

STATE OF IOWA
DEPARTMENT OF COMMERCE
UTILITIES BOARD

IN RE:)
) Docket No. P-46
MIDAMERICAN ENERGY COMPANY)

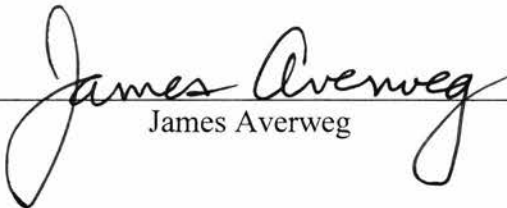
**AFFIDAVIT OF
JAMES AVERWEG**

STATE OF IOWA)
) ss.
COUNTY OF SCOTT)

I, James Averweg, being first duly sworn on oath, depose and state:

1. that I am Vice President-Engineering and a corporate officer of MidAmerican Energy Company;
2. that MidAmerican Energy Company has property in Iowa, other than pipelines, subject to execution, of a value in excess of \$250,000, as noted in FERC Form 2, pages 200-209, attached as Exhibit D;
3. that said facts are true and correct to the best of my knowledge and belief as of the date of this Affidavit.

Further affiant sayeth not.


James Averweg

Subscribed and sworn to before me, a
Notary Public in and for said County
and State, this 7th day of December, 2007.


Notary Public



Name of Respondent MidAmerican Energy Company		This Report is: (1) <input checked="" type="checkbox"/> An Original (2) <input type="checkbox"/> A Resubmission	Date of Report (Mo, Day, Yr)	Year/Period of Report End of 2006/Q4
SUMMARY OF UTILITY PLANT AND ACCUMULATED PROVISIONS FOR DEPRECIATION, AMORTIZATION AND DEPLETION				
Line No	Item (a)	Total Company For the Current Quarter/Year (b)	Electric (c)	
1	UTILITY PLANT			
2	In Service			
3	Plant in Service (Classified)	\$6,347,452,885	\$5,380,124,037	
4	Property Under Capital Leases	5,386,938	3,830,642	
5	Plant Purchased or Sold	0	0	
6	Completed Construction not Classified	766,013,654	697,153,821	
7	Experimental Plant Unclassified	0	0	
8	TOTAL (Enter Total of lines 3 thru 7)	\$7,118,853,477	\$6,081,108,500	
9	Leased to Others	0	0	
10	Held for Future Use	765,723	765,723	
11	Construction Work in Progress	862,678,875	859,172,819	
12	Acquisition Adjustments	21,360,574	0	
13	TOTAL Utility Plant (Enter Total of lines 8 thru 12)	\$8,003,658,649	\$6,941,047,042	
14	Accum. Prov. for Depreciation, Amort., & Depl.	3,497,551,837	2,999,896,238	
15	Net Utility Plant (Enter Total of line 13 less 14)	\$4,506,106,812	\$3,941,150,804	
DETAIL OF ACCUMULATED PROVISIONS FOR DEPRECIATION, AMORTIZATION AND DEPLETION				
16				
17	In Service:			
18	Depreciation	3,321,149,894	2,856,858,456	
19	Amort. and Depl. of Producing Natural Gas Land and Land Rights	0		
20	Amort. of Underground Storage Land and Land Rights	0		
21	Amort. of Other Utility Plant	162,582,385	143,037,782	
22	TOTAL In Service (Enter Total of lines 18 thru 21)	\$3,483,732,279	\$2,999,896,238	
23	Leased to Others			
24	Depreciation	0	0	
25	Amortization and Depletion	0	0	
26	TOTAL Leased to Others (Enter Total of lines 24 and 25)	\$0	\$0	
27	Held for Future Use			
28	Depreciation	\$0	0	
29	Amortization	0	0	
30	TOTAL Held for Future Use (Enter Total of lines 28 and 29)	\$0	\$0	
31	Abandonment of Leases (Natural Gas)			
32	Amort. of Plant Acquisition Adj.	13,819,558	0	
33	TOTAL Accumulated Provisions (Should agree with line 14 above) (Enter Total of lines 22, 26, 30, 31 and 32)	\$3,497,551,837	\$2,999,896,238	

Name of Respondent MidAmerican Energy Company	This Report is: (1) <input checked="" type="checkbox"/> An Original (2) <input type="checkbox"/> A Resubmission	Date of Report (Mo, Day, Yr)	Year/Period of Report End of 2006/Q4
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**SUMMARY OF UTILITY PLANT AND ACCUMULATED PROVISIONS
FOR DEPRECIATION, AMORTIZATION AND DEPLETION (Continued)**

Gas (d)	Other (Specify) (e)	Other (Specify) (f)	Other (Specify) (g)	Common (h)	Line No
					1
					2
\$967,328,848					3
1,556,296					4
0					5
68,859,833					6
0					7
\$1,037,744,977	\$0	\$0	\$0	\$0	8
0					9
0					10
3,506,056					11
21,360,574					12
\$1,062,611,607	\$0	\$0	\$0	\$0	13
497,655,599	0	0	0	0	14
\$564,956,008	\$0	\$0	\$0	\$0	15
					16
					17
464,291,438					18
					19
					20
19,544,603					21
\$483,836,041	\$0	\$0	\$0	\$0	22
					23
0					24
0					25
\$0	\$0	\$0	\$0	\$0	26
					27
0					28
0					29
\$0	\$0	\$0	\$0	\$0	30
0					31
13,819,558					32
\$497,655,599	\$0	\$0	\$0	\$0	33

Name of Respondent MidAmerican Energy Company	This Report Is: (1) <input checked="" type="checkbox"/> An Original (2) <input type="checkbox"/> A Resubmission	Date of Report (Mo, Day, Yr) 12/31/2006	Year/Period of Report End of 2006/Q4
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GAS PLANT IN SERVICE (ACCOUNTS 101, 102, 103, and 106)

1. Report below the original cost of gas plant in service according to the prescribed accounts.
2. In addition to Account 101, Gas Plant in Service (Classified), this page and the next include Account 102, Gas Plant Purchased or Sold; Account 103, Experimental Gas Plant Unclassified; and Account 106, Completed Construction Not Classified-Gas.
3. Include in column (c) or (d), as appropriate, corrections of additions and retirements for the current or preceding year.
4. Enclose in parentheses credit adjustments of plant accounts to indicate the negative effect of such accounts.

5. Classify Account 106 according to prescribed accounts, on an estimated basis if necessary, and include the entries in column (c). Also to be included in column (c) are entries for reversals of tentative distributions of prior year reported in column (b). Likewise, if the respondent has a significant amount of plant retirements which have not been classified to primary accounts at the end of the year, include in column (d) a tentative distribution of such retirements, on an estimated basis, with appropriate contra entry to the account for accumulated depreciation provision. Include also in column (d) reversals of tentative distributions of prior year unclassified retirements. Attach supplemental statement showing the account distributions of these tentative classifications in columns (c) and (d), including the rever-

Line No.	Account (a)	Balance at Beginning of Year (b)	Additions (c)
1	1. INTANGIBLE PLANT		
2	301 Organization	\$ 176	
3	302 Franchises and Consents	215,349	
4	303 Miscellaneous Intangible Plant	23,523,245	441,706
5	Total Intangible Plant	23,738,770	441,706
6	2. PRODUCTION PLANT		
7	Natural Gas Production and Gathering Plant		
8	325.1 Producing Lands		
9	325.2 Producing Leaseholds		
10	325.3 Gas Rights		
11	325.4 Rights-of-Way		
12	325.5 Other Land and Land Rights		
13	326 Gas Well Structures		
14	327 Field Compressor Station Structures		
15	328 Field Meas. and Reg. Sta. Structures		
16	329 Other Structures		
17	330 Producing Gas Wells - Well Construction		
18	331 Producing Gas Wells - Well Equipment		
19	332 Field Lines		
20	333 Field Compressor Station Equipment		
21	334 Field Meas. and Reg. Sta. Equipment		
22	335 Drilling and Cleaning Equipment		
23	336 Purification Equipment		
24	337 Other Equipment		
25	338 Unsuccessful Exploration & Devel. Costs		
26	339 Asset Retirement Costs for Natural Gas Production and Gathering Plant		
27	Total Production and Gathering Plant		
28	Products Extraction Plant		
29	340 Land and Land Rights		
30	341 Structures and Improvements		
31	342 Extraction and Refining Equipment		
32	343 Pipe Lines		
33	344 Extracted Products Storage Equipment		
34	345 Compressor Equipment		
35	346 Gas Meas. and Reg. Equipment		
36	347 Other Equipment		
37	348 Asset Retirement Costs for Products Extraction Plant		
38	Total Products Extraction Plant		
39	Total Nat. Gas Production Plant		
40	Mfd. Gas Prod. Plant (Submit Suppl. Statement) (See Page 209A)	5,268,315	(993)
41	Total Production Plant	5,268,315	(993)

Name of Respondent MidAmerican Energy Company	This Report is: (1) <input checked="" type="checkbox"/> An Original (2) <input type="checkbox"/> A Resubmission	Date of Report (Mo, Day, Yr) 12/31/2006	Year/Period of Report End of 2006/Q4		
<p>sals of the prior years tentative account distributions of these amounts. Careful observance of the above instructions and the texts of Accounts 101 and 106 will avoid serious omissions of respondent's reported amount for plant actually in service at end of year.</p> <p>6. Show in column (f) reclassifications or transfers within utility plant accounts. Include also in column (f) the additions or reductions of primary account classifications arising from distribution of amounts initially recorded in Account 102. In showing the clearance of Account 102, include in column (e) the amounts with respect to accumulated provision for depreciation, acquisition adjustments, etc., and show in column (f) only the offset to the debits or credits to primary account classifications.</p> <p>7. For Account 399, state the nature and use of plant included in this account and if substantial in amount submit a supplementary statement showing subaccount classification of such plant conforming to the requirements of these pages.</p> <p>8. For each amount comprising and reported balance and changes in Account 102, state the property purchased or sold, name of vendor or purchaser, and date of transaction. If proposed journal entries have been filed with the Commission as required by the Uniform System of Accounts, give also date of such filing.</p>					
Retirements (d)	Adjustments (e)	Transfers (f)	Balance at End of Year (g)		Line No.
			\$ 176	301	1
			215,349	302	2
			23,964,951	303	3
0	0	0	24,180,476		4
					5
					6
					7
			-	325.1	8
			-	325.2	9
			-	325.3	10
			-	325.4	11
			-	325.5	12
			-	326	13
			-	327	14
			-	328	15
			-	329	16
			-	330	17
			-	331	18
			-	332	19
			-	333	20
			-	334	21
			-	335	22
			-	336	23
			-	337	24
			-	338	25
			-	339	26
			0		27
					28
			-	340	29
			-	341	30
			-	342	31
			-	343	32
			-	344	33
			-	345	34
			-	346	35
			-	347	36
			-	348	37
			-		38
			0		39
16,862			5,250,460		40
16,862	0	0	5,250,460		41

Name of Respondent MidAmerican Energy Company	This Report is: (1) <input checked="" type="checkbox"/> An Original (2) <input type="checkbox"/> A Resubmission	Date of Report (Mo, Day, Yr) 12/31/2006	Year/Period of Report End of 2006/Q4
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GAS PLANT IN SERVICE (ACCOUNTS 101, 102, 103, AND 106) (CONTINUED)

Line No.	Account (a)	Balance at Beginning of Year (b)	Additions (c)
42	3. NATURAL GAS STORAGE AND PROCESSING PLANT		
43	Underground Storage Plant		
44	350.1 Land		
45	350.2 Rights-of-Way		
46	351 Structures and Improvements		
47	352 Wells		
48	352.1 Storage Leaseholds and Rights		
49	352.2 Reservoirs		
50	352.3 Non-recoverable Natural Gas		
51	353 Lines		
52	354 Compressor Station Equipment		
53	355 Measuring and Reg. Equipment		
54	356 Purification Equipment		
55	357 Other Equipment		
56	358 Asset Retirement Costs for Underground Storage Plant		
57	Total Underground Storage Plant		
58	Other Storage Plant		
59	360 Land and Land Rights	211,968	
60	361 Structures and Improvements	2,871,026	213,369
61	362 Gas Holders	15,700,661	210,161
62	363 Purification Equipment	1,750,960	
63	363.1 Liquefaction Equipment	4,355,171	5,022,230
64	363.2 Vaporizing Equipment	1,036,615	14,608
65	363.3 Compressor Equipment	790,866	
66	363.4 Meas. and Reg. Equipment		
67	363.5 Other Equipment	5,824,220	(231,564)
68	363.6 Asset Retirement Costs for Other Storage Plant		
69	Total Other Storage Plant	32,541,487	5,228,804
70	Base Load Liquefied Natural Gas Terminating and Processing Plant		
71	364.1 Land and Land Rights		
72	364.2 Structures and Improvements		
73	364.3 LNG Processing Terminal Equipment		
74	364.4 LNG Transportation Equipment		
75	364.5 Measuring and Regulating Equipment		
76	364.6 Compressor Station Equipment		
77	364.7 Communications Equipment		
78	364.8 Other Equipment		
79	364.9 Asset Retirement Costs for Base Load Liquefied Natural Gas		
80	Terminating and Processing Plant		
81	Total Base Load Liquefied Natural Gas,		
82	Terminating and Processing Plant (lines 71-80)		
83	Total Nat. Gas Storage and Proc. Plant (Total of lines 57,69, and 82)	32,541,487	5,228,804
84	4. TRANSMISSION PLANT		
85	365.1 Land and Land Rights		
86	365.2 Rights-of-Way		
87	366 Structures and Improvements		
88	367 Mains		
89	368 Compressor Station Equipment		
90	369 Measuring and Reg. Sta. Equipment		
91	370 Communication Equipment		
92	371 Other Equipment		
93	372 Asset Retirement Costs for Transmission Plant		
94	Total Transmission Plant		

** MidAmerican Energy Company owns intrastate transmission lines that do not constitute a material portion of the overall distribution system; as such, these lines are classified as distribution lines for accounting purposes.

