MONTANA-DAKOTA UTILITIES CO.
MONTANA PUBLIC SERVICE COMMISSION
DATA REQUEST
DATED DECEMBER 21, 2012
DOCKET NO. D2012.9.100

PSC-018

Regarding: Outside consultant reports
Witness: Applicable Witness

a. **Please provide white paper/executive summaries for all outside consultant reports in 2010, 2011, and year-to-date 2012.**

b. **For each report, please indicate whether the study (ies) is performed every year. If not, how often is the study (ies) performed, and what is the useful life of the study (ies)?**

Response:

a. Please see Attachment A for the MDU Resources Group, Inc. Actuarial Reports for 2010, 2011 and 2012.

b. The Actuarial Reports are provided annually.

MDU Resources Group, Inc. Pension Plan for Non-Bargaining Unit Employees

Actuarial Valuation as of January 1, 2010

Executive Summary

	January 1, 2010	January 1, 2009
Contribution Range		
Minimum Required Contribution	$3,403,455 (as of 1/1/2010)	$4,549,271 (as of 1/1/2009)
Maximum Deductible Contribution	$85,596,456	$81,859,939
Credit Balances		
Carryover Balance	$0	$0
PreFunding Balance	$17,980	$0
Total	$17,980	$0
Assets and Liabilities		
Target Normal Cost	$115,000	$3,726,852
Funding Target	$122,979,285	$102,099,924
Actuarial Value of Assets	$98,987,472	$91,356,136
Funding Target Attainment Percentage	80.47% (incl. rec. contribution)	89.48% (incl. rec. contribution)
Market Value of Assets	$93,420,736	$83,051,033
Estimated Rate of Return on Market Value of Assets	20.31%	(26.31%)
Census Information		
Active Participants	441	515
Terminated Vested Participants	55	32
Retirees and Beneficiaries	549	533
Total	1,045	1,080
Assumptions		
Interest Discounting	August 2009 Segment Rates	October 2008 Full Yield Curve
Effective Interest Rate	6.65%	8.21%

Executive Summary

Changes in Plan Provisions Since Prior Valuation

Effective December 31, 2009, benefit accruals are frozen.

Changes in Actuarial Assumptions and Methods

The interest discounting assumption was changed from the Full Yield Curve rates (with an October lookback period) to the PPA Segment Rates (with an August lookback period).

Summary of Other Significant Changes

We are not aware of the occurrence of any other significant event that would have a material effect on this valuation.

Executive Summary

Quarterly Contribution Requirement and Recommended Contribution Schedule for 2010

The plan is subject to the quarterly contribution requirement for the 2010 plan year. In order to avoid late interest penalties and potential notifications to the PBGC and participants, the following schedule of contributions should be followed:

Due Date (On or Before)	Contribution
April 15, 2010	$769,823
July 15, 2010	$769,823
October 15, 2010	$769,823
January 15, 2011	$769,823
September 15, 2011	$504,377
Total	**$3,583,669**

Estimated Quarterly Contribution Requirement for 2011

The plan will be subject to the quarterly contribution requirement for the 2011 plan year. Based upon 2010 actuarial valuation results, the estimated quarterly contribution required for the 2011 plan year will be $855,359. A contribution in this amount must be made on or before April 15, 2011, July 15, 2011, October 15, 2011 and January 15, 2012. Once the 2011 actuarial valuation is complete, we will communicate the final contribution requirements for the 2011 plan year.

Funding Policy Contribution

The plan sponsor's funding policy is to contribute the amount to meet the minimum funding requirements of Internal Revenue Code Sections 412 and 430. From time to time, and with regard to their cash and tax position, the plan sponsor may contribute an amount above the minimum required contribution.

Actuary's Commentary

General Comments

This valuation assumes that the Plan Sponsor agrees to the use of the actuarial cost methods as shown on page 30 of this report.

