

DEPARTMENT OF PUBLIC SERVICE REGULATION
BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MONTANA

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IN THE MATTER OF the Application of) REGULATORY DIVISION
MONTANA-DAKOTA UTILITIES CO.,)
A Division of MDU Resources Group,) DOCKET NO. D2012.9.100
Inc., for Authority to Establish Increased)
Rates for Natural Gas Service)

**OBJECTION, MOTION TO COMPEL, OR IN THE ALTERNATIVE,
MOTION TO STRIKE**

On February 1, 2012, Montana-Dakota Utilities Co. (MDU), the applicant, filed a response to data request MCC-150. This data request asked for certain information relating to MDU's depreciation recommendations. Specifically, it stated:

Please provide a detailed narrative explaining specifically how the 47R4 life-curve combination was selected for Accounts 376.1 and 376.2 – Mains Steel and Plastic, respectively. To the extent SPR results were relied upon, provide all ranking criteria for the selected curves, as well as full justification for which band analysis was relied upon, and why the results of other bands were not relied on.

SPR is an acronym standing for the Simulated Plant Record Method. As MDU witness Earl Robinson of AUS Consultants explained in his direct testimony, SPR is one of the two most common methods used to study a company's historical data. The other method is the Retirement Rate Method. If a company has specific aged data, the Retirement Rate Method is used. If not, SPR is used. Mr. Robinson also testified that MDU maintains aged plant records, the Retirement Rate Method was used in the depreciation studies of MDU's property. Robinson direct testimony, p. 7, ll. 1-14.

Later in his testimony, however, Mr. Robinson testified that MDU does not have complete historical vintage based investment records, so SPR was required to be used to analyze the past historical data. Robinson direct testimony, p. 22, ll. 16-19. Therefore,

MCC asked for the SPR results in data request MCC-150 in conjunction with data request MCC-145, which sought all life-related workpapers.

In its response, MDU stated that the output of the SPR analysis is not maintained in paper copy or any other format. As more fully explained in the attached sworn Affidavit of Jacob Pous, “In other words, AUS Consultants and MDU failed to retain critical workpapers associated with its proposed life parameters.” Affidavit of Jacob Pous, paragraph 12. Mr. Pous also stated that in performing several hundred depreciation analyses, he does not recall a similar situation over several decades where a utility knowingly chose not to retain critical SPR workpapers, and that other information provided, even if time were available, does not permit MCC to duplicate what AUS Consultants performed in developing its proposed life parameters. Affidavit of Jacob Pous, paragraph 13.

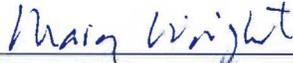
MCC objects to the response of MDU to data request MCC-150 as not responsive. Given that the witness stated that responsive information is not maintained in paper copy or any other format, however, even a motion to compel, if granted, would likely be fruitless. Therefore, MCC moves to strike MDU’s gas depreciation study and all associated testimony and recommendations. This remedy is well within the Commission’s authority as stated in Order No. 7254, the procedural order herein, which states at paragraph 12:

In response to a party’s failure to answer written discovery, the Commission may: (1) Refuse to allow it to support or oppose related claims; (2) prohibit it from introducing related evidence; (3) strike pleadings, testimony, or parts thereof; (4) stay the proceeding until the request is satisfied; or (5) dismiss the proceeding, or parts thereof.

As Mr. Pous stated in his Affidavit at paragraph 14, a utility presenting a depreciation request must support the request with, among other things, the workpapers it used to develop its proposals. In this case, the workpapers are not available and cannot be duplicated by MCC. The data requested in MCC-150 is in Mr. Pous’s experience always provided by consultants and utilities performing similar work before various regulatory bodies throughout North America.

The Commission should find that MDU's failure to provide such routine support for its depreciation proposals requires that the gas plant depreciation study, associated testimony and recommendations be stricken.

Respectfully submitted February 7, 2013.



Mary Wright
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Montana Consumer Counsel
111 North Last Chance Gulch
Helena, Montana 59620-1703

DEPARTMENT OF PUBLIC SERVICE REGULATION
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A Division of MDU Resources Group.)	DOCKET NO. D2012.9.100
Inc., for Authority to Establish Increased)	
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AFFIDAVIT OF JACOB POUS

I, Jacob Pous, state the following facts upon my oath.