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Retirements (d)	Adjustments (e)	Transfers (f)	Balance at End of Year (g)		Line No.
					42
					43
			-	350.1	44
			-	350.2	45
			-	351	46
			-	352	47
			-	352.1	48
			-	352.2	49
			-	352.3	50
			-	353	51
			-	354	52
			-	355	53
			-	356	54
			-	357	55
			-	358	56
					57
					58
			211,968	360	59
			3,084,395	361	60
			15,910,822	362	61
			1,750,960	363	62
			9,377,401	363.1	63
			1,051,223	363.2	64
			790,866	363.3	65
				363.4	66
			5,592,656	363.5	67
			-	363.6	68
0	0	0	37,770,291		69
					70
			-	364.1	71
			-	364.2	72
			-	364.3	73
			-	364.4	74
			-	364.5	75
			-	364.6	76
			-	364.7	77
			-	364.8	78
			-	364.9	79
					80
					81
					82
0	0	0	37,770,291		83
					84
			-	365.1	85
			-	365.2	86
			-	366	87
			-	367	88
			-	368	89
			-	369	90
			-	370	91
			-	371	92
			-	372	93
					94

Name of Respondent MidAmerican Energy Company	This Report is: (1) <input checked="" type="checkbox"/> An Original (2) <input type="checkbox"/> A Resubmission	Date of Report (Mo, Day, Yr) 12/31/2006	Year/Period of Report End of 2006/Q4
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GAS PLANT IN SERVICE (ACCOUNTS 101, 102, 103, AND 106) (CONTINUED)

Line No.	Account (a)	Balance at Beginning of Year (b)	Additions (c)
95	5. DISTRIBUTION PLANT		
96	374 Land and Land Rights	3,625,318	(130,167)
97	375 Structures and Improvements	732,571	
98	376 Mains	444,407,431	21,139,702
99	377 Compressor Station Equipment		
100	378 Meas. and Reg. Sta. Equip. - General	20,141,107	785,373
101	379 Meas. and Reg. Sta. Equip. - City Gate	10,100,839	571,064
102	380 Services	258,640,453	11,839,054
103	381 Meters	83,650,880	5,086,721
104	382 Meter Installations		
105	383 House Regulators	19,218,858	772,633
106	384 House Reg. Installations		
107	385 Industrial Meas. and Reg. Sta. Equipment	4,236,420	53,064
108	386 Other Prop. on Customers' Premises		
109	387 Other Equipment		
110	388 Asset Retirement Costs for Distribution Plant		
111	Total Distribution Plant	844,753,877	40,117,444
112	6. GENERAL PLANT		
113	389 Land and Land Rights	1,103,603	(169,916)
114	390 Structures and Improvements	35,142,571	710,364
115	391 Office Furniture and Equipment	8,258,258	1,358,954
116	392 Transportation Equipment	24,355,283	327,616
117	393 Stores Equipment	217,971	(123,694)
118	394 Tools, Shop, and Garage Equipment	6,224,024	652,803
119	395 Laboratory Equipment	647,176	83,529
120	396 Power Operated Equipment	6,564,926	211,192
121	397 Communication Equipment	9,497,441	551,487
122	398 Miscellaneous Equipment	103,285	
123	Subtotal	92,114,538	3,602,335
124	399 Other Tangible Property		
125	399.1 Asset Retirement Costs for General Plant		
126	Total General Plant	92,114,538	3,602,335
127	Total (Accounts 101 and 106)	998,416,987	49,389,296
128	Gas Plant Purchased (See Instr. 8)		
129	(Less) Gas Plant Sold (See Instr. 8)		
130	Experimental Gas Plant Unclassified		
131	Total Gas Plant in Service	\$ 998,416,987	\$ 49,389,296

Name of Respondent MidAmerican Energy Company	This Report is: (1) <input checked="" type="checkbox"/> An Original (2) <input type="checkbox"/> A Resubmission	Date of Report (Mo, Day, Yr) 12/31/2006	Year/Period of Report End of 2006/Q4		
					95
			3,495,151	374	96
3,185			729,386	375	97
2,662,846			462,884,287	376	98
				377	99
57,057		17,337	20,886,760	378	100
22,295			10,649,608	379	101
2,972,272			267,507,235	380	102
1,434,217		(6,825)	87,296,559	381	103
				382	104
			19,991,491	383	105
				384	106
16,886		(10,512)	4,262,086	385	107
				386	108
				387	109
			-	388	110
7,168,758	0	0	877,702,563		111
					112
			933,687	389	113
280,796			35,572,139	390	114
1,256,122		1,037,684	9,398,774	391	115
648,233		19,153	24,053,819	392	116
1,325			92,952	393	117
2,496,202			4,380,625	394	118
115,867	(1)		614,837	395	119
372,519			6,403,599	396	120
316,428	1		9,732,501	397	121
1,327			101,958	398	122
5,488,819	0	1,056,837	91,284,891		123
			-	399	124
			-	399.1	125
5,488,819	0	1,056,837	91,284,891		126
12,674,439	0	1,056,837	1,036,188,681		127
					128
					129
					130
\$ 12,674,439	\$ -	\$ 1,056,837	\$ 1,036,188,681		131
					132

**MIDAMERICAN ENERGY COMPANY
EXHIBIT F**

1. The purpose of the filing is to renew MidAmerican Energy Company's natural gas pipeline Permit No. 966 issued on December 20, 1989.

The pipeline is approximately 30.02 miles long. It commences at Natural Gas Pipeline Company of America's west to east mainline in rural Montgomery County north of Red Oak, Iowa, and terminates in Shenandoah, Iowa, in Page County. The route of the pipeline is within Montgomery County and Page County, Iowa. The pipeline is necessary to provide natural gas service to the cities of Red Oak, Essex, Stanton, Shenandoah, and Farragut, Iowa.

2. The pipeline route is through an area that is rural in nature, and other than those areas where the pipeline is lying within road right-of-way the route is classified as agricultural land.

The pipeline crosses 1 railroad, 3 primary highways, 1 foreign pipeline and 2 streams.

The pipeline is constructed on a combination of private easements and in road right-of-way as described in Exhibit A.

MidAmerican's records do not address the possible use of alternative routes, but based on an evaluation of the existing route, MidAmerican believes the existing route was selected for the following reasons:

The route serves a number of rural customers.

No other route reduces the number of railroad and road crossings.

The existing route is nearly a direct path between the Natural Gas Pipeline Company of America mainline and the city of Shenandoah.

This pipeline and its location are consistent with the present land use and applicable zoning ordinances. To the best of Petitioner's knowledge, the pipeline and its location are consistent with future land use and zoning ordinances.

No new construction is proposed. Consequently, since no physical activity is contemplated or proposed, the inconvenience or undue injury which may result to property owners as a result of the granting of the permit for the pipeline in this docket should be nonexistent. The portion of the pipeline on rural ground is buried at a depth which will not interfere with farming operations.

3. The majority of the pipeline was constructed in 1953 with the remaining portion constructed in 1956. No amendments or reportable changes were issued since the last re-permit. An amendment to install approximately 5.27 miles of 4 inch plastic pipe was approved on July 30, 1993. An amendment to up-rate the steel portion of the line to 450 psig was filed on September 20, 2007 and is pending.

The pipeline was constructed, and will be tested, operated, and maintained to conform with or exceed the requirements of the Title 49 CFR Part 192, "Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards": with the requirements of IOWA ADMIN. CODE 199 – Chapters 9 and 10, and all other applicable local, state and federal regulations.



MidAmerican Energy
106 East Second Street
P.O. Box 4350
Davenport, IA 52808
563 333-8005 Telephone
563 333-8021 Fax
rpjared@midamerican.com

Robert P. Jared
Senior Attorney

January 14, 2008

By Overnight Delivery

FILED WITH
Executive Secretary
JAN 15 2008
IOWA UTILITIES BOARD

Ms. Judi Cooper
Executive Secretary
Iowa Utilities Board
350 Maple Street
Des Moines, Iowa 50319-0069

Re: Docket No. P-46
MidAmerican Energy Company

Dear Ms. Cooper:

MidAmerican Energy Company ("MidAmerican") submits an original and two copies of the following response to the Iowa Utilities Board Staff's December 20, 2007 review of MidAmerican's Petition for Renewal of Pipeline Permit No. R966. MidAmerican requests the revised exhibits be substituted, where appropriate, for those submitted earlier.

1. Petition

A revised Page 1 of 4 is included correcting the predecessor company to Iowa Power and Light Company.

2. Revised Exhibit C

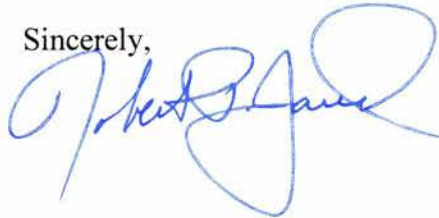
- a. The inlet pressure, outlet pressure, and flow rate have been revised.
- b. The % SMYS at MAOP has been revised.
- c. The % SMYS at MAOP has been revised.
- d. The % SMYS at MAOP has been revised.
- e. The % SMYS at MAOP has been revised.
- f. The date of the test has been included.
- g. A system MAOP determination form for the 60 psig system is included.

Judi Cooper
January 14, 2008
Page 2

- h. The % SMYS at MAOP has been revised.
 - i. The % SMYS at MAOP has been revised.
 - j. The % SMYS at MAOP has been revised.
 - k. The % SMYS at MAOP has been revised.
 - l. A notation has been entered that the line was originally constructed in 1953 and that no test records of the pressure test have been found.
 - m. The date of the test has been identified.
 - n. The Determination of Maximum Allowable Operating Pressure form has been replaced.
 - o. A system MAOP determination form for the 60 psig system is included.
3. Revised Exhibit F
- a. The date of the issuance of the permit has been revised.
 - b. The superfluous sentence has been deleted.

Thank you for your assistance.

Sincerely,

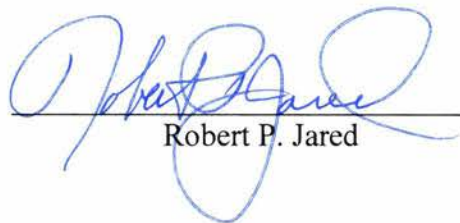
A handwritten signature in blue ink, appearing to read "Robert J. Jones", is written over the word "Sincerely,".

RPJ
Encl.

CERTIFICATE OF SERVICE

I hereby certify that I have on this 14th day of January, 2008, served three copies of the foregoing document upon the following party in accordance with the rules of the Iowa Utilities Board.

John R. Perkins
Office of Consumer Advocate
Department of Justice
310 Maple Street
Des Moines, Iowa 50319-0063


Robert P. Jared

STATE OF IOWA
DEPARTMENT OF COMMERCE
UTILITIES BOARD

<p>IN RE:</p> <p><u>MidAmerican Energy Company</u></p> <p>_____</p> <p>(company name)</p>	<p>DOCKET NO. P- <u>46</u></p>
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PETITION FOR RENEWAL OF PIPELINE PERMIT

COMES NOW MidAmerican Energy Company,
Petitioner and pursuant to Iowa Code chapter 479 (2007) states:

I

Petitioner is a corporation existing under the laws of the State of Iowa.
It is authorized to transact business in the State of Iowa. Its principal office is at 666 Grand Avenue,
Des Moines, Iowa 50306-0657

II

On the 20th day of December, 1982, the Iowa Utilities Board issued
Permit No. 966 to Iowa Power and Light Company, a predecessor corporation to
MidAmerican Energy Company

(Name and address of Company to which the permit was granted.)

to construct, operate and maintain a pipeline for the transportation of natural gas and for such
purpose to construct, reconstruct, repair or locate its pipes, pumps, pressure apparatus or other
stations, devices or equipment used in and on such line.

III

The pipeline is approximately 30.02 miles in length.

350 PRESSURE

IOWA UTILITIES BOARD
SPECIFICATIONS FOR PIPELINE
REVISED EXHIBIT "C-1"
8-INCH STEEL
MONTGOMERY AND PAGE COUNTIES

1. The proposed line will transport Natural Gas from NW ¼ of Sec. 35, T-73N, R-38W Montgomery County, Iowa to SE ¼ Sec. 6, T-70N, R-38W Page County, Iowa.
The maximum actual operating pressure of the line will be 350 psig. (See a.)
When operated at an inlet pressure of 350 psig and an outlet pressure of 306 psig it will transport 9852 (mcf) per day.
2. PIPE: Total length (mi) 14.17
Length in Location Class 1 X 2 _____ 3 _____ 4 _____ (See b.)
If more than one location class attach a map or description showing the locations of each class.
3. PIPE SPECIFICATIONS:
External diameter (in) 8.625 Wall thickness (in) .277"
Weight per foot (lb) 24.70 Minimum yield psi (SMYS) 35,000
Longitudinal seam type Low Frequency ERW Pipe Specification (API, ASME) API-5L
Type of coating Mill wrapped with Barretts Manufacturer of pipe Youngstown Steel & Tube
Pipeline Enamel and 15 lb. asbestos felt Republic Steel, National Tube
% SMYS at MAOP 15.57
If more than one type of pipe is used provide specifications for each type and attach a map or description showing where each is located.
4. Test Pressure (psig) 570* Test medium Natural Gas
For existing lines, the date(s) of the test Original Construction 1953
* This is the proposed Test Pressure to be established during the pipeline up-rate.
5. Maximum allowable operating pressure (MAOP), psig 350 (See c, d.)
Attach calculations showing how the MAOP was determined.
6. Type of cathodic protection. Anodes X Rectifier _____ Other (explain) _____
7. VALVES AND FLANGES:
API class or pressure rating for valves and flanges 500 WOG
Type of valve (plug, gate, ball, etc.) Plug
Method of valve connection (Flanged, screwed or welded) Flanged
Valve manufacturer's name and reference No. Walworth - Models 2720F & 2723F
Valve spacing 4.30, 5.77 miles.
Attach a map showing or describe the valve locations.
8. The contents of this pipeline are/will be odorized. Yes X No _____
9. The pipeline is/will be designed and constructed to accommodate the passage of instrumented internal inspection devices. Yes _____ No X (See e.)
If not, attach an explanation of why not, including the measures and degree of difficulty that would be necessary to allow the line to accommodate such devices.
10. STANDARDS: Unless otherwise indicated, all design, construction, operation and maintenance records will be in accordance with the appropriate federal and state regulations and standards. (See f.)
11. CROSSINGS: Listed on an attached sheet is the name and location (legal description) of each feature being crossed. (See Attachment)
- | | |
|----------------------------------|---------------------------------------|
| Railroads | Number of crossings <u>1</u> (See g.) |
| Primary Roads | Number of crossings <u>2</u> |
| Foreign Pipelines | Number of crossings <u>1</u> |
| Rivers, Streams, Bodies of Water | Number of crossings <u>0</u> (See h.) |

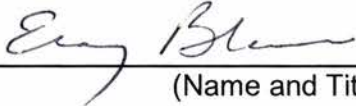
12. CONSTRUCTION:

If applicable, attached is information on any special design, construction, or test measures contemplated due to route conditions, environmentally sensitive areas, or other unusual circumstance.

The project has been designed and will be constructed to minimize the risk of damage to other utilities or disruption of service by those utilities. Petitioner will notify other utilities and exercise caution during construction in compliance with Iowa Code chapter 480.

The pipeline will be tested upon completion in accordance with the applicable provisions of 49 CFR Part 192, latest or replacement issue. The Utilities Board will be notified prior to testing, and after completion a written report will be filed showing the test method and results.

Name of applicant Eloy Blanco Date 1/9/05

Signed by  - SENIOR ENGINEER
(Name and Title)

REVISED ATTACHMENT TO EXHIBIT "C-2" - #3 (6" PIPELINE)

PIPE SPECIFICATIONS:

6" Steel Pipe – Installed 1953 & 1956 – 9.88 miles

External diameter (in)	<u>6.625</u>	Wall thickness (in)	<u>.280"</u>
Weight per foot (lb)	<u>18.99</u>	Minimum yield psi (SMYS)	<u>35,000</u>
Longitudinal seam type	<u>Low Frequency ERW</u>	Pipe Specification (API, ASME)	<u>API-5L</u>
Type of coating	<u>Mill wrapped with Barrets</u>	Manufacturer of pipe	<u>Youngstown Steel & Tube</u>
	<u>Pipeline Enamel and 15 lb. asbestos felt</u>		<u>Republic Steel, National Tube</u>
% SMYS at MAOP	<u>11.83</u>		

6" Steel Pipe – Installed 1994 – 0.12 miles

External diameter (in)	<u>6.625</u>	Wall thickness (in)	<u>.188"</u>
Weight per foot (lb)	<u>12.94</u>	Minimum yield psi (SMYS)	<u>35,000</u>
Longitudinal seam type	<u>ERW</u>	Pipe Specification (API, ASME)	<u>API-5L</u>
Type of coating	<u>Tapecoat P-TC50</u>	Manufacturer of pipe	<u>Unkown</u>
% SMYS at MAOP	<u>17.62</u>		

IOWA UTILITIES BOARD
SPECIFICATIONS FOR PIPELINE
REVISED EXHIBIT "C-3"

1. The proposed line will transport Natural Gas from SW ¼ of Sec. 23, T-72N, R-38W Montgomery County, Iowa to Red Oak, Iowa.
The maximum actual operating pressure of the line will be 350 psig. (See a.)
When operated at an inlet pressure of 328 psig and an outlet pressure of 312 psig it will transport 6730 (mcf) per day.
2. PIPE: Total length (mi) .58
Length in Location Class 1 X 2 _____ 3 _____ 4 _____ (See b.)
If more than one location class attach a map or description showing the locations of each class.
3. PIPE SPECIFICATIONS:
External diameter (in) 4.50 Wall thickness (in) .237"
Weight per foot (lb) 10.79 Minimum yield psi (SMYS) 30,000
Longitudinal seam type Low Frequency ERW Pipe Specification (API, ASME) API-5L
Type of coating Koppers 70B Mill Wrapped Manufacturer of pipe Youngstown Steel & Tube
Fiberglass & Kraft Paper
% SMYS at MAOP 11.08
If more than one type of pipe is used provide specifications for each type and attach a map or description showing where each is located.
4. Test Pressure (psig) 570* Test medium Natural Gas
For existing lines, the date(s) of the test Original construction in 1953. No records of pressure test.
* This is the proposed Test Pressure to be established during the pipeline up-rate.
5. Maximum allowable operating pressure (MAOP), psig 350 (See c, d.)
Attach calculations showing how the MAOP was determined.
6. Type of cathodic protection. Anodes X Rectifier _____ Other (explain) _____
7. VALVES AND FLANGES:
API class or pressure rating for valves and flanges 500 WOG
Type of valve (plug, gate, ball, etc.) Plug
Method of valve connection (Flanged, screwed or welded) Flanged
Valve manufacturer's name and reference No. Walworth - Model 2723F
Valve spacing .58 miles.
Attach a map showing or describe the valve locations.
8. The contents of this pipeline are/will be odorized. Yes X No _____
9. The pipeline is/will be designed and constructed to accommodate the passage of instrumented internal inspection devices. Yes _____ No X (See e.)
If not, attach an explanation of why not, including the measures and degree of difficulty that would be necessary to allow the line to accommodate such devices.
10. STANDARDS: Unless otherwise indicated, all design, construction, operation and maintenance records will be in accordance with the appropriate federal and state regulations and standards. (See f.)
11. CROSSINGS: Listed on an attached sheet is the name and location (legal description) of each feature being crossed.
- | | |
|----------------------------------|---------------------------------------|
| Railroads | Number of crossings <u>0</u> (See g.) |
| Primary Roads | Number of crossings <u>0</u> |
| Foreign Pipelines | Number of crossings <u>0</u> |
| Rivers, Streams, Bodies of Water | Number of crossings <u>0</u> (See h.) |

12. CONSTRUCTION:

If applicable, attached is information on any special design, construction, or test measures contemplated due to route conditions, environmentally sensitive areas, or other unusual circumstance.

