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UNITED STATES OF AMERICA  
BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF SOUTH DAKOTA

SOUTH DAKOTA PUBLIC  
UTILITIES COMMISSION

SOUTH DAKOTA INTRASTATE )  
PIPELINE COMPANY )

Case No. NG92-005

PREPARED REBUTTAL TESTIMONY

OF

WALTER J. WOODS

1 Q: Please state your name, address, and occupation.

2 A: My name is Walter J. Woods. My business address is 117 E.  
3 Capitol, Pierre, South Dakota. I am the Vice President and  
4 Secretary of South Dakota Intrastate Pipeline Company (SDIP).

5 Q: Have you submitted testimony in this proceeding prior to this  
6 testimony?

7 A: Yes, I have submitted Prepared Direct Testimony.

8 Q: What is the purpose of your testimony today?

9 A: To support the testimony submitted by the Montana-Dakota  
10 Utilities witness, M. Miller, and to comment on the  
11 testimony of Commission Staff witnesses Steven M. Wegman and  
12 Gregory A. Rislov.

13 Q: Why are you supporting MDU's testimony?

14 A: For two reasons:

15 1. While I had always assumed and had stated in the site  
16 meetings that were held in July that SDIPC would serve communities  
17 along its proposed route, I had not done a survey and therefore had  
18 only included an estimate of the market in my studies. MDU's

19 Marketing Department has done an analysis based on their experience  
20 in those communities and used that experience to estimate the  
21 potential sales in Pierre, and

22 2. I had used an estimate of 90 dk/yr (90mcf/yr) for  
23 residential customers and 300 dk/yr (300 mcf/yr) for commercial  
24 customers, MDU has used a higher consumption factor based on their  
25 experience in the area being served. The fact that MDU has the  
26 experience and expertise in the area to be served and that their  
27 marketing department has access to site specific information which  
28 compels me to support their study.

29 Q: What effect will the use of the MDU markets by SDIPC have on  
30 this filing?

31 A: SDIPC will have to spend approximately \$1,000,000, Exhibit \_\_\_\_  
32 (WJW-R1), more to provide service to the communities Mobridge, et  
33 al., but will be able to lower the rate for transportation due to  
34 the higher volumes.

35 Q: Have you prepared a new rate based on the new markets and  
36 costs?

37 A: Yes, the new rate and how it was derived is discussed in Mr.  
38 Szklarski's testimony.

39 Q: What are your comments on Mr. Wegman's testimony?

40 A: On page 5 of Mr. Wegman's testimony, he states that in his  
41 Exhibit \_\_\_\_ (SMW-2), the assumptions used for determining the  
42 number of residents that would convert from fuel oil to natural gas  
43 were...

44 "1) 50% of existing fuel oil furnaces would convert to natural

45 gas when their furnaces need replacing, and  
46 2) the average life for a fuel oil furnace is twenty  
47 years."...

48 He then goes on to state that there would be 42 fuel oil  
49 conversions in the first two years of SDIPC's operation. In the  
50 survey conducted by SDIPC, 643 residents indicated they used fuel  
51 oil and would be interested in converting to natural gas. Of the  
52 643, 405 indicated that their existing equipment was more than 20  
53 years old; indeed, 170 indicated their equipment was over 30 years  
54 old. Based on the results of the survey that was conducted, I  
55 concluded that Mr. Wegman's estimate is incorrect. All of the  
56 numbers quoted above are from the City of Pierre, South Dakota,  
57 survey. In addition, information I have received indicates that at  
58 least 200 fuel oil users have converted to propane in the last two  
59 years.

60 Q: Did you review Mr. Wegman's testimony concerning the conversion  
61 of propane space heating customers in Pierre, South Dakota, to  
62 natural gas?

63 A: Yes, I did.

64 Q: What did you conclude?

65 A: Mr. Wegman's Exhibit \_\_\_\_\_ (SMW-2), page 1 of 3, line 13,  
66 indicates that 1,189 propane customers will have converted by the  
67 5th year. 724 of the people answering the survey (approximately  
68 50%) indicated they would convert to natural gas. Assuming a like  
69 number that did not respond would also convert, it is probable that  
70 1448 people would convert to natural gas. I believe Mr. Wegman's

71 numbers are low.

72 Q: Do you have any comments concerning Mr. Wegman's testimony on  
73 the cost to convert propane users to natural gas?