1. My name is Jacob Pous. I am over eighteen years of age and am not disqualified from making this affidavit.
2. I am a principal in Diversified Utility Consultants, Inc. ("DUCI"). DUCI have/has been retained by the Montana Consumer Counsel ("MCC") to review Montana-Dakota Utilities Co.'s ("MDU") gas and common plant depreciation studies in the instant case at the Montana Public Services Commission ("Commission"). My business address is 1912 W. Anderson Lane, #202 Austin, TX 78757.
3. I have been involved in over 400 rate proceedings throughout the United States and Canada. I have testified on the topic of depreciation before municipal, state, federal, and provincial regulatory authorities in several hundred rate cases.
4. I am giving this affidavit to address the failure of MDU to retain and thus not provide critical workpapers associated with the development of life parameters for its gas plant depreciation request.
5. The life parameter portion represents \$7,771,863 of MDU's overall depreciation study request of \$10,224,051, or 76%, as shown on Table 1 and Table 2 – Plant only of MDU Exhibit_(EMR-1).
6. The development of life parameters for depreciation purposes of gas plant relies on different types of life analysis depending on the type of data available. Actuarial analyses are performed when aged data is available. Simulated Plant Records ("SPR"), or semi-actuarial analyses, are performed when unaged data is available.
7. MDU retained AUS Consultants to perform a gas plant and common plant depreciation analyses for plant as of December 31, 2008.

8. When performing actuarial analyses, such as was performed by AUS Consultants for MDU's common plant, an observed life table is obtained and a graphical presentation of curve-fitting between the observed life table and a smooth Iowa Survivor curve is performed. The resulting analysis, which underpins the assumed average service life and corresponding dispersion pattern for plant at issue, is presented in the study. Attached as Exhibit (JP-1) is a typical three-page printout of an observed life table and corresponding graph performed by AUS consultants for MDU's common plant. The information in Exhibit (JP-1) allows depreciation analysts to test the reasonableness of proposed life parameters for an account and is the typical type of presentation presented in all depreciation analyses relying on actuarial results.
9. MDU's gas plant does not have adequate age data; therefore AUS Consultants performed and relied upon SPR analyses.

Rather than producing an original life table, which permits graphical curve-fitting with Iowa Survivor curves, SPR analyses yield the best representative average service life for each of 29 different standardized Iowa Survivor curves along with two categories or measures of statistical fit. The first measure reflects the concept of a sum of squares differential ranking criteria. The second index, the Retirement Experience Index, reflects the concept of the completeness of the Iowa Survivor curve tested. Both indices are required in order to analyze potential life parameters for a given account.

Exhibit (JP-2) sets forth the typical output obtained from SPR analyses for another utility for which I have been retained to perform an analysis of that utility's depreciation study. The exhibit reflects one of over 100 pages of SPR results presented by the other utility as part of its depreciation study. The exhibit provides critical information to determine the best life-curve combination to select for depreciation purposes for each account from a statistical standpoint.

10. Exhibit (JP-3) reflects a typical one-page per account output presented by MDU in support of its SPR analyses. As can be seen on Exhibit (JP-3), all that is presented is a graphical comparison of actual and simulated balances over time. The graphical presentation fails to present the number of test points, the intervals and the actual average service life corresponding to each Iowa Survivor curve tested. In addition, the graph fails to present any of the statistical measures required to rank the quality of the statistical output of the SPR analyses.
11. After review of all of the MDU's filed depreciation study pages, it was necessary to submit data requests seeking, among other things, a narrative explaining how MDU arrived at its proposed life-curve combinations for accounts, including Accounts 376.1 and 376.2 – Mains – Steel and Plastic, respectively. Data request MCC-150 is set forth as Exhibit (JP-4). In addition to a narrative, the data request also sought all ranking criteria for selecting curves as well as full justification for which SPR band analysis was relied upon and why the results for other bands were not relied upon.
12. MDU's response included in Exhibit (JP-4) stated that Attachment A to that response provided a general ranking of statistical best fit curve for varying experience bands;

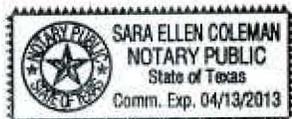
however the output of SPR analysis was “not maintained in paper copy or other format.” In other words, AUS Consultants and MDU failed to retain critical workpapers associated with its proposed life parameters.