The project has been designed and will be constructed to minimize the risk of damage to other utilities or disruption of service by those utilities. Petitioner will notify other utilities and exercise caution during construction in compliance with Iowa Code chapter 480.

The pipeline will be tested upon completion in accordance with the applicable provisions of 49 CFR Part 192, latest or replacement issue. The Utilities Board will be notified prior to testing, and after completion a written report will be filed showing the test method and results.

Name of applicant Eloy Blanco Date 1/9/08

Signed by Eloy Blanco - SENIOR ENGINEER
(Name and Title)

IOWA UTILITIES BOARD
SPECIFICATIONS FOR PIPELINE
REVISED EXHIBIT "C-4"

1. The proposed line will transport Natural Gas from SW ¼ of SW ¼ of Sec. 23, T-72N, R-38W Montgomery County, Iowa to SW ¼ of SE ¼ of Sec. 33, T-72N, R-37W Montgomery County, Iowa.

The maximum actual operating pressure of the line will be 60 psig. (See a.)

When operated at an inlet pressure of 60 psig and an outlet pressure of 51 psig it will transport 25 (mcf) per day.

2. PIPE: Total length (mi) 5.27
Length in Location Class 1 X 2 _____ 3 _____ 4 _____ (See b.)
If more than one location class attach a map or description showing the locations of each class.

3. PIPE SPECIFICATIONS:

External diameter (in) <u>4.50</u>	Wall thickness (in) <u>.414"</u>
Weight per foot (lb) <u>1.88</u>	Minimum yield psi (SMYS) <u>1250</u>
Longitudinal seam type <u>NA (Plastic)</u>	Pipe Specification <u>PE2406 SDR11.5</u>
Type of coating <u>NA (Plastic)</u>	Manufacturer of pipe <u>Plexco</u>

% SMYS at MAOP NA (Plastic)

If more than one type of pipe is used provide specifications for each type and attach a map or description showing where each is located.

4. Test Pressure (psig) 100 Test medium Air
For existing lines, the date(s) of the test August, 1993

5. Maximum allowable operating pressure (MAOP), psig 60 (See c, d.)
Attach calculations showing how the MAOP was determined.

6. Type of cathodic protection. Anodes _____ Rectifier _____ Other (explain) None (Plastic)

7. VALVES AND FLANGES:

API class or pressure rating for valves and flanges ANSI 150
Type of valve (plug, gate, ball, etc.) Plug
Method of valve connection (Flanged, screwed or welded) Welded
Valve manufacturer's name and reference No. Kerotest Plug Valve
Valve spacing 5.27 miles.

Attach a map showing or describe the valve locations.

8. The contents of this pipeline are/will be odorized. Yes X No _____

9. The pipeline is/will be designed and constructed to accommodate the passage of instrumented internal inspection devices. Yes _____ No X (See e.)

If not, attach an explanation of why not, including the measures and degree of difficulty that would be necessary to allow the line to accommodate such devices.

10. STANDARDS: Unless otherwise indicated, all design, construction, operation and maintenance records will be in accordance with the appropriate federal and state regulations and standards. (See f.)

11. CROSSINGS: Listed on an attached sheet is the name and location (legal description) of each feature being crossed. (See Attachment)

Railroads	Number of crossings <u>0</u> (See g.)
Primary Roads	Number of crossings <u>0</u>
Foreign Pipelines	Number of crossings <u>0</u>
Rivers, Streams, Bodies of Water	Number of crossings <u>2</u> (See h.)

12. CONSTRUCTION:

If applicable, attached is information on any special design, construction, or test measures contemplated due to route conditions, environmentally sensitive areas, or other unusual circumstance.

The project has been designed and will be constructed to minimize the risk of damage to other utilities or disruption of service by those utilities. Petitioner will notify other utilities and exercise caution during construction in compliance with Iowa Code chapter 480.

The pipeline will be tested upon completion in accordance with the applicable provisions of 49 CFR Part 192, latest or replacement issue. The Utilities Board will be notified prior to testing, and after completion a written report will be filed showing the test method and results.

Name of applicant Eloy Blanco Date 1/9/08

Signed by Eloy Blanco - SENIOR ENGINEER
(Name and Title)

MAOP System ID: 773 MAOP System Name: Trans/Feeder - RDOK671
 Service Center: Red Oak Service Center Town: RED_OAK_IA
 Location Class: 4 Active: Yes
 Designed MAOP: 60
 Remarks: system feeding from DRS 635 going east to Stanton

Regulator Stations:

Station ID	Location	Inlet Press.	Outlet Press.	Inlet MAOP	Outlet MAOP
0635	J AV & 200 ST	300	60	350	60

A) The design pressure of the weakest element of the segment. 192.619(a)(1), 192.621(a)(1), 192.113

Element Type	Rating / Design Pressure
Connected Fitting	75
Insulated Fitting	75
Main Segment	75
NonConnected Fitting	75
Reducer	75
Service Delivery Point	60
Service Regulator	60
Service Segment	75
Service Tap	75
Tee	75
Upstream regulator outlet	200
Valve	75

Lowest MAOP of the above: PSIG

B) If any cast iron pipe with unreinforced bell and spigot joints, 25 psig. 192.621(a)(3)

PSIG

C) If any plastic pipe, the minimum test pressure divided by a factor of 1.5. 192.619(a)(2)(i)

PSIG

D) If any steel pipe operating at 100 psig or above, the test pressure divided by a factor determined:

PSIG

Class Location	Installed Before 11-12-1970	Installed After 11-12-1970
1	1.1	1.1
2	1.25	1.25
3	1.4	1.5
4	1.4	1.5

E) The pressure determined to be maximum safe pressure after considering the history particularly known corrosion and the actual operating pressure.* 192.619(a)(4)

PSIG

F) The maximum inlet pressure for pressure relieving and pressure limiting devices that will not cause excessive pressure build-up on customer piping or will not exceed the MAOP of a connected downstream distribution system. 192.195, 192.619(b), 192.621(b)

PSIG

G) The highest actual operating pressure to which the segment was subjected during the period July 1, 1965 to July 1, 1970. 192.619(a)(3)*

PSIG

Approved Date: 05/08/2007

Approved By: WEATHERLY, JUDITH A

Calculated MAOP: PSIG

Remarks:

*If the actual operating pressures are used as the basis for establishing MAOP, a copy of the district regulator inspection form or the recording chart should be attached to this completed form.

450 PRESSURE

IOWA UTILITIES BOARD
 SPECIFICATIONS FOR PIPELINE
 REVISED EXHIBIT "C-1"
 8-INCH STEEL
 MONTGOMERY AND PAGE COUNTIES

1. The proposed line will transport Natural Gas from NW ¼ of Sec. 35, T-73N, R-38W Montgomery County, Iowa to SE ¼ Sec. 6, T-70N, R-38W Page County, Iowa.
 The maximum actual operating pressure of the line will be 450 psig. (See a.)
 When operated at an inlet pressure of 450 psig and an outlet pressure of 390 psig it will transport 15,290 (mcf) per day.

2. PIPE: Total length (mi) 14.17
 Length in Location Class 1 X 2 _____ 3 _____ 4 _____ (See b.)
 If more than one location class attach a map or description showing the locations of each class.

3. PIPE SPECIFICATIONS:
 External diameter (in) 8.625 Wall thickness (in) .277"
 Weight per foot (lb) 24.70 Minimum yield psi (SMYS) 35,000
 Longitudinal seam type Low Frequency ERW Pipe Specification (API, ASME) API-5L
 Type of coating Mill wrapped with Barretts Manufacturer of pipe Youngstown Steel & Tube
Pipeline Enamel and 15 lb. asbestos felt Republic Steel, National Tube
 % SMYS at MAOP 20.02
 If more than one type of pipe is used provide specifications for each type and attach a map or description showing where each is located.

4. Test Pressure (psig) 570* Test medium Natural Gas
 For existing lines, the date(s) of the test Original Construction 1953
 * This is the proposed Test Pressure to be established during the pipeline up-rate.

5. Maximum allowable operating pressure (MAOP), psig 450 (See c, d.)
 Attach calculations showing how the MAOP was determined.

6. Type of cathodic protection. Anodes X Rectifier _____ Other (explain) _____

7. VALVES AND FLANGES:
 API class or pressure rating for valves and flanges 500 WOG
 Type of valve (plug, gate, ball, etc.) Plug
 Method of valve connection (Flanged, screwed or welded) Flanged
 Valve manufacturer's name and reference No. Walworth - Models 2720F & 2723F
 Valve spacing 4.30, 5.77 miles.
 Attach a map showing or describe the valve locations.

8. The contents of this pipeline are/will be odorized. Yes X No _____

9. The pipeline is/will be designed and constructed to accommodate the passage of instrumented internal inspection devices. Yes _____ No X (See e.)
 If not, attach an explanation of why not, including the measures and degree of difficulty that would be necessary to allow the line to accommodate such devices.

10. STANDARDS: Unless otherwise indicated, all design, construction, operation and maintenance records will be in accordance with the appropriate federal and state regulations and standards. (See f.)

11. CROSSINGS: Listed on an attached sheet is the name and location (legal description) of each feature being crossed. (See Attachment)

Railroads	Number of crossings <u>1</u> (See g.)
Primary Roads	Number of crossings <u>2</u>
Foreign Pipelines	Number of crossings <u>1</u>
Rivers, Streams, Bodies of Water	Number of crossings <u>0</u> (See h.)

12. CONSTRUCTION:

If applicable, attached is information on any special design, construction, or test measures contemplated due to route conditions, environmentally sensitive areas, or other unusual circumstance.

The project has been designed and will be constructed to minimize the risk of damage to other utilities or disruption of service by those utilities. Petitioner will notify other utilities and exercise caution during construction in compliance with Iowa Code chapter 480.

The pipeline will be tested upon completion in accordance with the applicable provisions of 49 CFR Part 192, latest or replacement issue. The Utilities Board will be notified prior to testing, and after completion a written report will be filed showing the test method and results.

Name of applicant Eloy Blanco Date 1/9/08
Signed by Eloy Blanco - SENIOR ENGINEER
(Name and Title)

REVISED ATTACHMENT TO EXHIBIT "C-2" - #3 (6" PIPELINE)

PIPE SPECIFICATIONS:

6" Steel Pipe – Installed 1953 & 1956 – 9.88 miles

External diameter (in)	<u>6.625</u>	Wall thickness (in)	<u>.280"</u>
Weight per foot (lb)	<u>18.99</u>	Minimum yield psi (SMYS)	<u>35,000</u>
Longitudinal seam type	<u>Low Frequency ERW</u>	Pipe Specification (API, ASME)	<u>API-5L</u>
Type of coating	<u>Mill wrapped with Barrets</u>	Manufacturer of pipe	<u>Youngstown Steel & Tube</u>
	<u>Pipeline Enamel and 15 lb. asbestos felt</u>		<u>Republic Steel, National Tube</u>
% SMYS at MAOP	<u>15.21</u>		

6" Steel Pipe – Installed 1994 – 0.12 miles

External diameter (in)	<u>6.625</u>	Wall thickness (in)	<u>.188"</u>
Weight per foot (lb)	<u>12.94</u>	Minimum yield psi (SMYS)	<u>35,000</u>
Longitudinal seam type	<u>ERW</u>	Pipe Specification (API, ASME)	<u>API-5L</u>
Type of coating	<u>Tapecoat P-TC50</u>	Manufacturer of pipe	<u>Unkown</u>
% SMYS at MAOP	<u>22.65</u>		

IOWA UTILITIES BOARD
SPECIFICATIONS FOR PIPELINE
REVISED EXHIBIT "C-3"

1. The proposed line will transport Natural Gas from SW ¼ of Sec. 23, T-72N, R-38W Montgomery County, Iowa to Red Oak, Iowa.
The maximum actual operating pressure of the line will be 450 psig. (See a.)
When operated at an inlet pressure of 421 psig and an outlet pressure of 408 psig it will transport 6,580 (mcf) per day.
2. PIPE: Total length (mi) .58
Length in Location Class 1 X 2 _____ 3 _____ 4 _____ (See b.)
If more than one location class attach a map or description showing the locations of each class.
3. PIPE SPECIFICATIONS:
External diameter (in) 4.50 Wall thickness (in) .237"
Weight per foot (lb) 10.79 Minimum yield psi (SMYS) 30,000
Longitudinal seam type Low Frequency ERW Pipe Specification (API, ASME) API-5L
Type of coating Koppers 70B Mill Wrapped Manufacturer of pipe Youngstown Steel & Tube
Fiberglass & Kraft Paper
% SMYS at MAOP 14.24
If more than one type of pipe is used provide specifications for each type and attach a map or description showing where each is located.
4. Test Pressure (psig) 570* Test medium Natural Gas
For existing lines, the date(s) of the test Original construction in 1953. No records of pressure test.
* This is the proposed Test Pressure to be established during the pipeline up-rate.
5. Maximum allowable operating pressure (MAOP), psig 450 (See c, d.)
Attach calculations showing how the MAOP was determined.
6. Type of cathodic protection. Anodes X Rectifier _____ Other (explain) _____
7. VALVES AND FLANGES:
API class or pressure rating for valves and flanges 500 WOG
Type of valve (plug, gate, ball, etc.) Plug
Method of valve connection (Flanged, screwed or welded) Flanged
Valve manufacturer's name and reference No. Walworth - Model 2723F
Valve spacing .58 miles.
Attach a map showing or describe the valve locations.
8. The contents of this pipeline are/will be odorized. Yes X No _____
9. The pipeline is/will be designed and constructed to accommodate the passage of instrumented internal inspection devices. Yes _____ No X (See e.)
If not, attach an explanation of why not, including the measures and degree of difficulty that would be necessary to allow the line to accommodate such devices.
10. STANDARDS: Unless otherwise indicated, all design, construction, operation and maintenance records will be in accordance with the appropriate federal and state regulations and standards. (See f.)
11. CROSSINGS: Listed on an attached sheet is the name and location (legal description) of each feature being crossed.
- | | |
|----------------------------------|---------------------------------------|
| Railroads | Number of crossings <u>0</u> (See g.) |
| Primary Roads | Number of crossings <u>0</u> |
| Foreign Pipelines | Number of crossings <u>0</u> |
| Rivers, Streams, Bodies of Water | Number of crossings <u>0</u> (See h.) |

12. CONSTRUCTION:

If applicable, attached is information on any special design, construction, or test measures contemplated due to route conditions, environmentally sensitive areas, or other unusual circumstance.

The project has been designed and will be constructed to minimize the risk of damage to other utilities or disruption of service by those utilities. Petitioner will notify other utilities and exercise caution during construction in compliance with Iowa Code chapter 480.

The pipeline will be tested upon completion in accordance with the applicable provisions of 49 CFR Part 192, latest or replacement issue. The Utilities Board will be notified prior to testing, and after completion a written report will be filed showing the test method and results.

