



**Consumers
Power
Company**

General Offices: 212 West Michigan Avenue, Jackson, Michigan 49201 • Area Code 517 788-0550

March 4, 1975

File 514

RECEIVED

Division of Reactor Licensing
US Nuclear Regulatory Commission
Washington, DC 20555

Re: Docket 50-255
License DPR-20
Palisades Plant
Effluent Reports

Gentlemen:

Attached are the December 1974 and January 1975 Effluent Reports for the Palisades Plant. These reports are submitted to fulfill the requirements of the Interim Special Technical Specifications (dated October 16, 1972) of our Provisional Operating License No DPR-20.

Yours very truly,

WGF/smm

Ralph B. Sewell
Nuclear Licensing Administrator

CC: JGKeppler, USNRC



2498

PRIMARY COOLANT RADIOACTIVITY
Month of December 1974

| | <u>Gross Crud</u> <u>CPM/ml</u> | <u>Gross Filtrate</u> <u>CPM/ml</u> | <u>Gross Gas</u> <u>μCi/ml</u> | <u>Gross Iodine</u> <u>μCi/ml</u> | <u>I-131</u> <u>μCi/ml</u> | <u>I-133</u> <u>μCi/ml</u> | <u>Tritium</u> <u>μCi/ml</u> |
|---------|------------------------------------|--|-----------------------------------|--------------------------------------|-------------------------------|-------------------------------|---------------------------------|
| Maximum | (None) | | | | | | |
| Average | Plant Shut Down | | | | | | |

Core Avg Burnup
 MWd/MTU = 6950.1

PALISADES PLANT
Monthly Effluent Report - December 1974

| Isotope | Modified Liquid Radioactive Waste System (mCi) | Laundry System Drains (mCi) | Isotope | Gaseous Waste and Stack Effluent (mCi) |
|--|--|--------------------------------|--|--|
| ^{133}Xe | 0 | 0.06 | ^{133}Xe | 6.82 |
| ^{57}Co | 0 | 0.09 | $^{131}\text{Xe(m)}$ | 1.59 |
| ^{58}Co | 0.79 | 7.20 | $^{133}\text{Xe(m)}$ | 0 |
| ^{60}Co | 0.72 | 5.10 | ^{135}Xe | 0 |
| ^{51}Cr | 0 | 1.19 | ^{85}Kr | 0 |
| ^{54}Mn | 1.07 | 4.12 | $^{85}\text{Kr(m)}$ | 0 |
| ^{134}Cs | 1.17 | 2.20 | ^{87}Kr | 0 |
| ^{137}Cs | 0 | 6.09 | ^{131}I | 0.11 |
| ^{59}Fe | 0 | 0.19 | ^{132}I | 0 |
| ^{124}Sb | 0 | 0 | ^{133}I | 0 |
| ^{95}Zr | 0 | 0 | ^{135}I | 0 |
| ^{63}Ni | 23.4 | 6.63 | ^{57}Co | 0 |
| ^{95}Nb | 0 | 0 | ^{58}Co | 1.96E-04 |
| ^{65}Zn | 0 | 0.03 | ^{60}Co | 8.76E-06 |
| ^{140}La | 0 | 0 | ^{134}Cs | 0 |
| ^{131}I | 3.15 | 0.20 | ^{136}Cs | 0 |
| | | | ^{137}Cs | 0 |
| Net Unidentified | | | ^{138}Cs | 0 |
| Beta as ^{90}Sr | 3.72 | 0.29 | ^{95}Zr | 0 |
| Total Fission & Activation Products (Less ^3H & Dissolved Noble Gases) | 34.0 | 33.4 | ^{95}Nb | 0 |
| ^3H | 828 | 23.2 | ^{54}Mn | 1.70E-03 |
| Batches Released | 62 (Note 3) | 4 | Net Unidentified | |
| Total Volume Released | 7.41E+06 Liters | 3.94E+04 Liters | Beta as ^{90}Sr | 1.02E-02 |
| | | | ^3H | Not Analyzed |
| | | | Total Fission & Activation Products | 0.13 |
| | | | Batches Released | 5 |
| | | | Total Volume Released | 9.74E+07 (M ³) |

Note 3: Only 9 batch cards filled out; however, some batches extended for periods up to 31 days with each day considered a separate release.

Core Avg Burnup
MWd/MTU = 6950.1

PRIMARY COOLANT RADIOACTIVITY

Month of January 1975

| | <u>Gross Crud</u> <u>CPM/ml</u> | <u>Gross Filtrate</u> <u>CPM/ml</u> | <u>Gross Gas</u> <u>μCi/ml</u> | <u>Gross Iodine</u> <u>μCi/ml</u> | <u>I-131</u> <u>μCi/ml</u> | <u>I-133</u> <u>μCi/ml</u> | <u>Tritium</u> <u>μCi/ml</u> |
|---------|------------------------------------|--|-----------------------------------|--------------------------------------|-------------------------------|-------------------------------|---------------------------------|
| Maximum | | | | (None) | | | |
| Average | | | | Plant Shut Down | | | |

PALISADES PLANT
MONTHLY EFFLUENT REPORT - JANUARY 1975

| Isotope | Modified Liquid Radioactive Waste Systems (mCi) | Laundry System Drain (mCi) | Isotope | Gaseous Waste and Stock Effluent (mCi) |
|--|---|-------------------------------|--|--|
| ⁵⁷ Co | | 1.12 E-02 | ¹³³ Xe | 6.66 E-01 |
| ⁵⁸ Co | 3.98 E-01 | 2.25 E+00 | ¹³¹ I | 4.05 E-03 |
| ⁶⁰ Co | 4.11 E-01 | 1.37 E+00 | ⁵⁸ Co | 1.63 E-03 |
| ⁵¹ Cr | | 2.10 E-01 | ⁶⁰ Co | 4.05 E-03 |
| ⁵⁴ Mn | 2.77 E-01 | 7.41 E-01 | ¹³⁴ Cs | 2.05 E-03 |
| ¹³⁴ Cs | 1.60 E-01 | 9.77 E-01 | ¹³⁷ Cs | 3.79 E-02 |
| ¹³⁷ Cs | 3.26 E-01 | 2.85 E+00 | ⁵⁴ Mn | 1.62 E-03 |
| ⁵⁹ Fe | | 9.0 E-03 | | |
| ⁶³ Ni | 4.49 E-01 | 6.91 E+00 | | |
| Net Unidentified Beta As ⁹⁰ Sr | 4.23 E-01 | 1.61 E+00 | Net Unidentified Beta As ⁹⁰ Sr | 2.11 E-02 |
| Total Fission & Activation Products (Less ³ H & Dissolved Noble Gases) | 2.44 E+00 | 1.69 E+01 | ³ H | Not Analyzed |
| ³ H | 1.89 E+03 | 4.20 E+00 | Total Fission & Activation Products | 7.38 E-01 |
| Batches Released | 3 | 3 | Alpha | 3.4 E-04 |
| Total Volume Released | 2.56 E+06 liters | 2.87 E+04 liters | Batches Released | 9 |
| | | | Total Volume Released | 8.71 E+07 (M ³) |

Core Avg Burnup
MWd/MTU = 6950.1