As can be seen on Exhibit (JP-4), one unidentified ranking of a single result was provided, rather than the result for 29 different Iowa Survivor curves for each experience band. The attachment also does not list the proposed life-curve combinations set forth on MDU’s depreciation study for Account 376 – Mains, nor does it indicate anything of meaning associated with the requested ranking criteria for selecting curves or any justification for which band analysis was relied upon or why other results of other bands were not relied upon.

13. In performing several hundred depreciation analyses, some of which were performed on behalf of state and provincial regulators, I do not recall a similar situation in the past several decades where a utility knowingly chose not to retain critical SPR workpapers. MDU’s alternative offer instead of actual workpapers does not provide a worthwhile or valid substitution. MDU offers tens of thousands of values without explaining what certain of the values represented such that if there were time available to perform SPR analysis, no such analysis could be performed to duplicate what AUS Consultants on behalf of MDU performed in developing its proposed life parameters.
14. In all jurisdictions that I have performed depreciation analysis, and it is my understanding it is the same for the Montana jurisdiction, the utility presenting a depreciation request must support such requests with, among other things, the workpapers it used to develop its proposals. In this instance, it is clear that a critical set of workpapers, those being the output to SPR analyses, were destroyed and not retained. Moreover, the analysis cannot be duplicated by MCC based on the information provided in response to discovery. Therefore, based on my extensive experience relating to analyzing depreciation proposals by utilities for approximately the last four decades, I conclude that AUS Consultants did not act properly when it knowingly elected not to retain critical workpapers supporting its analyses as part of what constitutes an appropriate average service life and corresponding dispersion pattern that should be utilized for depreciation purposes. I also conclude that AUS Consultants’ conduct in this matter is contrary to the presentation made by all other consultants and utilities performing similar work before various regulatory bodies throughout North America that I have dealt with.
15. The statements made in this affidavit are true and correct.

Jacob Pous
NAME

SUBSCRIBED AND SWORN to before me, the undersigned authority, on the 4th day of February 2013, by Jacob Pous.



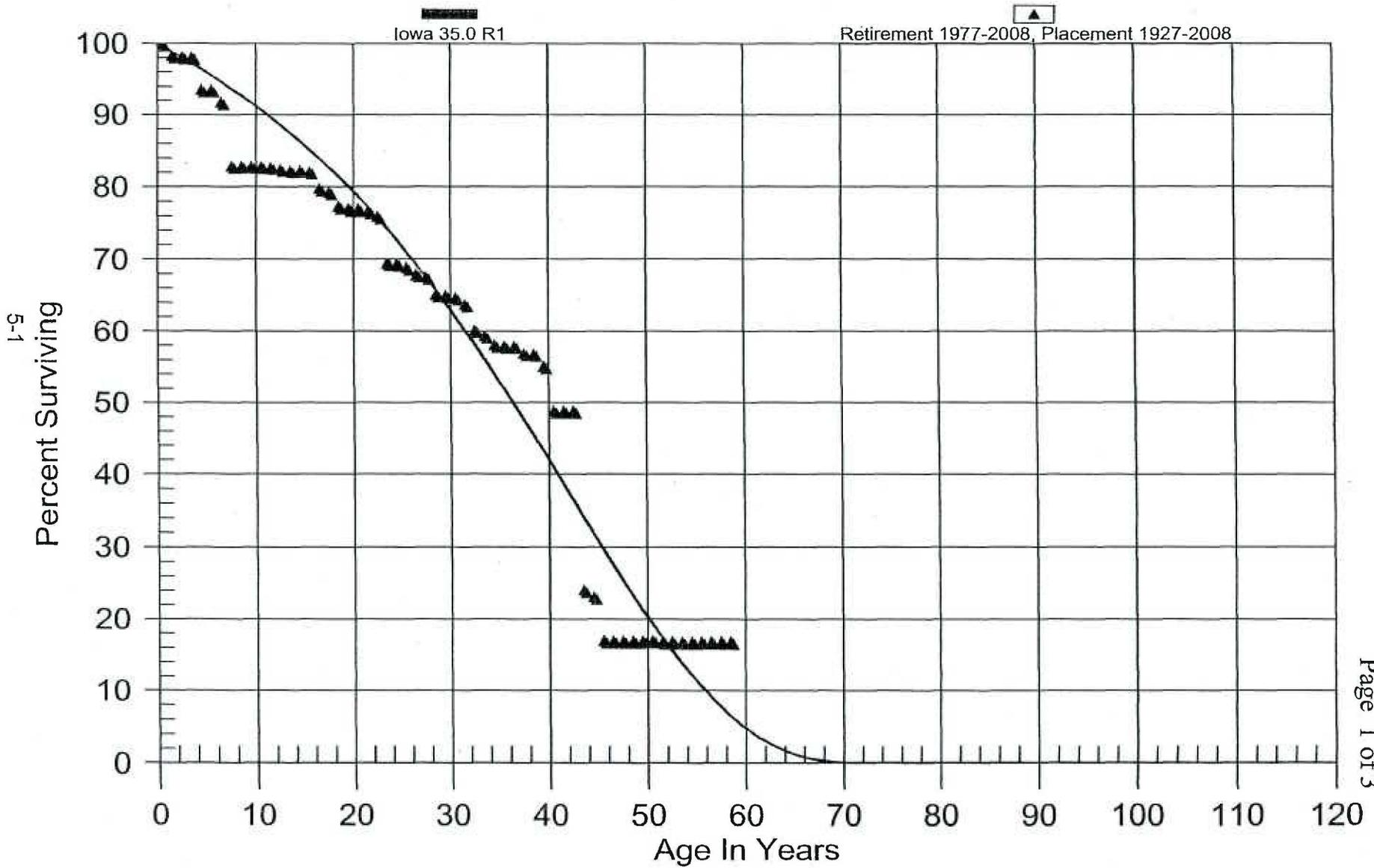
Sara Ellen Coleman
Notary Public, State of Texas
My Commission Expires: 4/13/2013