Name of applicant Eloy Blanco Date 1/9/08

Signed by Eloy Blanco - SENIOR ENGINEER
(Name and Title)

IOWA UTILITIES BOARD
SPECIFICATIONS FOR PIPELINE
REVISED EXHIBIT "C-4"

1. The proposed line will transport Natural Gas from SW ¼ of SW ¼ of Sec. 23, T-72N, R-38W Montgomery County, Iowa to SW ¼ of SE ¼ of Sec. 33, T-72N, R-37W Montgomery County, Iowa.
The maximum actual operating pressure of the line will be 60 psig. (See a.)
When operated at an inlet pressure of 60 psig and an outlet pressure of 51 psig it will transport 25 (mcf) per day.
2. PIPE: Total length (mi) 5.27
Length in Location Class 1 X 2 _____ 3 _____ 4 _____ (See b.)
If more than one location class attach a map or description showing the locations of each class.
3. PIPE SPECIFICATIONS:
External diameter (in) 4.50 Wall thickness (in) .414"
Weight per foot (lb) 1.88 Minimum yield psi (SMYS) 1250
Longitudinal seam type NA (Plastic) Pipe Specification PE2406 SDR11.5
Type of coating NA (Plastic) Manufacturer of pipe Plexco

% SMYS at MAOP NA (Plastic)
If more than one type of pipe is used provide specifications for each type and attach a map or description showing where each is located.
4. Test Pressure (psig) 100 Test medium Air
For existing lines, the date(s) of the test August, 1993
5. Maximum allowable operating pressure (MAOP), psig 60 (See c, d.)
Attach calculations showing how the MAOP was determined.
6. Type of cathodic protection. Anodes _____ Rectifier _____ Other (explain) None (Plastic)
7. VALVES AND FLANGES:
API class or pressure rating for valves and flanges ANSI 150
Type of valve (plug, gate, ball, etc.) Plug
Method of valve connection (Flanged, screwed or welded) Welded
Valve manufacturer's name and reference No. Kerotest Plug Valve
Valve spacing 5.27 miles.
Attach a map showing or describe the valve locations.
8. The contents of this pipeline are/will be odorized. Yes X No _____
9. The pipeline is/will be designed and constructed to accommodate the passage of instrumented internal inspection devices. Yes _____ No X (See e.)
If not, attach an explanation of why not, including the measures and degree of difficulty that would be necessary to allow the line to accommodate such devices.
10. STANDARDS: Unless otherwise indicated, all design, construction, operation and maintenance records will be in accordance with the appropriate federal and state regulations and standards. (See f.)
11. CROSSINGS: Listed on an attached sheet is the name and location (legal description) of each feature being crossed. (See Attachment)
- | | |
|----------------------------------|---------------------------------------|
| Railroads | Number of crossings <u>0</u> (See g.) |
| Primary Roads | Number of crossings <u>0</u> |
| Foreign Pipelines | Number of crossings <u>0</u> |
| Rivers, Streams, Bodies of Water | Number of crossings <u>2</u> (See h.) |

12. CONSTRUCTION:

If applicable, attached is information on any special design, construction, or test measures contemplated due to route conditions, environmentally sensitive areas, or other unusual circumstance.

The project has been designed and will be constructed to minimize the risk of damage to other utilities or disruption of service by those utilities. Petitioner will notify other utilities and exercise caution during construction in compliance with Iowa Code chapter 480.

The pipeline will be tested upon completion in accordance with the applicable provisions of 49 CFR Part 192, latest or replacement issue. The Utilities Board will be notified prior to testing, and after completion a written report will be filed showing the test method and results.

Name of applicant Eloy Blanco Date 1/9/08

Signed by Eloy Blanco - SENIOR ENGINEER
(Name and Title)

MIDAMERICAN ENERGY COMPANY
REVISED EXHIBIT "C-5"

RED OAK TO SHENANDOAH GAS TRANSMISSION LINE
MONTGOMERY AND PAGE COUNTIES, IOWA

DETERMINATION OF MAXIMUM ALLOWABLE OPERATING PRESSURE

192.619 Maximum allowable operating pressure: Steel or Plastic Pipelines

(a) (1): Design Pressure: Lowest design pressure for any of the following system components:

Pipe

4" API 5L GRADE A 0.237" wall thickness
(S=30,000 SYMS, t = 0.237", D = 4.50", F = .6 for class 1, E = 1 for ERW, T = 1)
Maximum Design Pressure = $(2St/D)*F*E*T = 1896$ psig

6" API 5L GRADE B 0.280" wall thickness
(S=35,000 SYMS, t = 0.280", D = 6.625", F = .6 for class 1, E = 1 for ERW, T = 1)
Maximum Design Pressure = $(2St/D)*F*E*T = 1775$ psig

6" API 5L GRADE B 0.188" wall thickness
(S=35,000 SYMS, t = 0.188", D = 6.625", F = .6 for class 1, E = 1 for ERW, T = 1)
Maximum Design Pressure = $(2St/D)*F*E*T = 1192$ psig

8" API 5L GRADE B 0.277" wall thickness
(S=35,000 SYMS, t = 0.277", D = 8.625", F = .6 for class 1, E = 1 for ERW, T = 1)
Maximum Design Pressure = $(2St/D)*F*E*T = 1349$ psig

Valves

Walworth Fig. 2723F 500 WOG, 500 MAOP 8" flanged (Multiple Locations)
Walworth Fig. 2720F 500 WOG, 500 MAOP 4" flanged (Multiple Locations)
Walworth Fig. 2723F 500 WOG, 500 MAOP 6" flanged (Multiple Locations)
Kerotest Model 1S07 ANSI 300 (Inlet Valve - Stanton Tap Sta.) 720 MAOP 1" welded
Kerotest Model 1WS7 ANSI 300 (Inlet Valve - Reg. Sta. 0642) 720 MAOP 1-1/4" welded
Kerotest Model 1WL5 500 WOG (Inlet Valve to Red Oak TBS-S) 500 MAOP 2" welded

Flanges

ANSI – 300 class MAOP = 720 psig
ANSI – 400 class MAOP = 960 psig

(a) (2): Test date and test pressure:

Line will be retested at 562.5 psig while in service using natural gas
New MAOP = new test pressure / 1.25 (for class 1 locations) = $562.5 / 1.25 = 450$ psig

(a) (3): The highest actual operating pressure for five years preceding 7-1-70:

N/A – the line will be retested in accordance with subpart K

(a) (4): Pressure determined by operator to be the maximum safe pressure:

The line has no history of active corrosion. MEC believes the line can be safely operated above 450 psig.

Determination of MAOP

The lowest pressure on any of the lines above: 450 psig.

MAOP System ID:	773	MAOP System Name:	Trans/Feeder - RDOK671
Service Center:	Red Oak Service Center	Town:	RED_OAK_IA
Location Class:	4	Active:	Yes
Designed MAOP:	60		
Remarks:	system feeding from DRS 635 going east to Stanton		

Regulator Stations:

Station ID	Location	Inlet Press.	Outlet Press.	Inlet MAOP	Outlet MAOP
0635	J AV & 200 ST	300	60	350	60

A) The design pressure of the weakest element of the segment. 192.619(a)(1), 192.621(a)(1), 192.113

Element Type	Rating / Design Pressure
Connected Fitting	75
Insulated Fitting	75
Main Segment	75
NonConnected Fitting	75
Reducer	75
Service Delivery Point	60
Service Regulator	60
Service Segment	75
Service Tap	75
Tee	75
Upstream regulator outlet	200
Valve	75

Lowest MAOP of the above: PSIG

B) If any cast iron pipe with unreinforced bell and spigot joints, 25 psig. 192.621(a)(3) PSIG

C) If any plastic pipe, the minimum test pressure divided by a factor of 1.5. 192.619(a)(2)(i) PSIG

D) If any steel pipe operating at 100 psig or above, the test pressure divided by a factor determined: PSIG

Class Location	Installed Before 11-12-1970	Installed After 11-12-1970
1	1.1	1.1
2	1.25	1.25
3	1.4	1.5
4	1.4	1.5

E) The pressure determined to be maximum safe pressure after considering the history particularly known corrosion and the actual operating pressure.* 192.619(a)(4) PSIG

F) The maximum inlet pressure for pressure relieving and pressure limiting devices that will not cause excessive pressure build-up on customer piping or will not exceed the MAOP of a connected downstream distribution system. 192.195, 192.619(b), 192.621(b) PSIG

G) The highest actual operating pressure to which the segment was subjected during the period July 1, 1965 to July 1, 1970. 192.619(a)(3)* PSIG

Approved Date: 05/08/2007

Approved By: WEATHERLY, JUDITH A

Calculated MAOP: PSIG

Remarks:

*If the actual operating pressures are used as the basis for establishing MAOP, a copy of the district regulator inspection form or the recording chart should be attached to this completed form.

**MIDAMERICAN ENERGY COMPANY
REVISED EXHIBIT F**

1. The purpose of the filing is to renew MidAmerican Energy Company's natural gas pipeline Permit No. 966 issued on December 20, 1982.

The pipeline is approximately 30.02 miles long. It commences at Natural Gas Pipeline Company of America's west to east mainline in rural Montgomery County north of Red Oak, Iowa, and terminates in Shenandoah, Iowa, in Page County. The route of the pipeline is within Montgomery County and Page County, Iowa. The pipeline is necessary to provide natural gas service to the cities of Red Oak, Essex, Stanton, Shenandoah, and Farragut, Iowa.

2. The pipeline route is through an area that is rural in nature, and other than those areas where the pipeline is lying within road right-of-way the route is classified as agricultural land.

The pipeline crosses 1 railroad, 3 primary highways, 1 foreign pipeline and 2 streams.

The pipeline is constructed on a combination of private easements and in road right-of-way as described in Exhibit A.

MidAmerican's records do not address the possible use of alternative routes, but based on an evaluation of the existing route, MidAmerican believes the existing route was selected for the following reasons:

The route serves a number of rural customers.

No other route reduces the number of railroad and road crossings.

The existing route is nearly a direct path between the Natural Gas Pipeline Company of America mainline and the city of Shenandoah.

This pipeline and its location are consistent with the present land use and applicable zoning ordinances. To the best of Petitioner's knowledge, the pipeline and its location are consistent with future land use and zoning ordinances.

No new construction is proposed. Consequently, since no physical activity is contemplated or proposed, the inconvenience or undue injury which may result to property owners as a result of the granting of the permit for the pipeline in this docket should be nonexistent. The portion of the pipeline on rural ground is buried at a depth which will not interfere with farming operations.

3. The majority of the pipeline was constructed in 1953 with the remaining portion constructed in 1956. An amendment to install approximately 5.27 miles of 4 inch plastic pipe was approved on July 30, 1993. An amendment to up-rate the steel portion of the line to 450 psig was filed on September 20, 2007 and is pending.

The pipeline was constructed, and will be tested, operated, and maintained to conform with or exceed the requirements of the Title 49 CFR Part 192, "Transportation of Natural and Other Gas by Pipeline: Minimum Federal Safety Standards": with the requirements of IOWA ADMIN. CODE 199 – Chapters 9 and 10, and all other applicable local, state and federal regulations.

IOWA STATE COMMERCE COMMISSION

IN THE MATTER OF THE PETITION OF IOWA POWER AND LIGHT COMPANY FOR RENEWAL OF PERMIT TO CONSTRUCT, OPERATE AND MAINTAIN A PIPELINE. DOCKET NO. P- 46

PETITION

Comes now Iowa Power and Light Company, 666 Grand Avenue, P.O. Box 657, Des Moines, Iowa 50303 (Company name and mailing address)

authorized to transact business in the State of Iowa, and hereby petitions the Iowa State Commerce Commission, under the provisions of Chapter 479, Code of Iowa 1981, for Renewal of Permit for a period of Twenty-five (25) years beyond the expiration date of the Permit now held by it and herein described.

I

On the 2nd day of April, 1957, the Iowa State Commerce Commission issued Permit No. 46 to the Iowa Power and Light Company (Name and address of company to which permit was granted)

666 Grand Avenue, P.O. Box 657, Des Moines, Iowa 50303 to construct, operate and maintain a pipeline for the transportation of Natural Gas and for such purpose to construct, reconstruct, repair or locate its pipes, pumps, pressure apparatus or other stations, devices or equipment used in and upon such line.

Assignments, Amendatory Orders or Resolutions if any were issued in this Docket on N/A (Dates)

II

The pipeline is approximately 24.67 miles in length. 14.17 Miles 8" 10.00 Miles 6" 0.50 Miles 4"

III

A legal description of the pipeline route is provided in Exhibit "A", attached hereto and by this reference is made a part hereof.

IV

A map showing the pipeline route, including all highway, railroad, and stream crossings and other pertinent features, is provided in Exhibit "B", attached hereto and by this reference is made a part hereof.

V

The engineering features, materials and manner of construction of said pipeline are shown in Exhibit "C" attached hereto and by this reference is made a part hereof.



Showing that the financial accountability of the Petitioner conforms to the provisions of Chapter 479, Code of Iowa 1981, is provided in Exhibit "D", attached hereto and by this reference is made a part hereof.

NOW THEREFORE, your Petitioner respectfully prays that:

1. The Iowa State Commerce Commission fix a time and place for hearing in the matter of this Petition for Renewal of Permit and request that proper notice be prepared for publication.
2. The Petitioner be granted a Renewal Permit under the provisions of Chapter 479, Code of Iowa 1981, and all the rights, privileges, orders, limitations and restrictions of the original permit be renewed with the granting of a Renewal Permit.

Dated this 27th day of July, 1982.

Iowa Power and Light Co.
 (Company)
 By Mike Vincent
Super. Gas Engineering
 (Official Title)

STATE OF Iowa)
)
 COUNTY OF Polk) SS.

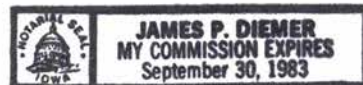
I, Mike Vincent being duly sworn, on oath state that I am Supervisor, Gas Engineering of applicant above named and that I have authority to execute the foregoing instrument and that I have read the foregoing petition and know the contents thereof, and that statements therein contained are true and correct as I verily believe.

Mike Vincent

Subscribed and sworn to before me by the said Mike Vincent
 this 27th day of July, 1982

James P. Diemer
 Notary Public
 My commission expires on _____

(SEAL)



MONTGOMERY COUNTY

Exhibit "A"

An 8 inch diameter gas pipeline beginning approximately 0.20 miles south of the northwest corner of Section 35, Township 73 North, Range 38 West of the 5th P.M., Montgomery County, Iowa, thence south adjacent to the east margin of a road along the west line of said Section 35 approximately 0.80 miles. Beginning near the northwest corner of Section 2, Township 72 North, Range 38 West of the 5th P.M., Montgomery County, Iowa, thence south adjacent to the east margin of a road on the west line of said Section 2 and Sections 11 and 14, a distance of approximately 2.25 miles, thence southeast into the Southwest Quarter of the Northwest Quarter ($SW\frac{1}{4} NW\frac{1}{4}$) of said Section 14 approximately 0.20 miles, thence continuing south thru said Southwest Quarter of the Northwest Quarter ($SW\frac{1}{4} NW\frac{1}{4}$) and into the Southwest Quarter ($SW\frac{1}{4}$) of said Section 14 a distance of approximately 0.55 miles. Beginning approximately 0.10 miles east of the northwest corner of Section 23, Township 72 North, Range 38 West of the 5th P.M., Montgomery County, Iowa, thence south parallel with the west line of said Section 23 and 26 a distance of approximately 1.10 miles, thence southwesterly across a road into Section 27, of said township and range, thence south adjacent to the west margin of said road on the east line of said Section 27 and 34 a distance of approximately 1.40 miles, thence west in the north margin of a road along the east-west centerline of said Section 34 a distance of approximately 0.10 miles, thence southwesterly across a road onto private property through the West Half ($W\frac{1}{2}$) of the Southeast Quarter ($SE\frac{1}{4}$), the $SW\frac{1}{4}$ of said Section 34 a distance of approximately 0.60 miles to a point that is approximately 0.50 miles west of the southeast corner of said Section 34.