At-Risk Status

The plan is not at-risk for the 2010 plan year since the 2009 Funding Target Attainment Percentage (FTAP) of 89.48% is greater than 75%. The plan will not be at risk in 2011 since the 2010 FTAP of 80.47% is greater than 80%.

Benefit Restrictions

The plan's Adjusted Funding Target Attainment Percentage (AFTAP) is greater than 80%. No benefit restrictions apply for the 2010 plan year.

Next year, until the AFTAP for the 2011 plan year is certified, the presumed AFTAP will be equal to the 2010 AFTAP until March 31, 2011. On April 1, 2011, if the 2011 AFTAP is still not certified, the presumed AFTAP for 2011 becomes the 2010 AFTAP less 10%.

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Actuarial Certification

This report presents the results of the actuarial valuation as of January 1, 2010 for the MDU Resources Group, Inc. Pension Plan for Non-Bargaining Unit Employees. The purpose of this report is to provide guidance to management with regard to the minimum required contribution in accordance with ERISA and the maximum tax-deductible contribution as allowed by the Internal Revenue Code.

This report is not an AFTAP certification, nor should it be relied upon for any other purpose by any party other than the plan sponsor.

This valuation has been conducted in accordance with generally accepted actuarial principles and practices. In preparing the results presented in this report, we have relied upon information provided to us regarding plan provisions, plan participants and plan assets. We have reviewed this information for overall reasonableness, but we have not audited this information. The accuracy of the results presented in this report is dependent upon the accuracy and completeness of the underlying information.

The assumptions for interest and mortality are mandated by the Internal Revenue Service. All other assumptions have been selected by New York Life Retirement Plan Services, with concurrence of the plan sponsor, and are considered to be reasonable and within the "best-estimate range" as described by the Actuarial Standards of Practice.

The information contained in this report was prepared for the internal use of MDU Resources Group, Inc. and its auditors in connection with our actuarial valuation of the MDU Resources Group, Inc. Pension Plan for Non-Bargaining Unit Employees. It is neither intended nor necessarily suitable for other purposes.

The Consulting Actuary is a member of the Society of Actuaries, member of the American Academy of Actuaries and other professional actuarial organizations and meets their "General Qualifications Standard for Prescribed Statements of Actuarial Opinion" relating to pension plans.

Mark B Magnus

Mark B. Magnus, ASA, MAAA, Enrolled Actuary
Enrolled Actuary No. 08-02866

6/18/2010
Date

Plan Assets

I. Asset Valuation Method

IRC Section 430(g) provides that plan assets be valued at either their fair market value on the valuation date or at the "average" value of assets on the valuation date. Under this average value, the value of plan assets is set equal to the average of the fair market value of assets on the valuation date and the adjusted fair market value of assets (including expected earnings) determined for one or more earlier determination dates (up to a 2-year limit). The resulting average value must be constrained so that it falls between 90 and 110 percent of the fair market value of plan assets on the valuation date.

Contributions for a prior plan year that are made after the beginning of this plan year must be adjusted for interest at the effective interest rate under Section 430(h)(2). This contribution adjustment requirement is effective beginning for contributions for the 2008 plan year. Contributions for the 2007 plan year made in 2008 are not adjusted for interest.

The Plan Assets for purposes of this Actuarial Valuation are valued under the asset averaging method.

II. Contributions for Plan Year Beginning January 1, 2009

Date	Amount
April 21, 2009	1,242,291
July 15, 2009	804,881
October 15, 2009	1,242,291
January 13, 2010	1,023,586
September 15, 2010*	538,602
Total:	**$4,851,651**

*Anticipated

Plan Assets

III. Market Value of Assets as of January 1, 2010

	Fair Market Value
Cash	$641,876
Wells Fargo Unitized Assets	90,119,292
MainStay Cash Reserves Fund I	835,283
MARKET VALUE (No Receivables)	91,596,451
Transfer Receivable	293,856
TOTAL	91,890,307
Discounted Receivable Contributions*	1,530,429
MARKET VALUE OF ASSETS AS OF January 1, 2010	$93,420,736