Montana-Dakota Utilities Company

Common Plant

390.00 STRUCTURES & IMPROVEMENTS

Original And Smooth Survivor Curves



Montana-Dakota Utilities Company**Common Plant****390.00 STRUCTURES & IMPROVEMENTS****Observed Life Table***Retirement Expr. 1977 TO 2008**Placement Years 1927 TO 2008*

<i>Age Interval</i>	<i>\$ Surviving At Beginning of Age Interval</i>	<i>\$ Retired During The Age Interval</i>	<i>Retirement Ratio</i>	<i>% Surviving At Beginning of Age Interval</i>
0.0 - 0.5	\$30,923,553.10	\$25,673.53	0.00083	100.00
0.5 - 1.5	\$30,647,167.91	\$502,495.67	0.01640	99.92
1.5 - 2.5	\$25,441,191.03	\$28,537.28	0.00112	98.28
2.5 - 3.5	\$25,028,496.79	\$21,067.24	0.00084	98.17
3.5 - 4.5	\$21,558,077.99	\$998,763.21	0.04633	98.09
4.5 - 5.5	\$19,733,258.09	\$3,328.20	0.00017	93.54
5.5 - 6.5	\$19,488,426.81	\$366,883.65	0.01883	93.53
6.5 - 7.5	\$18,697,663.99	\$1,803,312.79	0.09645	91.77
7.5 - 8.5	\$16,707,188.43	\$1,185.30	0.00007	82.91
8.5 - 9.5	\$17,175,374.34	\$201.39	0.00001	82.91
9.5 - 10.5	\$17,190,014.78	\$6,909.72	0.00040	82.91
10.5 - 11.5	\$17,087,646.97	\$22,460.50	0.00131	82.87
11.5 - 12.5	\$16,449,372.68	\$54,345.65	0.00330	82.77
12.5 - 13.5	\$16,094,049.40	\$35,258.34	0.00219	82.49
13.5 - 14.5	\$14,825,001.39	\$5,991.04	0.00040	82.31
14.5 - 15.5	\$12,535,830.93	\$23,427.31	0.00187	82.28
15.5 - 16.5	\$12,213,329.10	\$347,724.14	0.02847	82.12
16.5 - 17.5	\$11,709,677.50	\$76,946.11	0.00657	79.79
17.5 - 18.5	\$11,563,442.33	\$280,138.65	0.02423	79.26
18.5 - 19.5	\$11,284,647.27	\$49,274.84	0.00437	77.34
19.5 - 20.5	\$11,221,468.22	\$13,310.98	0.00119	77.00
20.5 - 21.5	\$11,316,923.39	\$45,061.83	0.00398	76.91
21.5 - 22.5	\$11,648,884.15	\$107,434.88	0.00922	76.61
22.5 - 23.5	\$11,083,154.10	\$941,681.64	0.08497	75.90
23.5 - 24.5	\$9,634,763.28	\$6,423.19	0.00067	69.45
24.5 - 25.5	\$6,635,781.46	\$51,633.39	0.00778	69.40
25.5 - 26.5	\$6,090,655.43	\$87,706.60	0.01440	68.86
26.5 - 27.5	\$4,270,597.43	\$20,932.77	0.00490	67.87
27.5 - 28.5	\$4,063,964.67	\$146,903.96	0.03615	67.54
28.5 - 29.5	\$3,674,970.31	\$3,871.72	0.00105	65.10
29.5 - 30.5	\$3,152,344.74	\$15,451.43	0.00490	65.03
30.5 - 31.5	\$3,151,652.41	\$48,328.18	0.01533	64.71
31.5 - 32.5	\$2,803,070.86	\$158,564.05	0.05657	63.72
32.5 - 33.5	\$2,602,897.43	\$33,240.37	0.01277	60.11
33.5 - 34.5	\$2,604,500.26	\$55,135.57	0.02117	59.35
34.5 - 35.5	\$2,532,951.30	\$7,220.80	0.00285	58.09
35.5 - 36.5	\$2,438,990.71	\$0.00	0.00000	57.93