74 A: Yes, the cost to convert a propane furnace to natural gas  
75 generally would be \$50 to \$100 depending on the type of furnace.  
76 I believe Mr. Wegman's costs are high.

77 Q: Mr. Wegman in his Exhibit \_\_\_\_\_ (SMW-2) Page 1 of 3, lines 14-  
78 19, indicates that there will be no conversions from electricity to  
79 natural gas in the first five years. Did you agree with this?

80 A: No. In response to the survey, 220 citizens of Pierre  
81 indicated they would convert to natural gas from electricity.  
82 Again, assuming a like number for the people that did not respond,  
83 there is a potential of 440 conversions from electricity to natural  
84 gas. As Mr. Wegman correctly noted, even though there were many  
85 people that had baseboard heating that indicated they would convert  
86 to natural gas, SDIPC did not include them in the totals.

87 Q: Did you review Mr. Wegman's testimony concerning the cost to  
88 replace an electric water heater with a natural gas water heater?

89 A: Yes, I asked two local plumbing and heating companies for the  
90 cost of a natural gas water heater to replace an electric water  
91 heater of equal deliverability. The cost was approximately \$275.  
92 The cost of installation, including proper venting, is  
93 approximately \$50. Therefore, the total cost would be closer to  
94 \$325.

95 Q: On the basis of the above costs, what would be the simple

96     payback for the conversion from electricity to gas?

97     A: Using the \$71 per that Mr. Wegman calculated in his example on  
98     page 8, line 12, the payback would be 4.6 years.

99     Q: Have you reviewed Mr. Wegman's Exhibit \_\_\_\_ (SMW-2) Page 3 of  
100     3?

101    A: Yes, I have, and based on my analysis of the response to the  
102    survey, I believe that approximately 594 businesses in Pierre will  
103    convert to natural gas. This agrees with MDU's estimate. This  
104    compares favorably with Mr. Wegman's conservative estimate of 572  
105    (515 at the end of 5 years) connections. I do not however agree  
106    with listing the State Capitol, JES Farms, and Fort Pierre at zero.  
107    I believe that the Capitol will convert to natural gas for  
108    maintenance and environmental reasons. JES Farms is a large user  
109    of electrical energy that continues to increase in cost and I am  
110    sure will welcome an alternate source of energy. To ignore the  
111    Fort Pierre market because "no one has determined if or when the  
112    crossing can be accomplished." (Page 8, line 16-17), ignores the  
113    fact that there is a potential market which will be served if gas  
114    is available in the Pierre area.

115    Q: Do you agree with Mr. Wegman's 5 year total for Pierre as shown  
116    on his Exhibit \_\_\_\_ (SMW-2), Page 3 of 3, line 21?

117    A: No, I do not. Both SDIPC and MDU expect to achieve that level  
118    of sales by the second year. Mr. Wegman's estimates are, in my  
119    opinion, extremely conservative.

120    Q: Do you have any comments to make about Mr. Wegman's Exhibit  
121    \_\_\_\_\_ (SMW-3)?

122 A: Mr. Wegman's Exhibit is developed by using a ratio of the  
123 volumes and population Mr. Wegman estimated for Pierre and  
124 multiplying them by the population of the other towns to obtain an  
125 estimate of potential sales. Since I don't agree with his estimate  
126 for Pierre, I obviously do not agree with his estimate for the  
127 other towns. MDU has a great deal of experience in estimating  
128 sales for communities converting to natural gas from other energy  
129 sources, and in the absence of a survey such as was done in Pierre,  
130 SDIPC will accept and utilize MDU's estimate. I also object to Mr.  
131 Wegman deleting Glenham and Mobridge since SDIPC has continually  
132 stated that they will serve all viable markets, and Glenham and  
133 Mobridge are viable markets.

134 Q: Do you have any comments on Exhibit \_\_\_\_\_ (SMW-4)?

135 A: No.

136 Q: Do you have any comments on Exhibit \_\_\_\_\_ (SMW-5)?

137 A: The conversions made for the costs, from one energy type to  
138 another, are the same as SDIPC has been using in all of its  
139 studies. For convenience, I have revised Mr. Wegman's Exhibit to  
140 add the conversion for electrical rates. Exhibit \_\_\_\_\_ (WJW-R1).

141 Q: Do you have any comments on Exhibit \_\_\_\_\_ (SMW-1)?

142 A: Exhibit \_\_\_\_\_ (SMW-1) is a summary of Exhibits \_\_\_\_\_ ) SMW-2)  
143 and (SMW-3). I object to the summary for the same reasons I object  
144 to the individual exhibits. I believe the volumes developed are  
145 too conservative based on the results of the Pierre survey and  
146 MDU's estimate.