**Contributions for the 2009 Plan Year that are made after December 31, 2009 are discounted back to January 1, 2010 at the 2009 Effective Interest Rate of 8.21%*

Plan Assets

IV. Reconciliation of Market Value of Assets

1. Market Value of Assets as of January 1, 2009	$76,847,642
2. Contributions Made During Calendar Year	8,347,434
3. Interplan Transfers	1,399,498
4. Investment Income	15,669,351
5. Benefit Payments	(10,169,064)
6. Expenses	(498,410)
7. Transfer Amount Receivable	293,856
8. Market Value of Assets as of December 31, 2009 (1+2+3+4+5+6+7)	$91,890,307

Estimated Gross Rate of Return on Assets: 20.31%

The estimated rate of return is based on the time weighting of contributions, benefit payments and expenses

V. Actuarial Value of Assets

1. Market value of assets, January 1, 2010	$93,420,736
2. Prior year gains/(losses):	
(a) Asset gain/(loss) for year-2	
(i) Initial asset gain/(loss)	(36,726,243)
(ii) Weight	0.333
(iii) Unrecognized amount: (i)x(ii)	(12,242,081)
(b) Asset gain/(loss) for year-1	
(i) Initial asset gain/(loss)	10,013,017
(ii) Weight	0.667
(iii) Unrecognized amount: (i)x(ii)	6,675,345
3. Total amount unrecognized: sum of (2)(iii)	(5,566,736)
4. Preliminary actuarial value: (1)-(3)	98,987,472
5. Market value corridor override	
(a) Lower bound: 0.9 x(1)	84,078,663
(b) Upper bound: 1.1 x(1)	102,762,809
(c) Adjustment to corridor	0
6. Actuarial assets, January 1, 2010: (4)+(5)(c)	$98,987,472

VI. Development of Asset Gain/(Loss)

1. Development of 2008 Gain/(Loss)

(a)	Expected Return on Assets		6.43%
(b)	Market Value at January 1, 2008		$115,396,641
(c)	Benefit Payments and Expenses		(8,959,209)
(d)	Expected Return at 6.43% Interest		
	(i) Market Value	7,420,004	
	(ii) Benefit Payments	(283,551)	
	(iii) Contributions	0	
	(iv) Total		7,136,453
(e)	Actual Return on Market Value		(29,589,790)
(f)	(Gain)/Loss: (e)-(d)(iv)		$36,726,243

2. Development of 2009 Gain/(Loss)

(a)	Expected Return on Assets		6.69%
(b)	Market Value at January 1, 2009		$81,699,395
(c)	Benefit Payments and Expenses		(8,883,828)
(d)	Expected Return at 6.69% Interest		
	(i) Market Value	5,465,690	
	(ii) Benefit Payments	(292,354)	
	(iii) Contributions	98,850	
	(iv) Total		5,272,186
(e)	Actual Return on Market Value		15,285,203
(f)	(Gain)/Loss: (e)-(d)(iv)		($10,013,017)

Credit Balances

With the enactment of the Pension Protection Act of 2006, credit balances were maintained; however, they were bifurcated into the following two categories:

1. The credit balance, if any, as of the end of the 2007 plan year establishes the Carryover Balance; and
2. Contributions made on or after the 2008 plan year in excess of minimum funding requirements will be credited to the Prefunding Balance.

Maintaining credit balances is elective. Plan sponsors may "waive" some or all of the Carryover Balance or Prefunding Balance in order to avoid asset reductions for purposes of determining:

1. whether the plan is "at-risk",
2. the Funding Target Attainment Percentage,
3. the Shortfall Amortization Base, and
4. whether benefit restrictions apply

If the credit balances are to be waived, the Carryover Balance must be waived first prior to any waiver of the Prefunding Balance.