Montana-Dakota Utilities Company
Common Plant
390.00 STRUCTURES & IMPROVEMENTS

Observed Life Table
Retirement Expr. 1977 TO 2008
Placement Years 1927 TO 2008

<i>Age Interval</i>	<i>\$ Surviving At Beginning of Age Interval</i>	<i>\$ Retired During The Age Interval</i>	<i>Retirement Ratio</i>	<i>% Surviving At Beginning of Age Interval</i>
36.5 - 37.5	\$2,015,672.80	\$35,668.14	0.01770	57.93
37.5 - 38.5	\$1,961,785.03	\$4,062.20	0.00207	56.90
38.5 - 39.5	\$1,951,978.24	\$58,309.83	0.02987	56.78
39.5 - 40.5	\$1,852,190.63	\$209,702.82	0.11322	55.09
40.5 - 41.5	\$633,016.01	\$0.00	0.00000	48.85
41.5 - 42.5	\$471,963.84	\$0.00	0.00000	48.85
42.5 - 43.5	\$319,624.00	\$162,495.28	0.50840	48.85
43.5 - 44.5	\$153,278.41	\$5,769.46	0.03764	24.01
44.5 - 45.5	\$128,525.01	\$33,976.68	0.26436	23.11
45.5 - 46.5	\$89,090.20	\$0.00	0.00000	17.00
46.5 - 47.5	\$79,478.26	\$0.00	0.00000	17.00
47.5 - 48.5	\$78,245.67	\$0.00	0.00000	17.00
48.5 - 49.5	\$76,167.37	\$0.00	0.00000	17.00
49.5 - 50.5	\$377,333.98	\$0.00	0.00000	17.00
50.5 - 51.5	\$375,995.96	\$3,171.15	0.00843	17.00
51.5 - 52.5	\$361,606.23	\$0.00	0.00000	16.86
52.5 - 53.5	\$337,003.55	\$400.00	0.00119	16.86
53.5 - 54.5	\$318,189.48	\$0.00	0.00000	16.84
54.5 - 55.5	\$317,325.59	\$0.00	0.00000	16.84
55.5 - 56.5	\$313,830.63	\$0.00	0.00000	16.84
56.5 - 57.5	\$301,579.65	\$0.00	0.00000	16.84
57.5 - 58.5	\$301,579.65	\$0.00	0.00000	16.84