MONTGOMERY COUNTY

Exhibit "A"

Beginning approximately 0.50 miles west of the northeast corner of Section 3, Township 71 North, Range 38 West of the 5th P.M., Montgomery County, Iowa, thence southwest on private property through the West Half of said Section 3, the Northwest Quarter of the Northwest Quarter of the Northwest Quarter ($NW\frac{1}{4} NW\frac{1}{4} NW\frac{1}{4}$) of Section 10, the East Half ($E\frac{1}{2}$) of Section 9, the Northeast Quarter ($NE\frac{1}{4}$), the Northwest Quarter ($NW\frac{1}{4}$) and the East Half ($E\frac{1}{2}$) of the Southwest Quarter ($SW\frac{1}{4}$) of Section 16, the Northwest Quarter ($NW\frac{1}{4}$), the Northwest Quarter of the Southwest Quarter ($NW\frac{1}{4}SW\frac{1}{4}$) of Section 21, all in last named township and range, a distance of approximately 3.90 miles to a point that is approximately 0.32 miles north of the southwest corner of said Section 21, thence west across Iowa Highway 48, thence southwest through the Northeast Quarter of the Southeast Quarter ($NE\frac{1}{4} SE\frac{1}{4}$), the Southeast Quarter of the Southeast Quarter ($SE\frac{1}{4} SE\frac{1}{4}$) of Section 20, the Northeast Quarter ($NE\frac{1}{4}$), the Northwest Quarter of the Southeast Quarter ($NW\frac{1}{4} SE\frac{1}{4}$), and Southwest Quarter ($SW\frac{1}{4}$) of Section 29, and into the Northwest Quarter of the Northwest Quarter ($NW\frac{1}{4}NW\frac{1}{4}$) of Section 32, all in said township and range a distance of approximately 1.40 miles to a point that is approximately 0.25 miles east and 0.05 miles south of the northwest corner of Section 32, thence continuing south through the Northwest Quarter ($NW\frac{1}{4}$) of said Section 32 on private right of way a distance of approximately 0.50 miles, thence southwest through the Southwest Quarter ($SW\frac{1}{4}$) of said Section 32 of said township and range a distance of approximately 0.50 miles, to a point that is approximately 10 feet east of the southwest corner of said Section 32.

Total distance of 8" pipeline is approximately 13.30 miles.

MONTGOMERY COUNTY

Exhibit "A"

A 4 inch diameter pipeline beginning approximately 50 feet east and 0.25 miles north of the southwest corner of Section 23, Township 72 North, Range 38 West of the 5th P.M., Montgomery County, Iowa, thence west on private right of way into Section 22, of said township and range, a distance of approximately 0.50 miles to the Town Border Station of the City of Red Oak.

Total distance of 4" is approximately 0.50 mile.

PAGE COUNTY

Exhibit "A"

An 8-inch pipeline beginning approximately 10 feet east of the northwest corner of Section 5, Township 70 North, Range 38 West of the 5th P.M., Page County, Iowa, thence southwesterly 30 feet to a point that is approximately 30 feet south of the northwest corner of said Section 5, thence south adjacent to the west line of said Section 5 in the Northwest Quarter of the Northwest Quarter ($NW\frac{1}{4} NW\frac{1}{4}$) a distance of approximately 0.25 miles, thence southwest on private property crossing the southeast corner of the Northeast Quarter of the Northeast Quarter ($NE\frac{1}{4} NE\frac{1}{4}$), the Southeast Quarter of the Northeast Quarter ($SE\frac{1}{4} NE\frac{1}{4}$) and the Northeast Quarter of the Southeast Quarter ($NE\frac{1}{4} SE\frac{1}{4}$) and the Northwest Quarter of the Southeast Quarter ($NW\frac{1}{4} SE\frac{1}{4}$) of Section 6, of said township and range approximately 0.62 miles.

Total distance of 8-inch pipeline is approximately 0.87 miles.

A 6-inch gas pipeline beginning approximately 0.25 miles north and 0.25 miles west of the southeast corner of Section 6, Township 70 North, Range 38 West of the 5th P.M., Page County, Iowa, thence southwest on private property through the Southeast Quarter ($SE\frac{1}{4}$) of said Section 6, the Northwest Quarter of the Northeast Quarter ($NW\frac{1}{4} NE\frac{1}{4}$), the Northeast Quarter of the Northwest Quarter ($NE\frac{1}{4} NW\frac{1}{4}$), the Southeast Quarter of the Northwest Quarter ($SE\frac{1}{4} NW\frac{1}{4}$), the Northeast Quarter of the Southwest Quarter ($NE\frac{1}{4} SW\frac{1}{4}$), the Northwest Quarter of

PAGE COUNTY

Exhibit "A"

the Southwest Quarter ($NW\frac{1}{4} SW\frac{1}{4}$), the Southwest Quarter of the Southwest Quarter ($SW\frac{1}{4} SW\frac{1}{4}$), Section 7, thence continuing south and southwest into the Northwest Quarter ($NW\frac{1}{4}$) of Section 18 a distance of approximately 1.70 miles to a point that is approximately 0.25 miles south of the northwest corner of said Section 18, all in last named township and range.

Beginning approximately 0.25 miles south of the northeast corner of Section 13, Township 70 North, Range 39 West of the 5th P.M., Page County, Iowa, thence southwest in said Section 13 onto private property through the Northeast Quarter ($NE\frac{1}{4}$), the Northeast Quarter of the Southeast Quarter ($NE\frac{1}{4} SE\frac{1}{4}$), the Northwest Quarter of the Southeast Quarter ($NW\frac{1}{4} SE\frac{1}{4}$), the Southwest Quarter of the Southeast Quarter ($SW\frac{1}{4} SE\frac{1}{4}$), thence continuing southwest into Section 24, said township and range, through the Northwest Quarter of the Northeast Quarter ($NW\frac{1}{4} NE\frac{1}{4}$), the Southwest Quarter of the Northeast Quarter ($SW\frac{1}{4} NE\frac{1}{4}$) the Southeast Quarter of the Northwest Quarter ($SE\frac{1}{4} NW\frac{1}{4}$), the East Half ($E\frac{1}{2}$) of the Southwest Quarter ($SW\frac{1}{4}$) and continuing south and southwesterly into Section 25, said township and range, through the Northeast Quarter of the Northwest Quarter ($NE\frac{1}{4} NW\frac{1}{4}$), the Northwest Quarter of the Northwest Quarter ($NW\frac{1}{4} NW\frac{1}{4}$) the Southwest Quarter of the Northwest Quarter ($SW\frac{1}{4} NW\frac{1}{4}$) thence continuing southwest into Section 26, said township and range, into the Southeast Quarter of the Northeast Quarter ($SE\frac{1}{4} NE\frac{1}{4}$), and the Southeast Quarter ($SE\frac{1}{4}$),

PAGE COUNTY

Exhibit "A"

thence continuing southwest into Section 35, said township and range through the Northeast Quarter ($NE\frac{1}{4}$), the East Half ($E\frac{1}{2}$) of the Northwest Quarter ($NW\frac{1}{4}$) and the Southwest Quarter ($SW\frac{1}{4}$), also the Southeast Quarter of the Southeast Quarter ($SE\frac{1}{4} SE\frac{1}{4}$) of Section 34, all in last named township and range a distance of approximately 4.50 miles to a point that is approximately 0.15 miles west of the southeast corner of said Section 34.

Beginning approximately 0.15 miles west of the northeast corner of Section 3, Township 69 North, Range 39 West of the 5th P.M., Page County, Iowa, thence southwest on private property through the Northeast Quarter ($NE\frac{1}{4}$), the Northwest Quarter ($NW\frac{1}{4}$), and the Southwest Quarter ($SW\frac{1}{4}$) of said Section 3, thence continuing southwest into the Northwest Quarter ($NW\frac{1}{4}$) of Section 10, the Northeast Quarter ($NE\frac{1}{4}$), the Southeast Quarter ($SE\frac{1}{4}$), and the Southwest Quarter ($SW\frac{1}{4}$) of Section 9, the Northwest Quarter ($NW\frac{1}{4}$) of Section 16, the Southeast Quarter of the Northeast Quarter ($SE\frac{1}{4} NE\frac{1}{4}$) and the Southeast Quarter ($SE\frac{1}{4}$) of Section 17 a distance of approximately 3.80 miles to a point that is located in the Southeast Quarter of the Southwest Quarter ($SE\frac{1}{4} SW\frac{1}{4}$) near the north-south centerline of said Section 17, all in last named township and range, to the Shenandoah Town Border Station.

Total distance of 6" pipeline is approximately 10.00 miles.

IOWA STATE COMMERCE COMMISSION
 SPECIFICATIONS FOR PIPELINE
 EXHIBIT "C"

Use separate sheet for each size pipe. Answer all questions fully. Attach additional 8½" x 11" sheets as needed.

1. The proposed pipeline will transport Natural Gas from SW¼ Sec.23 to Sec.22-72-38, Iowa to Red Oak, Iowa. Montgomery County
 The maximum actual operating pressure of the line will be 350 psi. (See a.)
 When operated at an inlet pressure of 250 psi and an outlet pressure of 150 psi it will transport 9,300 (mcf.) ~~(bbls.)~~ per day.

2. PIPE: Mileage 0.50 Type of joints Electric Arc Weld
 Internal diameter 4.026 Class Location 1 (2) 3 4 (See b.)
 External diameter 4.50 Max. allowable operating psi 360 (See b.)
 Weight (foot) 10.79 Minimum yield psi 30,000
 Lengths (feet) 40' Random Minimum test psi 500 (See b.)
 Tensile strength psi 65,000 Pipe specification API-5L
 Manufacturer of pipe Youngstown Steel & Tube

3. Name and method of coating Koppers 70B Mill Wrapped - Fiberglass and Kraft Paper

4. Type of cathodic protection 17 lb. Anodes

5. VALVES:

Test pressure 1000 Flanged, screwed or welded Flanged
 Manufacturer's name, type and reference No. Walworth 2723F Lubricated Plug
 Approximate spacing At town border Station at SW¼ Sec 22-72-38, Montgomery County

6. STANDARDS: Unless otherwise indicated, all design, construction, operation, and maintenance will be in accordance with the appropriate federal and state regulations and standards.

7. CROSSINGS: Listed on an attached sheet is the name and location (legal description) of each feature being crossed.

Railroads	Number of crossings	<u>0</u>	(See c.)
Primary Roads	Number of crossings	<u>0</u>	
Foreign Pipelines	Number of crossings	<u>0</u>	
Rivers, Streams, Bodies of Water	Number of crossings	<u>0</u>	(See d.)

8. CONSTRUCTION:

If applicable, attached is information on any special design, construction, or test measures contemplated due to route conditions, environmentally sensitive areas, or other unusual circumstance.

Prior to construction other utilities will be contacted to determine the location of facilities which could be affected by the project and arrangements made to minimize disruption of services.

The pipeline will be tested upon completion in accordance with the applicable provisions of 49 CFR Part 192 or 195, latest or replacement issue. The Commission will be notified prior to testing, and after completion a written report will be filed showing the test method and results.

Name of applicant IOWA POWER AND LIGHT COMPANY Date 7/27/82

Signed by Mike Vincent Supt. Gas Engineering
 (Name and Title)

INSTRUCTIONS

- a. Maximum actual operating pressure is the maximum operating pressure that will exist in the piping system during a normal annual operating cycle. Unless otherwise requested by the petitioner, this pressure is the amount which will be specified in the operating permit, when and if issued.
- b. See 49 CFR Part 192 or 195, latest or replacement issue.
- c. Active lines only. Any abandoned railroad rights-of-way (as defined in Chapter 471.15, Code of Iowa) shall be identified on an attached list or on Exhibit "B".
- d. Shall include all navigable waters, meandered streams, streams exceeding 100 feet in width between high water marks, and any stream where a crossing permit is required by another regulatory agency or agencies. Identify the agencies.

ISCC 9/15/81



IOWA STATE COMMERCE COMMISSION
 SPECIFICATIONS FOR PIPELINE
 EXHIBIT "C"

Use separate sheet for each size pipe. Answer all questions fully. Attach additional 8½" x 11" sheets as needed.

1. The proposed pipeline will transport natural gas from SF1NW Sec 35, T-70N, R-39W Iowa to Shenandoah, Iowa. Page 3 County
 The maximum actual operating pressure of the line will be 350 psi. (See a.)
 When operated at an inlet pressure of 250 psi and an outlet pressure of 150 psi it will transport 6,250 (mcf.) ~~(bbls.)~~ per day.

2. PIPE: Mileage 10.00 Type of joints Electric Arc Weld
 Internal diameter 6.065 Class Location (1) 2 3 4 (See b.)
 External diameter 6.625 Max. allowable operating psi 360 (See b.)
 Weight (foot) 17.02 lbs. Minimum yield psi 35,000
 Lengths (feet) 40' random Minimum test psi 400 (See b.)
 Tensile strength psi 65,000 Pipe specification API 5L
 Manufacturer of pipe Youngstown Steel, Republic Steel & National Tube

3. Name and method of coating Mill wrapped with Barretts Pipeline Enamel and 15 lbs. asbestos felt

4. Type of cathodic protection 17 lb. Mg. Anodes

5. VALVES:
 Test pressure 1000 Flanged, screwed or welded flanged
 Manufacturer's name, type and reference No. Walworth, lubricated plug,
 Approximate spacing 5 miles. 2720F and 2723F

6. STANDARDS: Unless otherwise indicated, all design, construction, operation, and maintenance will be in accordance with the appropriate federal and state regulations and standards.

7. CROSSINGS: Listed on an attached sheet is the name and location (legal description) of each feature being crossed.
 Railroads Number of crossings 0 (See c.)
 Primary Roads Number of crossings 1
 Foreign Pipelines Number of crossings 0
 Rivers, Streams, Bodies of Water Number of crossings 0 (See d.)

8. CONSTRUCTION:
 If applicable, attached is information on any special design, construction, or test measures contemplated due to route conditions, environmentally sensitive areas, or other unusual circumstance.

Prior to construction other utilities will be contacted to determine the location of facilities which could be affected by the project and arrangements made to minimize disruption of services.

The pipeline will be tested upon completion in accordance with the applicable provisions of 49 CFR Part 192 or 195, latest or replacement issue. The Commission will be notified prior to testing, and after completion a written report will be filed showing the test method and results.

Name of applicant IOWA POWER AND LIGHT COMPANY Date 7/27/82

Signed by Mike Vincent Supv. Gas Engineering
 (Name and Title)

INSTRUCTIONS

- a. Maximum actual operating pressure is the maximum operating pressure that will exist in the piping system during a normal annual operating cycle. Unless otherwise requested by the petitioner, this pressure is the amount which will be specified in the operating permit, when and if issued.
- b. See 49 CFR Part 192 or 195, latest or replacement issue.
- c. Active lines only. Any abandoned railroad rights-of-way (as defined in Chapter 471.15, Code of Iowa) shall be identified on an attached list or on Exhibit "B".
- d. Shall include all navigable waters, meandered streams, streams exceeding 100 feet in width between high water marks, and any stream where a crossing permit is required by another regulatory agency or agencies. Identify the agencies.

ISCC 9/15/81



ATTACHMENT TO EXHIBIT "C" 6" LINE

One highway crossing under Iowa Highway 48, as follows:

The Southwest Quarter (SW $\frac{1}{4}$) Section 24, and the Northwest Quarter Section 25, all in Township 70 North, Range 39 West of the 5th P.M., Page County.

IOWA STATE COMMERCE COMMISSION
 SPECIFICATIONS FOR PIPELINE
 EXHIBIT "C"

Use separate sheet for each size pipe. Answer all questions fully. Attach additional 8½" x 11" sheets as needed.

1. The proposed pipeline will transport Natural Gas from NGPL Stennett, Iowa Iowa to S.E. NW¼ Sec 35, T-70N, R-39W, Iowa. The maximum actual operating pressure of the line will be 350 psi. (See a.) When operated at an inlet pressure of 250 psi and an outlet pressure of 150 psi it will transport 6250 (mcf.) (~~lbs.~~) per day.
2. PIPE: Mileage 14.17 Type of joints Electric Arc Weld
 Internal diameter 8.071 Class Location (1) 2 3 4 (See b.)
 External diameter 8.625 inches Max. allowable operating psi 350 (See b.)
 Weight (foot) 24.7 lbs. Minimum yield psi 35,000 lbs.
 Lengths (feet) 40' Random Minimum test psi 400 (See b.)
 Tensile strength psi 65,000 psi Pipe specification API 5L
 Manufacturer of pipe Youngstown-Republic & National Tube
3. Name and method of coating Barretts Pipeline Enamel & 15 lb. asbestos felt
4. Type of cathodic protection 17 lb. mg. anodes
5. VALVES:
 Test pressure 1,000 lbs. Flanged, screwed or welded flanged
 Manufacturer's name, type and reference No. Walworth lubricated plug valves
 Approximate spacing 5 miles. #2720F & 2723F
6. STANDARDS: Unless otherwise indicated, all design, construction, operation, and maintenance will be in accordance with the appropriate federal and state regulations and standards.
7. CROSSINGS: Listed on an attached sheet is the name and location (legal description) of each feature being crossed.
 Railroads Number of crossings 1 (See c.)
 Primary Roads Number of crossings 2
 Foreign Pipelines Number of crossings 0
 Rivers, Streams, Bodies of Water Number of crossings 0 (See d.)
8. CONSTRUCTION:
 If applicable, attached is information on any special design, construction, or test measures contemplated due to route conditions, environmentally sensitive areas, or other unusual circumstance.
 Prior to construction other utilities will be contacted to determine the location of facilities which could be affected by the project and arrangements made to minimize disruption of services.
 The pipeline will be tested upon completion in accordance with the applicable provisions of 49 CFR Part 192 or 195, latest or replacement issue. The Commission will be notified prior to testing, and after completion a written report will be filed showing the test method and results.