After 2007, interest on the Carryover and Prefunding Balance will be credited at the rate determined on the actual return on the market value of plan assets.

Credit balances may be used toward the current year's minimum funding requirement only if, for the prior year, the Actuarial Value of Assets less the Prefunding Balance is greater than 80% of the "not-at-risk" Funding Target. If the Credit Balances are going to be used as an offset to the Minimum Funding Requirement, the Carryover Balance must be used first prior to the use of the Prefunding Balance.

Credit Balances

Detailed below is the development of the Credit Balances as of the beginning of the 2010 plan year:

1. Funding Standard Carryover Balance (FSCB)	
(a) FSCB as of 01/01/2009	$0
(b) Waived FSCB	0
(c) FSCB after waivers: (a) – (b)	0
(d) FSCB applied to minimum required contribution	0
(e) Remaining FSCB as of 01/01/2009: (c) – (d)	0
(f) Rate of Return on Plan Assets During Plan Year 2009	20.31%
(g) FSCB as of 01/01/2010 (e)(1 + f)	0
2. Prefunding Balance (PFB)	
(a) PFB as of 01/01/2009	0
(b) Waived PFB balance	0
(c) PFB after waivers: (a)-(b)	0
(d) PFB applied to minimum required contributions	0
(e) Excess contributions (Excess)	
(i) Employer contributions discounted to BOY	4,565,887
(ii) Preliminary minimum required contribution (MRC)	4,549,271
(iii) Credit balances applied to MRC	0
(iv) Excess: (i)-(ii)+(iii), min zero	16,616
(v) Excess above MRC: (i)-(ii), min zero	16,616
(vi) Excess due to use of credit balances: (iv)-(v)	0
(f) Effective rate	8.21%
(g) Rate of Return on Plan Assets During Plan Year 2009	20.31%
(h) Interest Calculation: (e)(v) x (f) + [(c)-(d) + (e)(vi)] x (g)	1,364
(i) PFB at 01/01/2010: (c)-(d)+(e)(iv)+(h)	$17,980

Credit Balances

The following chart details what, if any, portion of the Credit Balances will be waived for 2010:

1. Waived credit balance(s) to avoid benefit restrictions	
(a) Adjusted Funding Target Attainment Percentage (AFTAP) before waivers	
(i) Actuarial assets	$98,987,472
(ii) Funding Standard Carryover Balance (FSCB)	0
(iii) Prefunding Balance (PFB)	17,980
(iv) Not-at-risk funding liability	122,979,285
(v) Non-HCE annuity purchases in last 2 years	0
(vi) Preliminary AFTAP: ((i)-(ii)-(iii)+(v))/((iv)+(v))	80.47%
(vii) Funded Ratio: (i)/(iv)	80.49%
(b) Transition percentage	96.00%
(c) Credit balance(s) waived to avoid benefit restrictions, if possible	0
(d) AFTAP after benefit restriction waivers	
(i) FSCB after benefit restriction waivers	0
(ii) PFB after benefit restriction waivers	17,980
(iii) AFTAP after benefit restriction waivers: if (a)(vii)>=(b), ((a)(i)+(a)(v))/((a)(iv)+(a)(v)), else ((a)(i)-(i)-(ii)+(a)(v))/((a)(iv)+(a)(v))	80.47%
2. Waived credit balance(s) to avoid At-Risk status	
(a) Not-at-Risk Funding Target Attainment Percentage (NAR FTAP) before waivers to avoid At-Risk status: ((1)(a)(i)-(1)(d)(i)-(1)(d)(ii))/(1)(a)(iv)	80.47%
(b) At-Risk Funding Target Attainment Percentage (AR FTAP) before waivers to avoid At-Risk status	
(i) At-risk funding liability	142,216,035
(ii) Preliminary AR FTAP: ((1)(a)(i)-(1)(d)(i)-(1)(d)(ii))/(i)	69.59%
(c) Funding Target Benefit percentage for following year	80.00%
(d) At-Risk in following year? Yes if (a)<(c), (b)(ii)<70%, and >500 participants	No
(e) Credit balance(s) waived to avoid At-Risk status, if possible	0
(f) FTAPs after waivers	
(i) FSCB after waivers	0
(ii) PFB after waivers	17,980
(iii) NAR FTAP: ((1)(a)(i)-(i)-(ii))/(1)(a)(iv)	80.47%
(iv) AR FTAP: ((1)(a)(i)-(i)-(ii))/(b)(i)	69.59%