Simulated Plant Record Analysis
SPS 2012 Engagment

Account: 367

Version: SPS 2012 Engagement SPR Data

Method: Simulated Balances

No. of Test Points: 20 Interval: 0 Observation Band: 1992 - 2011

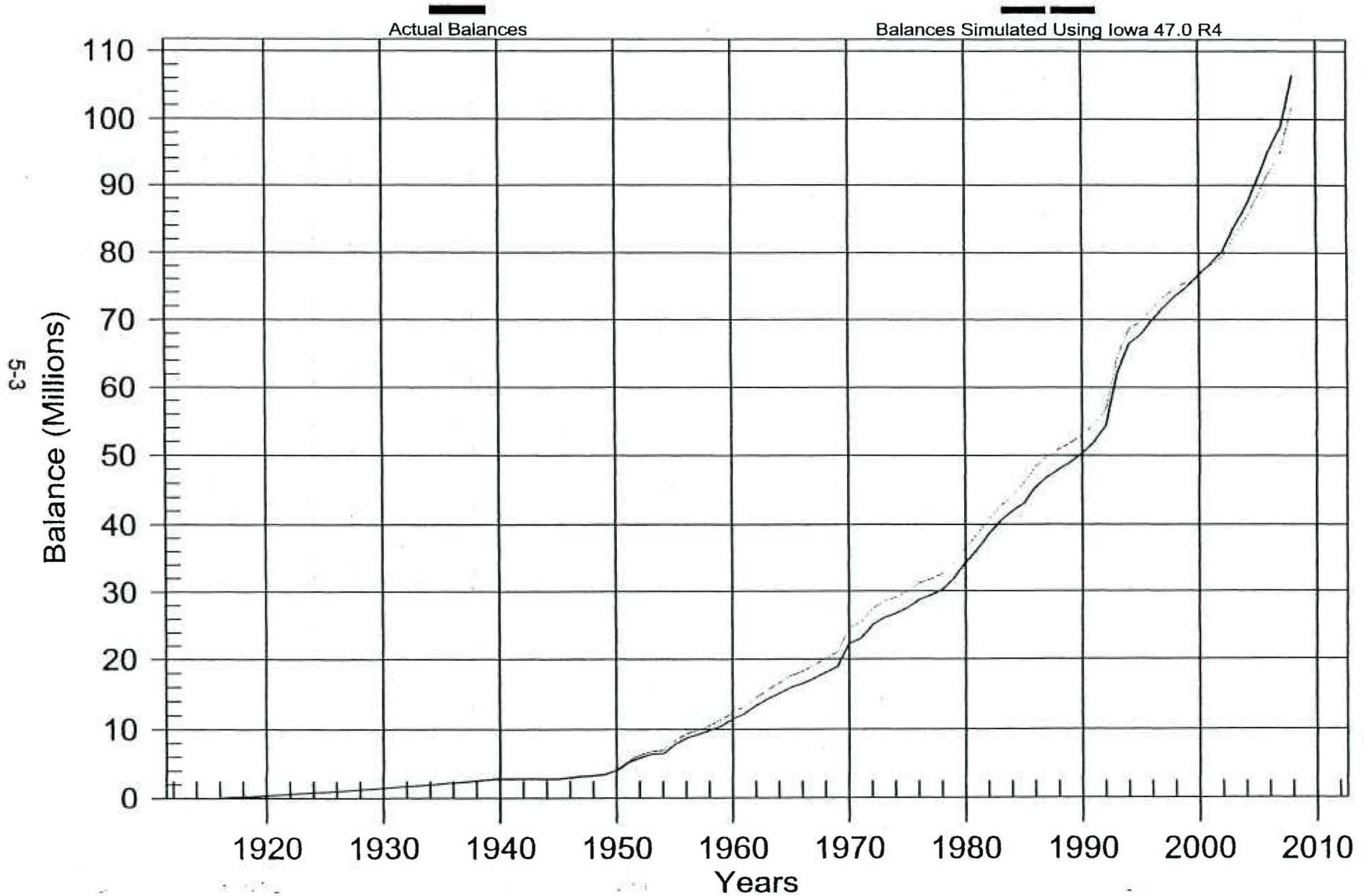
Dispersion	Avg Service Life	Sum of Squared Differences	Index of Variation	Conformance Index	Retirement Experience Index
R1	51.8	5.45E+11	9.2278	108.37	93.52
S-.5	59.1	5.90E+11	9.6069	104.09	76.86
R0.5	60.6	5.93E+11	9.6319	103.82	75.56
R1.5	46.8	6.09E+11	9.7614	102.44	99.35
L0	66.4	6.42E+11	10.0177	99.82	70.38
L0.5	58.2	6.74E+11	10.2656	97.41	79.58
S0	50.6	7.25E+11	10.6465	93.93	92.88
R2	42.7	9.37E+11	12.1014	82.64	100.00
S0.5	46.6	9.42E+11	12.1338	82.41	98.68
L1	52.1	9.61E+11	12.2550	81.60	87.76
L1.5	48.0	1.30E+12	14.2543	70.15	93.38
R2.5	40.6	1.42E+12	14.8931	67.15	100.00
S1	43.9	1.47E+12	15.1654	65.94	100.00
S1.5	41.5	2.03E+12	17.8121	56.14	100.00
L2	44.7	2.21E+12	18.5683	53.86	97.19
R3	38.4	2.34E+12	19.1200	52.30	100.00
L2.5	42.0	2.86E+12	21.1280	47.33	99.16
S2	39.6	3.05E+12	21.8237	45.82	100.00
S2.5	38.7	3.88E+12	24.6415	40.58	100.00
L3	40.2	4.21E+12	25.6534	38.98	99.95
R4	36.3	4.83E+12	27.4874	36.38	100.00
S3	37.7	5.22E+12	28.5606	35.01	100.00
L4	37.0	6.50E+12	31.8755	31.37	100.00
S4	36.0	8.36E+12	36.1543	27.66	100.00
R5	35.4	9.34E+12	38.2023	26.18	100.00
L5	35.9	9.54E+12	38.6204	25.89	100.00
S5	35.1	1.12E+13	41.8417	23.90	100.00
S6	34.9	1.30E+13	45.1656	22.14	100.00
SQ	38.0	3.32E+13	72.0009	13.89	100.00