Name of applicant IOWA POWER AND LIGHT COMPANY Date 7/27/82
 Signed by Mike Vincent Supt. Gas Engineering
 (Name and Title)

INSTRUCTIONS

- a. Maximum actual operating pressure is the maximum operating pressure that will exist in the piping system during a normal annual operating cycle. Unless otherwise requested by the petitioner, this pressure is the amount which will be specified in the operating permit, when and if issued.
- b. See 49 CFR Part 192 or 195, latest or replacement issue.
- c. Active lines only. Any abandoned railroad rights-of-way (as defined in Chapter 471.15, Code of Iowa) shall be identified on an attached list or on Exhibit "B".
- d. Shall include all navigable waters, meandered streams, streams exceeding 100 feet in width between high water marks, and any stream where a crossing permit is required by another regulatory agency or agencies. Identify the agencies.

ISCC 9/15/81

RECEIVED
SECRETARY'S OFFICE

SEP 28 1982

IOWA PUBLIC SERVICE COMMISSION

ATTACHMENT TO EXHIBIT "C" 8" LINE

One railroad crossing located in the Southeast Quarter of the Northeast Quarter ($SE\frac{1}{4} NE\frac{1}{4}$) of Section 27, Township 72 North, Range 38 West of the 5th P.M., Montgomery County, Iowa.

Iowa Highway 48 primary road crossing located as follows:

The Southwest Quarter ($SW\frac{1}{4}$) Section 21 to the Southeast Quarter ($SE\frac{1}{4}$) Section 20, Township 71 North, Range 38 West of the 5th P.M., Montgomery County, Iowa.

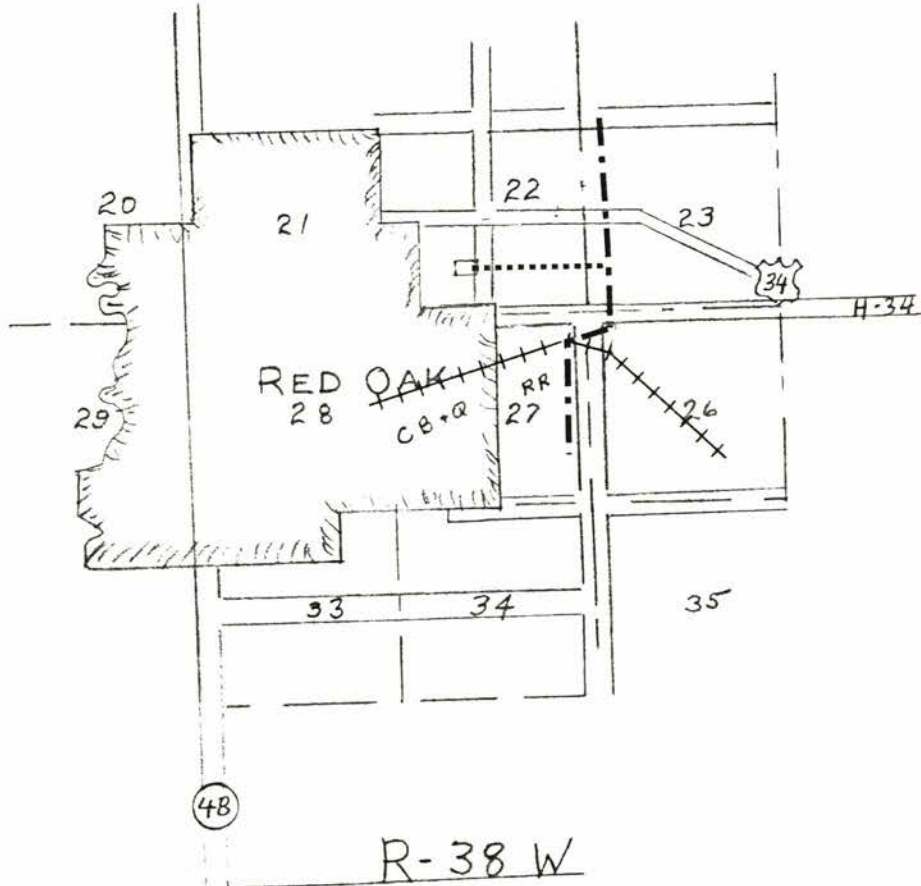
Highway crossing U.S. 34 near the southwest corner of the Northwest Quarter ($NW\frac{1}{4}$) to the northwest corner of the Southwest Quarter ($SW\frac{1}{4}$) Section 23, Township 72 North, Range 38 West of the 5th P.M., Montgomery County, Iowa.

MONTGOMERY
COUNTY

R-38 W



T-72 N



T-72 N

R-38 W

4" IOWA POWER &
LIGHT CO.
666 GRAND AVE
Des MOINES, Ia 50309

IOWA POWER AND LIGHT CO.	
4" Pipeline Red Oak Tap To Border Station.	
DRAWN BY J. Dieter	DATE: 5-26-82
CHECKED	SCALE 1" = 1 Mile
APPROVED	EXHIBIT "B"
APPROVED	



R-39W

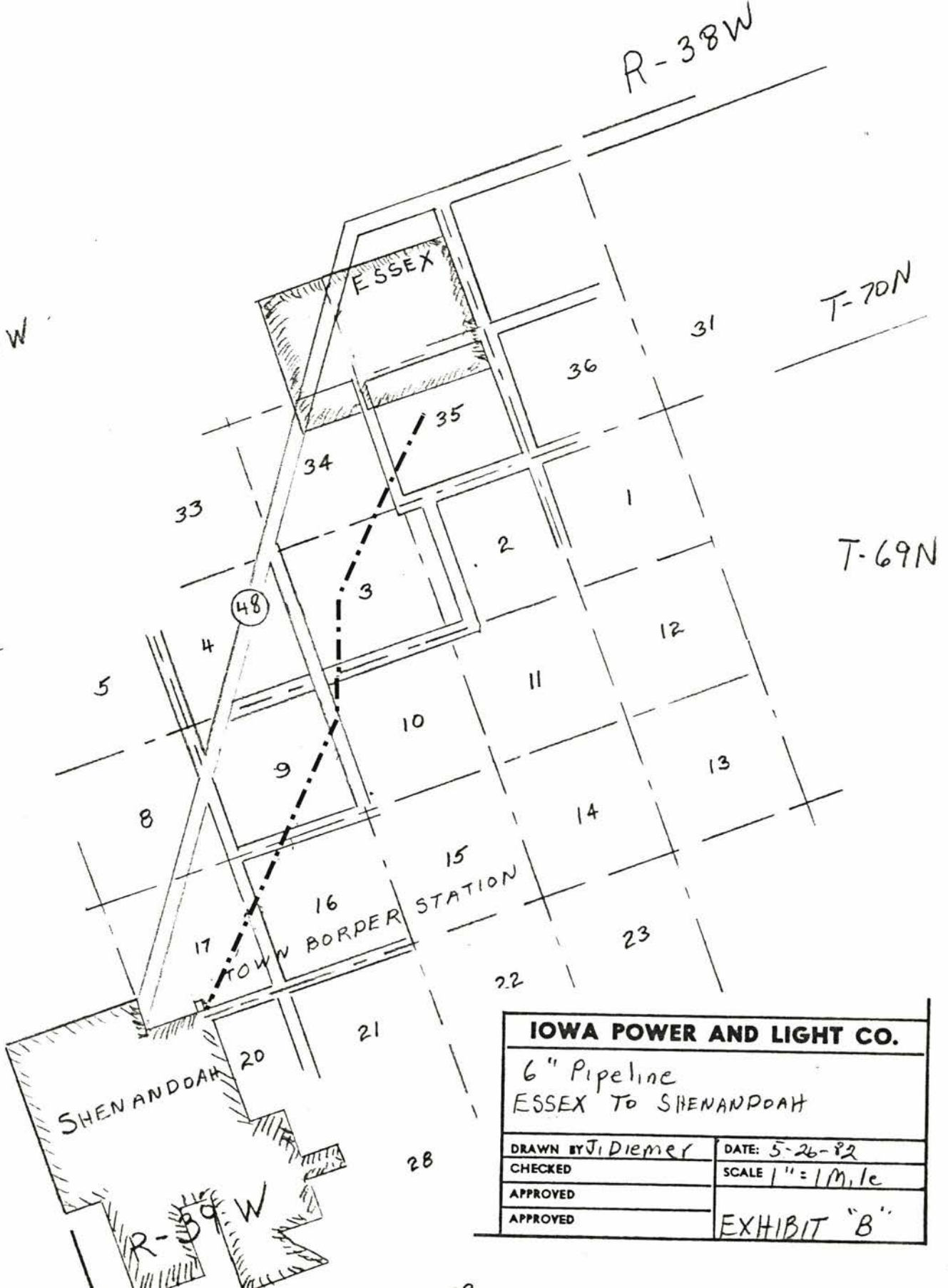
R-38W

T-70N

T-70N

T-69N

T-69N



IOWA POWER AND LIGHT CO.

6" Pipeline
ESSEX TO SHENANDOAH

DRAWN BY Jidiemer

DATE: 5-26-82

CHECKED

SCALE 1" = 1 Mile

APPROVED

APPROVED

EXHIBIT "B"

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549



FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report March 5, 1982

. Iowa Power and Light Company
(Exact name of registrant as specified in its charter)

. Iowa 1-3567 42-0334050
(State or other jurisdiction (Commission (I.R.S. Employer
of incorporation) File Number) Identification No.)

. 666 Grand Avenue, P.O. Box 657, Des Moines, Iowa 50303
(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code 515-281-2900

Item 5. Other Materially Important Events

The following financial statements of Iowa Power and Light Company and report of independent public accountants are filed as exhibits herewith:

<u>Document</u>	<u>Exhibit No.</u>
Selected Financial Data	A
Report of Independent Public Accountants.....	B
Statement of Income for the three years ended December 31, 1981.....	C
Balance Sheet as of December 31, 1981 and 1980.....	D
Statement of Retained Earnings for the three years ended December 31, 1981.....	E
Statement of Changes in Financial Position for the three years ended December 31, 1981.....	F
Notes to Financial Statements.....	G

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Iowa Power and Light Company
.....
(Registrant)

Date March 5, 1982

..... J. P. Glahn
..... J. P. Glahn
Vice President and Treasurer
(Principal Financial Officer)

EXHIBIT A

IOWA POWER AND LIGHT COMPANY

SELECTED FINANCIAL DATA

	Year Ended December 31				
	<u>1981</u>	<u>1980</u>	<u>1979</u>	<u>1978</u>	<u>1977</u>
	(In Thousands)				
Revenues	\$326,335	\$295,185	\$268,889	\$227,155	\$199,486
Operating income	50,716	46,653	44,416	33,300	28,886
Net income available to common stock	31,987	27,376	26,577	24,685	18,825
Total assets	1,068,524	964,641	918,642	834,813	762,246
Long-term debt	283,512	270,887	250,471	213,163	209,290
Cumulative preferred stock without sinking fund	44,961	44,961	45,000	45,000	45,000
Cumulative preferred stock with sinking fund	28,492	28,923	9,500	10,000	10,000
Common equity	244,085	212,848	204,031	180,480	165,932
Total capitalization	601,050	557,619	509,002	448,643	430,222
Power purchase contract	211,483	205,112	209,910	214,483	218,848

REPORT OF INDEPENDENT PUBLIC ACCOUNTANTS

To Iowa Power and Light Company:

We have examined the balance sheet of IOWA POWER AND LIGHT COMPANY (an Iowa corporation and wholly-owned subsidiary of Iowa Resources Inc.) as of December 31, 1981 and 1980, and the related statements of income, retained earnings and changes in financial position for each of the three years in the period ended December 31, 1981. Our examinations were made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

In our auditors' report dated January 28, 1981, our opinion on the 1980 and 1979 financial statements was qualified as being subject to the effect, if any, of the regulatory decisions on the accounting for a nuclear fuel advance and electric and gas rate increases collected subject to refund. As explained in Note 2 of Notes to Financial Statements, the Iowa State Commerce Commission reached its decision on July 31, 1981, and a rate refund was recorded in 1981. As a result, our opinion qualification with respect to the 1980 and 1979 financial statements is removed.

In our opinion, the financial statements referred to above present fairly the financial position of Iowa Power and Light Company as of December 31, 1981 and 1980, and the results of its operations and the changes in its financial position for each of the three years in the period ended December 31, 1981, in conformity with generally accepted accounting principles applied on a consistent basis.

ARTHUR ANDERSEN & CO.

Des Moines, Iowa
February 19, 1982

IOWA POWER AND LIGHT COMPANY

STATEMENT OF INCOME

FOR THE THREE YEARS ENDED DECEMBER 31, 1981

(In Thousands)

	<u>1981</u>	<u>1980</u>	<u>1979</u>
OPERATING REVENUES (Notes 1 & 2)			
Electric.....	\$220,120	\$202,119	\$180,164
Gas.....	106,215	93,066	88,725
	<u>326,335</u>	<u>295,185</u>	<u>268,889</u>
OPERATING EXPENSES			
Operation-			
Purchased power-nuclear(Note 3)	46,085	41,151	34,399
Interchanged power, net.....	(10,566)	(16,487)	(15,877)
Electric production fuel.....	42,904	42,051	33,391
Gas purchased for resale.....	84,767	70,195	67,194
Other operation.....	40,656	35,779	32,441
Maintenance.....	19,638	15,796	14,184
Depreciation (Note 1).....	25,404	23,668	22,070
Income taxes (Note 1).....	7,382	18,666	20,044
Property and other taxes	19,349	17,713	16,629
	<u>275,619</u>	<u>248,532</u>	<u>224,475</u>
OPERATING INCOME			
Electric.....	47,238	41,946	40,272
Gas.....	3,478	4,707	4,142
	<u>50,716</u>	<u>46,653</u>	<u>44,414</u>
OTHER INCOME (DEDUCTIONS)			
Allowance for equity funds used during construction and carrying costs accrued on advances (Notes 1 and 3).....	6,417	3,788	2,572
Other, net.....	(313)	(80)	185
	<u>6,104</u>	<u>3,708</u>	<u>2,757</u>
Income before interest charges.	<u>56,820</u>	<u>50,361</u>	<u>47,171</u>
INTEREST CHARGES			
Interest on long-term debt.....	21,679	20,512	17,789
Interest on short-term debt.....	10,654	4,363	3,289
Allowance for borrowed funds used during construction and carrying costs accrued on advances (Notes 1 and 3).....	(13,279)	(6,747)	(4,406)
	<u>19,054</u>	<u>18,128</u>	<u>16,672</u>
NET INCOME (Note 2).....	37,766	32,233	30,499
Preferred stock dividends.....	5,779	4,857	3,922
NET INCOME AVAILABLE TO COMMON STOCK (Note 2).....	<u>\$ 31,987</u>	<u>\$ 27,376</u>	<u>\$ 26,577</u>

The accompanying notes are an
integral part of this statement.