Credit Balances

3.	Funding Standard Carryover Balance		
	(a)	FSCB at January 1, 2010	0
	(b)	Waived FSCB balance	0
	(c)	FSCB after waivers: (a)-(b)	0
	(d)	FSCB applied to MRC or quarterly contributions	0
	(e)	FSCB at December 31, 2010 before investment return: (c)-(d)	0
4.	Prefunding Balance		
	(a)	PFB at January 1, 2010	17,980
	(b)	Waived PFB balance	0
	(c)	PFB after waivers: (a)-(b)	17,980
	(d)	PFB applied to MRC	17,980
	(e)	Excess contributions (Excess)	
		(i) Employer contributions discounted to BOY	3,403,455
		(ii) Preliminary (MRC)	3,421,435
		(iii) Credit balances applied to MRC	17,980
		(iv) Excess: (i)-(ii)+(iii), min zero	0
		(v) Excess above MRC: (i)-(ii), min zero	0
		(vi) Excess due to use of credit balances: (iv)-(v)	0
	(f)	Effective rate	6.65%
	(g)	Interest on excess contributions: (e) (v) x (f)	0
	(h)	PFB at December 31, 2010 before investment return: (c)-(d)+(e)(iv)+(g)	$0

Funding Target

In accordance with Section 430(d) of the Internal Revenue Code, the Funding Target is the present value of all benefits accrued or earned under the plan as of the beginning of the plan year.

The Funding Target for plans that are "not-at-risk" is determined based on the following:

- Interest discounting is mandated through use of a segmented yield curve based on high-quality (AAA,AA,A) corporate bond yields. The three segments include benefits expected to be paid over the next 5 years, between years 5 and 20 and after year 20. The segmented yield curve is based on a 24-month unweighted average and there is an optional 3-year phase-in from the prior discounting basis beginning in 2008. There is also an optional lookback period up to 4 months prior to the beginning of the plan year. Alternatively, plan sponsors may elect to use the full yield curve in lieu of the segmented rates. The full yield curve, however, represents the rates for one month as opposed to the 24-month average.
- The mortality assumption is mandated by the IRS. The table is based upon the RP-2000 Mortality Table with separate tables for annuitant and non-annuitant mortality. Plan sponsors may use either the table with static projections or a table with generational projections. The static projection table projects non-annuitant mortality rates (i.e., prior to benefit commencement) 15 years beyond the valuation year and annuitant mortality rates (i.e. after benefit commencement) 7 years beyond the valuation year. The generational projection table projects mortality rates (annuitant and non-annuitant) to all future years. All projections are performed using Scale AA.
- Assumed utilization of lump sums, if applicable, is reflected.
- All other assumptions that are individually reasonable and, in combination, offer the enrolled actuary's best estimate of anticipated experience.

A plan is considered to be "at-risk" for the current plan year if it meets all of the following requirements:

- The Funding Target Attainment Percentage for the prior plan year is less than 80%*
- As of the prior plan year, the Actuarial Value of Assets less any Credit Balances is less than 70% of the "at-risk" Funding Target**
- Total participants in all defined benefit plans sponsored by the employer (or any member of the employer's controlled group) is greater than 500.

* The 80% threshold is phased-in over 4 years. For plan years beginning in 2008, 2009 and 2010, 80% is replaced by 65%, 70% and 75%, respectively. In accordance with IRS Proposed Regulation §1.436-1, Current Liability for the 2007 plan year replaces Funding Target to determine the Funding Target Attainment Percentage for the 2007 plan year.