Montana-Dakota Utilities Company

Gas Division

376.00 MAINS

Actual And Simulated Balances 1916-2008



5-9

MONTANA-DAKOTA UTILITIES CO.
MONTANA CONSUMER COUNSEL
DATA REQUEST
DATED JANUARY 11, 2013
DOCKET NO. D2012.9.100

MCC-150 RE: ACCOUNT 376
 WITNESS: ROBINSON

Please provide a detailed narrative explaining specifically how the 47R4 life-curve combination was selected for Accounts 376.1 and 376.2 – Mains Steel and Plastic, respectively. To the extent SPR results were relied upon, provide all ranking criteria for selected curves, as well as full justification for which band analysis was relied upon, and why the results of other bands were not relied on.

Response:

Please see Attachment A for a general ranking of statistical best fit curve for varying experience bands. The output of the SPR analysis is not maintained in paper copy or other format. The databases and study software are electronic and the analysis was utilized to run numerous band analysis in real time during the course of completing the study. Plot outputs are provided in the depreciation study report for the service life parameters that were estimated for each of the property groups.

Please see Response No. MCC-135 for a complete copy of the historic depreciation database. The SPR is one additional tool of various items that are reviewed to identify the applicable service life for each of the applicable property groups.

*Montana-Dakota Utilities Company**Gas Division*

376.00 MAINS

Summary of Simulated Curve Fitting Results

5 Year Band

Experience Band	Curve Dispersion	Ave. Serv. Life	Least Sum Of Square	Conformance Index	Index of Variation	Ret. Exp. Index
1916 - 2008	O3	160.6	7.818200E+13	28.38	35.23	43.37
2004 - 2008	O3	191.5	4.643100E+11	313.9	3.19	37.33
1999 - 2003	O3	172.9	5.993700E+11	227.5	4.4	40.78
1994 - 1998	O3	150.9	4.652100E+11	229.4	4.36	45.62
1989 - 1993	O4	185.3	3.044900E+11	216.8	4.61	48.26
1984 - 1988	S.5	61.2	2.596900E+11	197.7	5.06	79.35
1979 - 1983	O4	166.6	1.917100E+11	185.2	5.4	51.84
1974 - 1978	O4	140.6	1.526200E+11	163.1	6.13	57.46
1969 - 1973	R4	28.8	1.331000E+10	446.7	2.24	100
1964 - 1968	O4	114.5	2.242100E+09	784.2	1.28	63.88
1959 - 1963	R2.5	34.9	1.655100E+10	215.2	4.65	100
1954 - 1958	R2.5	36.3	7.171700E+08	699.5	1.43	100
1949 - 1953	S6	31.8	1.322600E+08	954.9	1.05	100