IOWA POWER AND LIGHT COMPANY
BALANCE SHEET - DECEMBER 31, 1981 AND 1980
(In Thousands)

	1981	1980	CAPITALIZATION AND LIABILITIES	1981	1980
PROPERTY AND OTHER ASSETS					
UTILITY PLANT, at original cost (Notes 1 and 6):					
Electric	\$704,340	\$624,982	COMMON EQUITY (Note 4):	\$ 75,865	\$ 75,865
Gas	94,757	91,085	Common stock--authorized 8,000,000 shares, par value \$10, outstanding 7,586,456 shares	95,567	71,521
	<u>799,097</u>	<u>716,067</u>	Additional paid-in capital	<u>72,653</u>	<u>65,462</u>
Less-accumulated provisions for depreciation	(216,437)	(193,394)	Retained earnings, per accompanying statement	<u>244,085</u>	<u>212,848</u>
	<u>582,660</u>	<u>522,673</u>			
Construction work in progress	137,296	128,285	CUMULATIVE PREFERRED STOCK - authorized 800,000 shares, par value \$100 (Note 5):		
PRODUCTIVE CAPACITY UNDER POWER PURCHASE CONTRACT (Note 3)	<u>719,956</u>	<u>650,958</u>	Without sinking fund -		
	216,513	209,910	49,850 shares, 3.30%	4,985	4,985
ADVANCES, INCLUDING CARRYING COSTS AND NET OF AMORTIZATION (NOTE 3):			50,000 shares, 4.40%	5,000	5,000
Nuclear fuel advance	20,037	16,856	49,950 shares, 4.35%	4,995	4,995
Capital improvements	<u>13,321</u>	<u>3,603</u>	49,908 shares, 4.80%	4,991	4,991
	33,358	20,459	100,000 shares, 7.84%	10,000	10,000
			149,900 shares, 8.50%	14,990	14,990
			44,961	<u>44,961</u>	<u>44,961</u>
			With sinking fund -		
			84,920 and 89,230 shares, 10.20%	8,492	8,492
			200,000 shares, 9.75%	20,000	20,000
				<u>28,492</u>	<u>28,492</u>
			LONG-TERM DEBT (Note 6)	<u>283,512</u>	<u>270,887</u>
CURRENT ASSETS:			Total capitalization	601,050	557,619
Cash and short-term investments	2,441	2,900	POWER PURCHASE CONTRACT (Note 3)	211,483	205,112
Accounts receivable, less reserves of \$524 and \$446, respectively	35,129	27,494	CURRENT LIABILITIES:		
Accounts receivable from affiliated companies	2,956	371	Commercial paper outstanding (Note 7)	38,965	33,060
Materials and supplies, at average cost	9,487	8,999	Customer refunds payable at 17.35%	38,965	33,060
Electric production fuel, at average cost	20,287	25,315	3½% First Mortgage bonds due May 15, 1982	23,458	-
Prepayments and other	<u>3,386</u>	<u>3,178</u>	Current portion of power purchase contract (Note 3)	8,422	-
	73,686	68,257	Accounts payable	5,030	4,798
			Dividends declared	43,360	39,631
			Taxes accrued	8,128	6,954
			Interest accrued	20,698	19,448
			Other	7,104	6,368
				<u>1,900</u>	<u>1,512</u>
				157,065	111,771
DEFERRED CHARGES AND OTHER ASSETS:			RESERVES AND DEFERRED CREDITS:		
Construction and other funds held by pollution control revenue bond trustee	6,682	711	Accumulated deferred income taxes (Note 1)	51,952	50,551
Other	<u>18,329</u>	<u>14,166</u>	Unamortized investment tax credit (Note 1)	40,294	37,297
	25,011	14,877	Other	6,680	2,111
				<u>98,926</u>	<u>89,959</u>
				<u>\$1,068,524</u>	<u>\$964,461</u>

The accompanying notes are an integral part of this statement.

EXHIBIT D

IOWA POWER AND LIGHT COMPANYSTATEMENT OF RETAINED EARNINGSFOR THE THREE YEARS ENDED DECEMBER 31, 1981(In Thousands)

	<u>1981</u>	<u>1980</u>	<u>1979</u>
BALANCE, beginning of year	\$ 65,462	\$ 59,119	\$ 51,275
ADD - Net income (Note 2)	<u>37,766</u>	<u>32,233</u>	<u>30,499</u>
	<u>103,228</u>	<u>91,352</u>	<u>81,774</u>
DEDUCT:			
Cash dividends-			
3.30% cumulative preferred stock	164	165	165
4.40% cumulative preferred stock	220	220	220
4.35% cumulative preferred stock	217	218	218
4.80% cumulative preferred stock	240	240	240
7.84% cumulative preferred stock	784	784	784
10.20% cumulative preferred stock	930	980	1,020
8.50% cumulative preferred stock	1,274	1,275	1,275
9.75% cumulative preferred stock	1,950	975	-
Common stock	24,792	20,741	18,668
Other	<u>4</u>	<u>292</u>	<u>65</u>
	<u>30,575</u>	<u>25,890</u>	<u>22,655</u>
BALANCE, end of year	<u>\$ 72,653</u>	<u>\$ 65,462</u>	<u>\$ 59,119</u>

The accompanying notes are an integral part of this statement.

EXHIBIT F

IOWA POWER AND LIGHT COMPANY

STATEMENT OF CHANGES IN FINANCIAL POSITION

FOR THE THREE YEARS ENDED DECEMBER 31, 1981

(In Thousands)

	<u>1981</u>	<u>1980</u>	<u>1979</u>
SOURCES OF FUNDS			
Operations:			
Net income (Note 2).....	\$37,766	\$32,233	\$30,499
Add items not requiring current outlay of funds			
Depreciation and amortization.	27,622	25,159	23,458
Amortization of nuclear fuel advance	7,633	6,198	-
Deferred income taxes, net....	1,401	6,270	6,511
Deferral of investment tax credit, net.....	2,997	5,065	6,368
Allowance for funds used during construction and carrying costs accrued on advances (Note 1)..	<u>(19,696)</u>	<u>(10,535)</u>	<u>(6,978)</u>
	<u>57,723</u>	<u>64,390</u>	<u>59,858</u>
Change In Working Capital			
Exclusive of Current Maturities:			
Cash and short-term investments.	459	(466)	(1,251)
Accounts receivable.....	(7,635)	(246)	(2,029)
Accounts receivable from affiliated companies.....	(2,585)	6,268	(6,639)
Materials, supplies and electric production fuel.....	4,540	(1,829)	(13,928)
Commercial paper.....	5,905	(11,285)	9,870
Accounts payable.....	3,729	5,624	2,774
Taxes accrued.....	1,250	(2,393)	5,154
Customer refunds payable.....	23,458	-	-
Other, net.....	<u>2,322</u>	<u>957</u>	<u>1,374</u>
	<u>31,443</u>	<u>(3,370)</u>	<u>(4,675)</u>
Financing And Other:			
Sale of common stock, net proceeds	-	-	15,671
Sale of preferred stock, net proceeds.....	-	19,712	-
Sale of long-term debt, net proceeds.....	-	29,655	29,414
Bank credit agreement.....	-	(8,500)	8,500
Investments in subsidiary companies	-	-	6,515
Capital contribution from parent company.....	24,046	2,474	-
Pollution control revenue bond proceeds received from trustees.	15,409	1,351	3,783
Other, net.....	<u>3,941</u>	<u>322</u>	<u>6,251</u>
	<u>43,396</u>	<u>45,014</u>	<u>70,134</u>
	<u>\$132,562</u>	<u>\$106,034</u>	<u>\$125,317</u>
APPLICATION OF FUNDS:			
Property additions			
Electric.....	\$89,354	\$74,058	\$71,742
Gas.....	6,008	5,911	8,998
	<u>95,362</u>	<u>79,969</u>	<u>80,740</u>
Nuclear fuel advance.....	10,814	1,991	21,063
Advance for capital improvements.....	10,091	3,603	-
Allowance for funds.....	<u>(19,696)</u>	<u>(10,535)</u>	<u>(6,978)</u>
	<u>96,571</u>	<u>75,028</u>	<u>94,825</u>
Cash dividends declared.....	30,571	25,598	22,590
Current maturity of long-term debt.....	-	-	6,389
Other, net.....	<u>5,420</u>	<u>5,408</u>	<u>1,513</u>
Total	<u>\$132,562</u>	<u>\$106,034</u>	<u>\$125,317</u>

The accompanying notes are an integral part of this statement.

IOWA POWER AND LIGHT COMPANYNOTES TO FINANCIAL STATEMENTS

(1) Summary of Significant Accounting Policies:

(a) General

The accounting records of Iowa Power and Light Company (Company), a wholly-owned subsidiary of Iowa Resources Inc., are maintained in accordance with the uniform system of accounts prescribed by the Federal Energy Regulatory Commission (FERC) which has also been adopted by the Iowa State Commerce Commission (ISCC).

(b) Utility Plant

Electric and gas plant is stated at original cost, which includes payroll taxes, pensions, insurance and other payroll benefits, administrative and general costs and the allowance for funds used during construction. Income tax reductions arising from the current deductibility of certain of these expenditures are reflected as current reductions to income tax expense on the Statement of Income.

(c) Joint Plant Ownership

Under joint plant ownership agreements with other Iowa utilities, the Company had undivided interests at December 31, 1981, in four electric generating units, as shown below:

	Neal Unit No. 3	Council Bluffs Unit No. 3	Ottumwa Unit No. 1	Louisa Unit No. 1
	(Dollars in millions except cost per KW)			
Utility plant in service	\$34.4	\$154.2	\$ 57.6	\$ -
Utility plant under construction	0.2	1.3	-	121.7
Estimated for completion	-	-	-	78.3
Total	<u>\$34.6</u>	<u>\$155.5</u>	<u>\$ 57.6</u>	<u>\$200.0</u>
Year in service	1975	1978	1981	1983
Accumulated depreciation	\$ 6.7	\$ 14.2	\$ 1.1	\$ -
Unit capacity - MW.	515	700	675	650
Company share - percent	23%	46.7%	15%	32.5%
Total cost per KW	\$ 292	\$ 476	\$ 569	\$ 947

The dollar amounts above represent the Company's share in each jointly-owned unit. Each participant must provide its own financing for its share of the unit. Operating expenses on the Statement of Income include the Company's share of direct expenses of these units.

(d) Depreciation

The provisions for depreciation as an annual percentage of the average depreciable plant in service, determined generally by the application of straight-line rates, were as follows:

	Year Ended December 31		
	1981	1980	1979
Electric generation and transmission.	3.1%	3.1%	3.1%
Electric distribution	4.8	4.3	4.2
Gas	4.0	4.1	4.0

The cost of repairs and minor replacements is charged to maintenance expense. Property additions and major property replacements are charged to plant accounts. Property retired or disposed of in the normal course of business is charged to accumulated provisions for depreciation, less net salvage credits.

(e) Revenue

Revenue recorded from the sale of electricity and gas is based on meters read during the calendar year.

(f) Allowance for Funds Used During Construction (AFUDC)

The allowance for funds used during construction represents the cost of borrowed funds and a return on equity funds used for construction and is computed in accordance with rules of the FERC. This item is a cost of construction and established regulatory rate practices permit the Company to earn a return on such cost and to recover it in the rates charged for utility services after the related plant is placed in service. The equity portion of AFUDC is classified in other income and the portion related to borrowed funds is deducted from interest charges. In accordance with ratemaking principles, the tax effect of currently deducting the allowance for borrowed funds is not deferred. AFUDC rates for the years 1981, 1980 and 1979 are as follows:

	1981	1980	1979
Borrowed funds	8.5%	6.7%	6.2%
Equity funds	4.1	3.8	3.8
Total AFUDC rate	<u>12.6%</u>	<u>10.5%</u>	<u>10.0%</u>

(g) Federal and State Income Taxes

The items comprising income tax expenses are as follows:

	Year Ended December 31		
	1981	1980	1979
Federal income taxes			
Taxes currently payable.	\$1,466	\$3,068	\$3,055
Provision for deferred taxes	6,455	5,647	5,838
Deferred taxes flowback per ISCC order (Note 2)	(1,501)	-	-
Deferred taxes provided in prior years-credit	(608)	(397)	(385)
Investment tax credits, net	3,169	6,731	7,921
Total utility operations	8,981	15,049	16,429
Non-utility operations	156	290	341
Total Federal income taxes	<u>\$9,137</u>	<u>\$15,339</u>	<u>\$16,770</u>

State income taxes			
Taxes currently payable	\$1,345	\$ 2,597	\$ 2,556
Provision for deferred taxes.	-	1,050	1,084
Deferred taxes flowback per ISCC order (Note 2)	(2,944)	-	-
Deferred taxes provided in prior years-credit	-	(30)	(25)
Total utility operations	<u>(1,599)</u>	<u>3,617</u>	<u>3,615</u>
Non-utility operations.	29	54	64
Total state income taxes	<u>\$ (1,570)</u>	<u>\$ 3,671</u>	<u>\$ 3,679</u>
Total Federal and state income taxes			
Utility Operations.	\$7,382	\$18,666	\$20,044
Non-Utility Operations.	185	344	405
	<u>\$7,567</u>	<u>\$19,010</u>	<u>\$20,449</u>

Iowa Resources Inc. files consolidated tax returns which include the Company. Under a tax sharing agreement with Iowa Resources Inc., the Company calculates and pays its income tax liability to Iowa Resources Inc. as if the Company had filed a separate return.

Deferred Federal income taxes are provided for the effect of using liberalized tax depreciation provisions. As deferred taxes become currently payable, the related accumulated deferrals are credited to operating income.

In its rate order dated July 31, 1981, (see Note 2) the ISCC adopted flow-through accounting for state income taxes and required the Company to begin to flow back previously provided deferred state income taxes and deferred Federal income taxes provided in excess of the current 46% tax rate.

Investment tax credits utilized to reduce taxes payable are deferred and amortized over the life of the property giving rise to such credits. The amortizations for the years 1981, 1980 and 1979 were \$1,342,000, \$1,142,000 and \$1,066,000, respectively. Investment tax credits available to reduce income taxes payable in future years totaled approximately \$5,181,000 at December 31, 1981.

The total income tax expense set forth above produces the effective income tax rates shown in the following schedule. These rates are computed by dividing such total income tax expense by the sum of such tax expense and net income. The table below reconciles effective income tax rates to the statutory Federal income tax rate.

	Year Ended December 31		
	1981	1980	1979
Effective income tax rate as reported . . .	17%	37%	40%
State income taxes, net of Federal income tax benefits	(2)	(3)	(3)
Federal and state income tax flowback per ISCC order (Note 2)	11	-	-
Taxes and pension costs treated as current-year tax expense but capital- ized per books	3	2	2
Allowance for funds	18	9	6
Amortization of investment tax credit . .	3	2	2
Difference between book and tax depre- ciation for which deferred taxes have not been provided	(3)	(2)	(2)
Other items, net	(1)	1	1
Statutory Federal income tax rate	<u>46%</u>	<u>46%</u>	<u>46%</u>

(2) Rate Matters:

As a result of an ISCC order dated July 31, 1981, the Company recorded an obligation in 1981 of \$3.2 million of gas and \$14.0 million of electric revenues, including interest, collected subject to refund since January 1, 1979. Additional interest will accrue on these amounts until the Company distributes the refunds to its customers in late April, 1982. In accordance with a stipulation approved by the ISCC, the Company withdrew its court appeal of the order and, accordingly, has recorded its refund obligation and the related effects on income and expense in December, 1981.

The ISCC order resulted in reduced expenses for 1981, 1980 and 1979. The ISCC treated Council Bluffs Station Unit 3 as in service on March 3, 1979, rather than December 5, 1978, as was proposed by the Company. This resulted in reduced depreciation expense and increased AFUDC. The order adopted flow-through accounting for state income taxes and required the Company to begin to flow back previously provided deferred state income taxes and deferred Federal income taxes provided in excess of the current statutory Federal tax rate. The effect of this order was to decrease the Company's 1981 revenues by \$13.9 million and increase its 1981 net income by \$1.6 million.

The following table sets forth the amounts by which revenue and net income would have changed in each year covered by the order had such amounts not been recorded in 1981.

	Year Ended December 31		
	1981	1980	1979
	(In Thousands)		
Revenues	\$(8,200)	\$ -	\$(5,700)
Net Income	(2,700)	1,300	3,000

On February 19, 1982, the ISCC issued an order affirming substantially all of an electric rate increase placed into effect on June 1, 1981 which was designed to increase annual electric revenues by \$27 million over previously approved rates. The order is subject to appeal until March 22, 1982. The Company has not yet determined whether to appeal the order.

All of the Company's electric sales are currently subject to an Energy Cost Adjustment Clause (ECA). The ECA is designed to reflect changes in the cost of fuel used by the Company to generate electricity, to reflect changes in the costs of electricity purchased by the Company and to minimize the time required to reflect such changes in its electric rates. The Company's ECA was revised effective January 1, 1980, to conform to new ISCC rules. Pending final ISCC approval of the Company's revised ECA, a portion of its ECA revenues is being collected subject to refund.