** Determined without regard to the expense load

Funding Target

The Funding Target for a plan that is "at-risk" is determined using the following additional mandated assumptions:

- Participants who will be eligible to elect benefits in the next 10 years will assume to do so at their earliest eligibility date
- Participants are assumed to elect the most-valuable form of benefit
- If a plan has been in "at-risk" status for at least 2 of the 4 preceding plan years, a loading factor is added equal to $700 per participant plus 4% of the "not-at-risk" Funding Target
- In no event shall the "at-risk" Funding Target be less than the "not-at-risk" Funding Target

Funding Target

Development of Funding Target

1.	More than 500 participants in controlled group in prior year?			Yes
2.	Prior year funding target attainment percentage			
	(a)	Not-at-risk liability		89.5%
	(b)	At-risk liability		76.3%
3.	Funding target benchmark percentage			75.0%
4.	At-risk status			
	(a)	Current year: If (1) and (2)(a)<(3) and (2)(b)<70%		No
	(b)	Year-1		No
	(c)	Year-2		No
	(d)	Year-3		No
	(e)	Year-4		No
	(f)	At-risk current year and 2 of preceding 4 years? (If yes, loads apply)		No
5.	Not-at-risk funding liability			
	(a)	Funding liability		
		(i)	Retirees and benef. receiving payments	73,214,311
		(ii)	Terminated vested participants	2,112,116
		(iii)	Active participants, vested liability	46,029,943
		(iv)	Active participants, total liability	47,652,858
		(v)	Total liability: (i)+(ii)+(iv)	122,979,285
	(b)	Normal cost before adjustments		0
	(c)	Expenses included in Normal Cost		115,000
	(d)	Normal cost: (b)+(c)		115,000

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Funding Target

6.	At-risk funding liability		
	(a)	At-risk funding liability	
		(i) Retirees and benef. receiving payments	73,214,311
		(ii) Terminated vested participants	2,571,091
		(iii) Active participants, vested liability	62,638,375
		(iv) Active participants, total liability	66,430,633
		(v) Total liability: (i)+(ii)+(iv)	142,216,035
	(b)	Number of plan participants	1,045
	(c)	Per-participant load: $700 x (b)	N/A
	(d)	Liability load: 4% of (5)(a)(v)	N/A
	(e)	At-risk funding target: (a)(v)+(c)+(d), not less than (5)(a)(v)	142,216,035
	(f)	Preliminary at-risk normal cost (adj. for expenses)	115,000
	(g)	Normal cost load: 4% of (5)(b)	N/A
	(h)	At-risk normal cost: (f)+(g), not less than (5)(d)	115,000
7.	Funding target		
	(a)	Number of consecutive years at-risk (max 5)	0
	(b)	Transition percentage: 20% x (a)	0.0%
	(c)	Funding target: (5)(a)(v)+[(b)x((6)(e)-(5)(a)(v))]	122,979,285
	(d)	Target normal cost: (5)(d)+[(b)x((6)(h)-(5)(d)]	$115,000

Development of Shortfall Amortization Charge

In accordance with Section 430(c) of the Internal Revenue Code, the Shortfall Amortization Charge for any plan year is the aggregate total (not less than zero) of the shortfall amortization installments for such plan year with respect to the shortfall amortization bases for the current plan year and 6 preceding plan years.

In the initial year of application of PPA, the Shortfall Amortization Base is equal to the initial Funding Shortfall. In subsequent years, a Shortfall Amortization Base is created equal to that year's Funding Shortfall less the present value of remaining Shortfall Amortization Installments.

If the Actuarial Value of Assets reduced by the Prefunding Balance is greater than or equal to the Funding Target for a plan year, the plan is exempt from establishing a Shortfall Amortization Base.