147 Q: Do you have any other comments on Mr. Wegman's testimony.

148 A: No.

149 Q: Have you reviewed the Testimony and Exhibits of Mr. Gregory A.  
150 Rislov?

151 A: Yes, I have.

152 Q: What are your comments about Mr. Rislov's testimony?

153 A: I disagree with Mr. Rislov's statement on page 2 that the  
154 issues in this filing are "new" or "unique" either to regulation or  
155 this Commission. Mr. Rislov states (page 1, lines 14-15) that he  
156 has testified and/or provided exhibits in approximately 40 major  
157 electrical, natural gas, or telecommunications revenue requirement  
158 dockets which certainly should have provided ample experience for  
159 processing this docket. SDIPC will provide "in-kind" substitutions  
160 of energy just as "telecommunications companies ... provide ...  
161 either in-kind substitutions ... to service already being  
162 rendered." (page 2, line 16-17). I am confident that the  
163 Commission has decided many cases that were similar to this case  
164 and will find there is nothing "new" or "unique" in this case.

165 Q: Do you agree with Mr. Rislov that the estimated sales or  
166 thruput is of greatest concern?

167 A: Yes, I certainly do. That's why I do not believe that the  
168 sales volumes prepared by Mr. Wegman should be used as they are too  
169 low. Both SDIPC and MDU have estimated higher sales. In fact,  
170 SDIPC's estimate is between the staff estimate and the MDU  
171 estimate. SDIPC favors using MDU's estimate for the towns outside  
172 of Pierre because SDIPC did not do a survey of those towns, and MDU  
173 which does business in those towns, should be able to provide a

174 better estimate.

175 Q: Are Mr. Rislov's concerns about the other estimates or the  
176 estimation process justified?

177 A: SDIPC shares Mr. Rislov's concerns about the estimates used to  
178 determine if the project would be feasible, but without estimates,  
179 a company cannot make a decision on whether to proceed or not. I  
180 disagree with the statements that ... "the estimation process  
181 inherently leads to inaccuracy." (page 3, line 10) See attached.  
182 The estimates made by SDIPC are as accurate and as precise as they  
183 can be until the pipeline is built and the final cost is known and  
184 consumers commit for volumes. In the absence of better  
185 information, SDIPC is of the opinion that its estimates are not  
186 "inherently inaccurate" or "quite imprecise". SDIPC believes it  
187 has been prudent in its estimate of volumes and costs for this  
188 project, based upon input from consumers in Pierre and the other  
189 towns along the route of the pipeline, as well as information from  
190 MDU, which has the benefit of many years' dealing with the precise  
191 energy market SDIPC seeks to serve.

192 Q: Mr. Rislov states on page 5, lines 1-3, that pipeline  
193 competitions, i.e., other pipelines that would perform the same  
194 transportation services, are not likely. Do you agree with that  
195 statement?

196 A: Yes. As Mr. Rislov explains, the size of the market precludes  
197 more than one pipeline for the foreseeable future.

198 Q: Mr. Rislov, on page 5, lines 4-11, discusses the competition to  
199 natural gas and the why consumers would convert to natural gas. He



200 relies on cost as the only reason to convert to natural gas. Are  
201 there any other reasons for converting to natural gas?

202 A: Cost certainly is one of the reasons to convert to natural gas,  
203 but not the only reason. Many people prefer natural gas because it  
204 is cleaner burning, does not require having a tank contain the  
205 product in their basement or back yard, and the price is generally  
206 the same year round. Natural gas is also an environmentally  
207 superior product and reduces pollutants in the air. In the event  
208 of a snow or ice storm that makes travel impossible, consumers  
209 using natural gas are assured of their supply, while those using  
210 alternate fuels are dependent on the road conditions if their tanks  
211 need refilling.

212 Q: What are your comments concerning the "market" price of natural  
213 gas compared to competing forms of energy?

214 A: As Mr. Rislov has so aptly remarked on page 5 (lines 17-24), if  
215 natural gas is higher than competing energy sources, sales will  
216 probably not develop, and SDIPC will lose money for a longer period  
217 of time and will lose more money. SDIPC, however, believes that  
218 the threshold cost to be successful is approximately \$6.00/mcf.