All of the Company's gas sales are subject to an automatic Purchased Gas Adjustment Clause which reflects changes in prices charged by its pipeline suppliers.

Effective July 1, 1981, new Iowa statutes permit the Company to place new rates into effect on a temporary basis 90 days after they are filed with the ISCC, or such earlier time as the ISCC may allow, subject to refund pending final action by the ISCC. The amount of such temporary rates is determined by the ISCC based upon previously established regulatory principles. If the ISCC has not rendered a decision on permanent rates within ten months of the filing date (subject to extensions of time for good cause and for rate cases involving new electric generating facilities) the temporary rates automatically become permanent. The Company may then place any remaining portion of increased rates into effect, subject to refund, pending final action by the ISCC.

(3) Long-term Power Purchase Contract:

Under a long-term power purchase contract with the Nebraska Public Power District (NPPD), expiring in 2004, the Company buys one-half of the output of the 760 megawatt Cooper Nuclear Station (Cooper). The Balance Sheet includes a liability for the Company's fixed obligation to pay 50% of NPPD's Nuclear Facility Revenue Bonds. A like amount representing the Company's right to purchase Cooper power is shown as an asset. The obligation increased during 1981 as NPPD incurred additional debt to finance the cost of certain plant modifications required by the Nuclear Regulatory Commission.

Monthly payments to NPPD cover one-half of the fixed and operating costs of the plant (excluding depreciation) and the Company's share of nuclear fuel costs based on energy delivered. The debt service portion on a monthly basis approximates \$1.4 million and is not contingent upon the plant being in operation. Payments also include amounts to maintain various funds and reserves which are anticipated to be available for plant decommissioning costs and final disposal of spent fuel. "Purchased Power-Nuclear" in the Statement of Income reflects all such payments. The net interest component of the Company's payments to NPPD was \$9,979,300, \$10,277,500 and \$10,444,000 for the years 1981, 1980 and 1979, respectively.

The Company's payments to NPPD representing advances for the delivery of uranium concentrates together with related carrying costs, are being amortized

and recovered in rates in accordance with the refueling schedule. Amortization was \$7.6 million in 1981 and \$6.2 million in 1980. Certain capital improvement costs paid by the Company are being amortized and recovered in rates over the term of the NPPD contract.

(4) Common Stock:

Effective with the reorganization on November 1, 1979, holders of shares of the Company's common stock automatically became shareowners of Iowa Resources Inc. common stock on a share for share basis with Iowa Resources Inc. adopting without change from the Company the Employee Stock Purchase Plan, Automatic Dividend Reinvestment and Stock Purchase Plan and Tax Reduction Act Employee Stock Ownership Plan. Subsequent to the reorganization, the Company has no shares reserved for sale under any stock plans, nor has any additional stock been issued.

	Year Ended December 31					
	1981		1980		1979	
	<u>Amount</u>	<u>Shares</u>	<u>Amount</u>	<u>Shares</u>	<u>Amount</u>	<u>Shares</u>
(In Thousands)						
<u>Common Stock</u>						
Balance beginning of period	\$75,865	7,586	\$75,865	7,586	\$69,461	6,946
Additions arising from sales of common stock to the public	-	-	-	-	3,750	375
Additions arising from sales of common stock to employees	-	-	-	-	1,922	192
Additions arising from issuance of common stock to the Tax Reduction Act Employee Stock Ownership Trust	-	-	-	-	732	73
Balance end of period	<u>\$75,865</u>	<u>7,586</u>	<u>\$75,865</u>	<u>7,586</u>	<u>\$75,865</u>	<u>7,586</u>
<u>Additional Paid In Capital</u>						
Balance beginning of period	\$71,521		\$69,047		\$59,744	
Additions arising from sales of common stock to the public	-		-		8,055	
Additions arising from sales of common stock to employees	-		-		168	
Additions arising from issuance of common stock to the Tax Reduction Act Employee Stock Ownership Trust	-		-		1,080	

	Year Ended December 31					
	1981		1980		1979	
	Amount	Shares	Amount	Shares	Amount	Shares
Additions arising from contributions from parent company	24,046		2,474		-	
Balance end of period . .	<u>\$95,567</u>		<u>\$71,521</u>		<u>\$69,047</u>	

(In Thousands)

(5) Cumulative Preferred Stock:

(a) Preferred Stock Without Sinking Fund

The Company's \$45.0 million of outstanding Cumulative Preferred Stock Without Sinking Fund may be redeemed, at the option of the Company, at prices which currently total \$47.2 million, except that the 8.50% series may not be redeemed prior to April 1, 1982 through certain refunding operations at an interest or dividend cost of less than 8.60%. In all cases, the redemption price is in addition to dividends accrued and unpaid at the date of redemption. In 1980, 392 shares were redeemed.

(b) Preferred Stock With Sinking Fund

The Company sold 200,000 shares of \$100 par value, 9.75% Cumulative Preferred Stock on June 24, 1980. The net proceeds were applied toward the payment of short-term debt.

The Company's \$28.5 million of outstanding Cumulative Preferred Stock With Sinking Fund may be redeemed, at the option of the Company, at prices which currently total \$31.1 million, except that the 10.20% series may not be redeemed prior to April 1, 1985, through certain refunding operations at an interest or dividend cost of less than 10.20%, and the 9.75% series may not be redeemed prior to July 1, 1985, through certain refunding operations at an interest or dividend cost of less than 9.75%.

The 10.20% series contains a sinking fund requirement which began in 1980 to retire 5,000 shares annually of such series at a redemption price of \$100 per share. At December 31, 1981, there were 4,945 reacquired shares held by the Company to satisfy future sinking fund requirements. The 9.75% series of stock contains a sinking fund requirements, beginning in 1985, to retire 8,000 shares annually of such series, and the Company, at its option, may retire up to an additional 8,000 shares of such stock, at \$100 per share. Stock retired through the sinking fund will accrue dividends to the retirement date.

In the case of a default in the dividend payment for four consecutive quarters of any preferred stock issue, the holders of all of the Cumulative Preferred Stock will be entitled to elect the minimum number necessary to constitute a majority of the members of the Company's Board of Directors.

(6) Long-term Debt:

(a) Financings

In September, 1981, the Company issued its \$21.5 million 11% First Mortgage Bond due September 15, 1984, to secure Pollution Control Revenue Bonds issued by Louisa County, Iowa, which financed the Company's portion of the costs of installing pollution control equipment for Louisa Generating Station Unit 1.

(b) Assets Subject to Lien

The Company's First Mortgage Bonds are secured by a lien on substantially all property owned by the Company.

(c) Outstanding Long-Term Debt

Outstanding First Mortgage Bonds of the Company exclusive of (a) current sinking fund requirements of \$910,000 and \$1,010,000 at December 31, 1981 and 1980, met substantially by reacquired long-term debt, (b) reacquired long-term debt in excess of these sinking fund requirements, and (c) issues due within one year, consisted of the following:

	1981	1980
	(In Thousands)	
First Mortgage Bonds		
3 1/4% Series due 1982	\$ -	\$ 8,375
3 3/8% Series due 1983	7,128	7,171
11% Series due 1984* (Louisa County, Iowa).	21,500	-
3 5/8% Series due 1986	6,455	6,493
10 7/8% Series due 1987	30,000	30,000
3 5/8% Series due 1988	8,778	8,833
4 5/8% Series due 1991	8,900	8,950
6 5/8% Series due 1998	13,875	13,949
9% Series due 2000	13,725	13,800
7 5/8% Series due 2001	14,175	14,250
6 1/2% Series due 2003* (Chillicothe, Council Bluffs, and Pleasant Hill, Iowa)	9,900	9,900
10 3/4% Series due 2004	18,800	18,900
8 3/4% Series due 2006	29,998	29,998
5.9% Series due 2007*(Council Bluffs, Iowa).	18,000	18,000
8 1/4% Series due 2007	30,000	30,000
9 3/4% Series due 2009	30,000	30,000
	<u>261,234</u>	<u>248,619</u>
Pollution Control Revenue Bonds (Due Serially 1983 to 2003, average rate 5.3%)**		
Pleasant Hill, Iowa	4,600	4,600
Council Bluffs, Iowa	4,000	4,000
Salix, Iowa	5,060	5,060
Pollution Control Notes**		
6.7% due 2003 Pleasant Hill, Iowa	1,000	1,000
6.1% due 2007 Council Bluffs, Iowa	1,000	1,000
	<u>15,660</u>	<u>15,660</u>
Debentures, 4 5/8% due 1989	7,069	7,069
Unamortized debt discount	(451)	(461)
	<u>\$283,512</u>	<u>\$270,887</u>

*These bonds secure the Company's obligations with respect to pollution control revenue bonds issued by the named governmental units.

**The Company has guaranteed the payment of interest and principal on these pollution control revenue bonds and notes through rental payments on the facilities equal to the debt service requirements.

(d) Debt Maturities

Debt maturities and bond sinking fund requirements for 1982, 1983, 1984, 1985 and 1986, net of bonds reacquired and on hand at December 31, 1981, were \$9,283,000, \$9,124,000, \$23,769,000, \$2,569,000 and \$8,724,000 respectively. In addition, the Company may reduce the sinking fund requirements for the First Mortgage Bonds to the extent of 50% by certifying property additions in accordance with terms of the Indenture and its supplements; except that for those issues due in 2006, 2007 and 2009, the sinking fund requirements may be reduced to the extent of 100% by certifying property additions or, in the alternate, the sinking fund retirement may be increased for these issues by up to the amount required to be retired on that date.

(7) Short-term Debt:

Interim financing of the construction program is obtained from the sale of commercial paper or short-term borrowing from banks. At December 31, 1981, lines of credit with various banks totaled \$48 million for which the banks are compensated with either a fee, or a compensating balance or a combination of these methods. These lines of credit support the issuance of commercial paper, as required, and no loans were outstanding with banks at December 31, 1981, utilizing these lines of credit. The average interest rates for commercial paper balances outstanding at December 31, 1981 and 1980 were 12.9% and 19.0% respectively.

(8) Construction Expenditures and Commitments:

(a) Expenditures for property, plant and equipment for 1981 were \$95.4 million and the 1982 construction budget plus construction commitments beyond 1982 total approximately \$108 million.

(b) The Company has entered into long-term coal-supply contracts for its generating stations. Due to lower than anticipated load growth the Company may not be able to utilize currently all of the coal which it is obligated to buy under these contracts. The Company is evaluating various options to dispose of unneeded coal supplies or to amend or terminate its supply contracts. Although the outcome of this matter cannot be predicted, management does not expect that the ultimate effect upon the Company's results of operation or financial condition will be materially adverse.

(9) Segments of Business:

The Company is engaged in generating and distributing electrical energy and distributing natural gas.

		Year Ended December 31		
		Depreciation and Amortization	Income Taxes (Credit)	Assets
		(In Thousands)		
1981	Electric	\$ 22,110	\$ 8,143	\$ 965,391
	Gas	3,294	(761)	87,060
	Assets utilized for overall Company operations			16,073
		<u>\$ 25,404</u>	<u>\$ 7,382</u>	<u>\$1,068,524</u>
1980	Electric	\$ 20,567	\$17,413	\$ 871,891
	Gas	3,101	1,253	80,065
	Assets utilized for overall Company operations			12,505
		<u>\$ 23,668</u>	<u>\$18,666</u>	<u>\$ 964,461</u>
1979	Electric	\$ 19,198	\$18,520	\$ 827,065
	Gas	2,872	1,524	74,620
	Assets utilized for overall Company operations			16,957
		<u>\$ 22,070</u>	<u>\$20,044</u>	<u>\$ 918,642</u>

Identifiable assets for "Electric" and "Gas" are utility plant less reserves for depreciation and amortization, electric production fuel, deferred gas purchase costs and natural gas storage, material and supplies, net accounts receivable, productive capacity under power purchase contract, and advances to NPPD.

(10) Capital Leases:

Certain leases of the Company presently accounted for as non-capitalized financing leases in accordance with their treatment in the ratemaking process meet the criteria for classification as capital leases. If such leases had been accounted for as capital leases, assets would have increased by \$12.2 million and \$11.3 million and liabilities would have increased by \$12.0 million and \$10.7 million as of December 31, 1981 and 1980, respectively. If such leases had been accounted for as capital leases, expenses would not have changed materially.

(11) Employees' Pension Plans:

Iowa Resources and Iowa Power and Light Company maintain defined benefit pension plans covering substantially all of their employees. The companies total pension expense for 1981, 1980 and 1979 was \$2,917,000, \$2,468,000 and \$1,932,000, respectively, which includes amortization of past service cost over 30 years. The companies make annual contributions to the plans equal to

amounts accrued for pension expense. A comparison of accumulated plan benefits and plan assets is presented below.

Valuation as of January 1	<u>1981</u> (In Thousands)	<u>1980</u>
Actuarial present value of accumulated plan benefits:		
Vested	\$20,578	\$17,752
Nonvested.	590	399
	<u>\$21,168</u>	<u>\$18,151</u>
Net assets available for benefits	<u>\$23,859</u>	<u>\$20,298</u>

Valuation information as of January 1, 1981, is the latest available.

The weighted average assumed rate of return used in determining the actuarial present value of accumulated plan benefits was 6.5% for both 1981 and 1980.

(12) Quarterly Financial Data (Unaudited):

For the quarters shown, operating revenues, operating income, and net income were as follows:

1981	<u>Mar. 31</u>	<u>June 30</u>	<u>Sep. 30</u>	<u>Dec. 31</u>
	(In Thousands)			
Revenues	\$90,349	\$66,294	\$81,502	\$88,190
Operating Income	15,814	9,859	15,351	9,692
Net Income	13,231	4,584	9,328	4,844
1980				
Revenues	87,792	62,715	74,997	69,681
Operating Income	15,185	8,721	13,188	9,559
Net Income	11,252	4,769	9,939	6,273

The 1981 quarterly operating results have been restated to reflect the effect of the July 31, 1981 ISCC order and, for interim reporting purposes, the amount of the rate refund and related effect on expenses which are applicable to 1979 and 1980 have been reflected in results of operations for the quarter ending March 31, 1981.

(13) Supplementary Information Concerning the Effects of Changing Prices (Unaudited):

In recent years, inflation has had a significant impact on the earnings and stockholders' investments in business corporations. The regulated electric industry, in particular, has been severely affected due to the large capital requirements for generating capacity additions, the cost of replacing productive assets at inflated prices, and the fact that operating income is set by regulation.

The Company presents the following supplementary information concerning the effects of changing prices in accordance with the Financial Accounting Standards Board Statement No. 33, "Financial Reporting and Changing Prices," as modified to reflect the economic effects imposed on the Company by regulatory authorities. It should be viewed as an estimate of the approximate effects of inflation, rather than a precise measure.

The following schedule shows information based upon the constant dollar and current cost methods of measuring the effect of inflation. Constant dollar amounts represent historical cost stated in terms of dollars of equal purchasing power, as measured by the Consumers Price Index for all Urban Consumers. Current cost amounts reflect changes in specific prices of plant from the date the plant was acquired to the present. They differ from constant dollar amounts to the extent that specific prices have increased more or less rapidly than the general rate of inflation. The current cost of plant was determined by using the Handy-Whitman Index of Public Utility Construction Costs. Current cost does not necessarily represent the replacement cost of the the Company's productive capacity because the utility plant is not expected to be replaced precisely in kind.

The Company experienced increases in its cost of electric generation fuel and gas purchased for resale during the year. These increased costs are recoverable in the Company's ECA and PGA clauses.

Depreciation expense was determined by using the effective depreciation rates and methods used for computing book depreciation applied to the constant dollar and current cost plant value calculations. The excess amount of depreciation, using these methods, over the historical depreciation is not recoverable in revenues under the ratemaking procedures prescribed by the regulatory authorities.

Income tax expense was not adjusted because only historical costs are deductible for income tax purposes.

Productive capacity under the Power Purchase Contract (Note 3) is classified as a monetary asset.

Holding monetary liabilities (e.g. long-term debt) partially offsets the effect of increasing prices since a fixed dollar amount of debt will be satisfied in future years with dollars of decreasing value. Conversely, holding monetary assets has the effect of decreasing the Company's purchasing power.

The net effect on stockholder's equity, as shown on the following schedule, is an erosion of \$18.8 million in 1981 and \$27.5 million in 1980 stated in average 1981 dollars. The ratemaking process does not provide revenues necessary to generate cash flows capable of replacing the capital investment in future years, or preserving the purchasing power of previously invested common equity capital.