect to rates of return on common equity are within a reasonable range.

The assumed capital structures for the applicants are 49 to 52 percent long-term debt; 10 to 14 percent preferred stock; and 36 to 40 percent common equity. As noted above, these assumed capital structures are historically typical of the electric utility industry and, in our judgment, are within the zone of reasonableness. Furthermore, the projected rates of return, when applied to these capital structures, will result in adequate coverages of fixed charges (i.e., total interest charges and amortization of debt discount expense)for each applicant.

Conclusions on Financial Qualifications

Based on our analysis, we conclude that Niagara Mohawk Power Corporation, Central Hudson Gas & Electric Corporation, Long Island Lighting Company,

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New York State Electric & Gas Corporation, and Rochester Gas and Electric Corporation have reasonable assurance of obtaining the necessary funds to cover the estimated construction cost of the NMP-2 facility and its related fuel cycle costs. Our conclusion is based upon an assessment that the financial projections submitted by the applicants constitute reasonable financing plans. We do not consider these financial projections to be a forecast of the financing which will actually occur. We require only that the applicants demonstrate one possible method by which their planned construction program, including the subject facility, might be reasonably financed. Since we are dealing with future events, we naturally expect that financing plans will change from time to time to accommodate changing conditions. Nevertheless, the financing projections submitted by the applicants are in accordance with general industry practice and the underlying assumptions, although not susceptible to precise measurement against absolute criteria, are consistent with the postulated conditions. Consequently, since we find that the applicants' financial projections are reasonable, we conclude that the standard of reasonable assurance has been satisfied. Accordingly, we find the applicants financially qualified to design and construct the proposed NMP-2 facility.

In accordance with the provisions of Section 50.71(b) of 10 CFR Part 50, the applicants will be filing annual certified financial statements with the Director of Nuclear Reactor Regulation. Information in these statements will be used by the staff in its monitoring of the applicants' construction program, including the NMP-2 facility.

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SAFETY CONCLUSIONS

For reasons stated in the above analysis, we conclude that activities authorized by this amendment (1) do not involve a significant hazards consideration; (2) would not constitute an unreasonable risk to the health and safety of public; and (3) are not inimical to the common defense and security.

Based on our evaluation of financial information provided in the application for the amendment as summarized in the above analysis, we conclude that there is reasonable assurance the the above-named co-owners are financially qualified to participate in the ownership of NMP-2.

Harley Silver, Project Manager
Light Water Reactors Branch No. 4
Division of Project Management

Original signed by
Steven A. Varga

Steven A. Varga, Chief
Light Water Reactors Branch No. 4
Division of Project Management

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*See previous yellow for concurrence

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Harley Silver, Project Manager
Light Water Reactors Branch No. 4
Division of Project Management

Steven A. Varga, Chief
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Concurrence subject to inclusion on final copy of SER of Handwritten corrections and Insertions on "working" copy of SER

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