219 Q: Do you agree with Mr. Rislov's hypothetical example of the  
220 State Capitol Complex by-passing the Pierre Distribution System?

221 A: No, I do not. The Capitol Complex load is not large enough to  
222 warrant by-passing the distribution system. Currently, there are  
223 no individual businesses that could by-pass the distribution system  
224 and be cost effective due to their small loads. By-pass typically  
225 is a method used by large manufacturing or industrial complexes

226 that use several hundred thousand mcf's a year in a very compact  
227 area. There are no overwhelming large loads in Pierre.

228 Q: What are the possibilities for fuel switching?

229 A: Fuel switching is always a possibility; however, it is doubtful  
230 that most businesses will keep dual fuel systems for some small  
231 seasonal difference in energy costs.

232 Q: Have you reviewed Mr. Rislov's testimony concerning the SDIPC  
233 plant costs?

234 A: Yes, I have, and I disagree with his elimination of \$582,000 in  
235 O & C (Omission and Contingencies) and A & G (Administration and  
236 General), and Environmental. While SDIPC has defined as accurately  
237 as possible all the costs associated with the plant utilizing  
238 information received from vendors, without asking for formal  
239 quotes, and their experience in pipeline construction, all projects  
240 have some area of uncertainty. Until a project is completed and  
241 the actual costs are known, a decision on whether to proceed or  
242 not must be based on reasonable estimates. Estimates normally have  
243 10% to 20% added for O & C and A & G. The \$100,000 for  
244 environmental issues would not be enough for any long term detailed  
245 study but was intended to provide funds in the unlikely event any  
246 artifacts were discovered in the pipeline right-of-way.

247 Q: Will SDIPC spend all funds that are allocated or only the funds  
248 required to successfully and safely complete the project?

249 A: SDIPC will not spend one penny more than necessary to safely  
250 complete this project. When the methodology for determining rates  
251 is agreed to by SDIPC and the staff, SDIPC proposes the final rates

252 be determined by the final project costs.

253 Q: Mr. Rislov suggests that SDIPC completely justify the pricing  
254 of line pack gas before including it in the rate base. Page 17,  
255 lines 3-5. Do you agree with this?

256 A: Yes, as with the cost to build the plant, SDIPC agrees to a  
257 rate based on actual expenditures.

258 Q: Do you agree with the elimination of promotional and  
259 advertising expense as suggested by Mr. Rislov on page 19, lines  
260 10-11, and explained on page 20, lines 17-24, and page 21, lines 1-  
261 4?

262 A: No, I do not. While promotional advertising normally accrues  
263 to the benefit of the owner, in this case, any increase in sales  
264 will ultimately have the effect of decreasing the unit cost to the  
265 consumer. For this reason, I believe it is necessary and  
266 appropriate for SDIPC to advertise to increase its rate base  
267 volume.

268 Q: Mr. Rislov also recommended a reduction in consulting and  
269 training services, page 19, lines 14-21, and page 20, lines 1-15.  
270 Do you have any comments about this recommendation?

271 A: Yes, SDIPC has not included in its operating costs permanent  
272 employees in various areas of special interest such as law, tax  
273 returns, auditing, etc. From time to time, all these services will  
274 be required to met various governmental rules and regulations.  
275 Therefore it is appropriate for SDIPC to include a consultant  
276 charge. The alternative would be to hire the people required on a  
277 full time basis at a much higher cost to the consumer.

278 Q: What about the training cost?

279 A: SDIPC has budgeted money for a normal and ongoing training  
280 program. Most pipeline companies send employees to schools for  
281 updates and to re-test the employees skills in specific areas such  
282 as fighting gas fires every two or three years. Also, it is  
283 probable that not everyone that hires on with SDIPC initially will  
284 stay with them forever, and new employees need to be trained.  
285 SDIPC believes the amount included in their O & M is appropriate.

286 Q: Have you adjusted any costs in this rate filing?

287 A: Yes, I have. As mentioned earlier, I have added \$1,000,000 for  
288 the Mobridge Extension Exhibit \_\_\_\_\_ (WJW-R1) and have adjusted  
289 Statement H and Statement L to reflect the payroll expense and  
290 taxes for the Mobridge Extension. Exhibit \_\_\_\_\_ (WJW-R3) and  
291 Exhibit \_\_\_\_\_ (WJW-R4) I also have eliminated the \$24,000  
292 contingency from Statement L as suggested by Mr. Rislov.

UNITED STATES OF AMERICA  
BEFORE THE PUBLIC UTILITIES COMMISSION  
OF THE STATE OF SOUTH DAKOTA

SOUTH DAKOTA INTRASTATE )  
PIPELINE COMPANY )

Case No. NG92-005

AFFIDAVIT OF WALTER J. WOODS

State of South Dakota )  
County of Hughes ) SS

Walter J. Woods, being first duly sworn according to law, on oath deposes and says that he is the witness whose Rebuttal Testimony in the above entitled proceeding accompanies this Affidavit; that if asked the questions which appear in the text of the aforesaid testimony, Affiant would give the answers that are therein set forth; and that Affiant adopts the aforesaid testimony as his sworn Rebuttal Testimony in this proceeding.

*Walter J. Woods*  
\_\_\_\_\_  
Walter J. Woods

Subscribed and sworn to before me this 14th day of December, 1992.

*James Robbennolt*  
\_\_\_\_\_  
Notary Public  
Commission Expires JAMES ROBBENOLT, Notary Public  
(SEAL) My Commission Expires  
January 13, 1993

EXHIBIT 1  
COST ESTIMATE

<u>ITEM</u>	<u>UNIT</u>	<u>QUAN</u>	<u>COST</u>	<u>TOTAL</u>
1.Right of way and damages	Mile	155.0	\$ 650	\$ 100,000
2.Supervison, engineering & drafting	Lot	1	1,014,000	1,014,000
3.Permits	Lot	1	10,000	10,000
4.Environmental	Lot	1	100,000	100,000
5.6"pipe-installed	Mile	104.0	52,800	5,491,000
6.8"pipe-installed	Mile	51.0	60,000	3,060,000
6a.3"pipe-installed	Mile	25.0	1,000,000	1,000,000
7.Cathodic Protection	Each	9	10,000	90,000
8.Pig Traps-6"	Lot	1	50,000	50,000
9.Pig Traps-8"	Lot	1	75,000	75,000
10.Line Pack	MCF	13,000	1.75	23,000
			Sub-total	\$11,013,000
			O&C(4.4%)	500,000
			A&G(4.4%)	500,000
			Total	\$12,013,000

## SOUTH DAKOTA INTRASTATE PIPELINE COMPANY

## BTU and Price Comparisons

December 1992

Natural Gas Price Per <u>MCF</u>	Propane Price Per <u>Gallon</u>	Fuel Oil Price Per <u>Gallon</u>	Electricity Price Per <u>KWH</u>
\$5.00	\$0.46	\$0.70	\$0.0171
5.25	0.48	0.74	0.0179
5.50	0.50	0.77	0.0188
5.75	0.53	0.81	0.0196
6.00	0.55	0.84	0.0205
6.25	0.57	0.88	0.0213
6.50	0.60	0.91	0.0222
6.75	0.62	0.95	0.0230
7.00	0.64	0.98	0.0239

## ASSUMPTIONS:

91,600 BTU'S = 1 GALLON OF PROPANE  
 140,000 BTU'S = 1 GALLON OF FUEL OIL  
 1,000,000 BTU'S = 1 MCF OF NATURAL GAS  
 1,000,000 BTU'S = 10.92 GALLONS OF PROPANE  
 1,000,000 BTU'S = 7.14 GALLONS OF FUEL OIL

3,413 BTU'S = 1 KWH  
 1,000,000 BTU'S = 293 KWH

## STATEMENT H Revised

## SOUTH DAKOTA INTRASTATE PIPELINE COMPANY

## Operations and Maintenance Expenses

<u>Line No.</u>	<u>Description</u> (Col. 1)	<u>Amount</u> (Col. 2)
1	Payroll	\$240,000
1a	Payroll - Moberge Extension	\$ 25,000
2	Benefits	\$ 72,000
3	Expenses	\$188,000
4	Total	\$525,000



## STATEMENT L Revised

## SOUTH DAKOTA INTRASTATE PIPELINE COMPANY

## Other Taxes

<u>Line No.</u>	<u>Description</u> (Col. 1)	<u>Amount</u> (Col. 2)
1	Property Taxes	\$180,000 (1)
1a	Mobridge Extension	\$ 17,500 (1)
2	Workmens Compensation	\$ 15,000 (1)
3	Unemployment Insurance	\$ 1,000 (1)
4	Total	\$213,500

- (1) Estimates based on information received from South Dakota Department of Revenue
- (2) Taxes for first year only. Please refer to Statement M of T. C. Szklarski's testimony for subsequent years