The Worker, Retiree and Employer Recover Act of 2008 provided transition relief for certain eligible plans* with regard to establishing a Shortfall Amortization Charge. For these plans, only the amount by which the assets (as reduced by the Credit Balance) are less than 92% of the Funding Target need be established as a Shortfall Amortization Base in 2008. This percentage increases to 94% in 2009, to 96% in 2010 and is then 100% in 2011 and beyond.

In any year in which the Funding Shortfall is zero, all Shortfall Amortization Bases are considered fully amortized.

* To be eligible for this transition relief, the plan must have been exempt from the Additional Funding Charge rules in the 2007 plan year.

Development of Shortfall Amortization Charge

1.	1st segment rate			5.03%
	2nd segment rate			6.73%
2.	Funding target			$122,979,285
3.	Adjusted plan assets			
	(a)	Actuarial assets		98,987,472
	(b)	Funding Standard Carryover Balance		0
	(c)	Prefunding Balance (PFB)		17,980
	(d)	Adjusted assets: (a)-(b)-(c), not less than 0		98,969,492
4.	Funding shortfall: (2)-(3)(d), not less than 0			24,009,793
5.	Current shortfall amortization installments			
	(a)	Annual installments		
		(i)	Year -1 base (6 years remaining)	822,419
		(ii)	Year -2 base (5 years remaining)	0
		(iii)	Year -3 base (4 years remaining)	0
		(iv)	Year -4 base (3 years remaining)	0
		(v)	Year -5 base (2 years remaining)	0
		(vi)	Year -6 base (1 years remaining)	0
	(b)	Total annual installments		822,419
	(c)	Present value of annual installments		
		(i)	Year -1 base (6 years remaining)	4,330,473
		(ii)	Year -2 base (5 years remaining)	0
		(iii)	Year -3 base (4 years remaining)	0
		(iv)	Year -4 base (3 years remaining)	0
		(v)	Year -5 base (2 years remaining)	0
		(vi)	Year -6 base (1 years remaining)	0
	(d)	Total present value of annual installments		4,330,473
6.	Exemption from new shortfall amortization base			
	(a)	Target liability percentage		96.00%
	(b)	Shortfall funding target: (2)x(a)		118,060,114
	(c)	Prefunding Balance if used to reduce the Minimum Required Contribution, else 0		17,980
	(d)	Exempt?: [(3)(a)-(c)]>=(b)		No

Development of Shortfall Amortization Charge

7.	Shortfall amortization base		
	(a)	Adjusted funding shortfall:	
		(6)(b)-(3)(d), not less than 0	19,090,622
	(b)	New current year base:	
		(a)-(5)(d), or 0 if exempt	14,760,149
	(c)	New 7-year installment amount	2,484,016
8.	Shortfall amortization charge:		
	(5)(b)+(7)(c), not less than 0		$3,306,435

Minimum Required Contribution

If the Actuarial Value of Assets reduced by the Credit Balances is less than the Funding Target, then the Minimum Required Contribution for such plan year shall be the sum of the Target Normal Cost and the Shortfall Amortization Charge.

If the Actuarial Value of Assets reduced by the Credit Balances is greater than the Funding Target for a year, then the Minimum Required Contribution for such plan year shall be the Target Normal Cost less the excess of adjusted assets over the Funding Target, but not less than $0.

Quarterly contributions are required if the Funding Shortfall was greater than $0 on the prior valuation date. If applicable, the quarterly contribution is due on or before the 15th day following the end of each quarter. If the quarterly contribution is not made on time, late interest is charged at the Effective Interest Rate plus 5%. If applicable, the quarterly contribution amount is 25% of the lesser of 90% of the current year's minimum required contribution or 100% of the prior year's minimum required contribution.

Contributions can be made up to 8½ months after the end of the plan year for such plan year. All contributions will be discounted back to the valuation date with interest at the Effective Interest Rate, including contributions made after the end of the plan year, to determine whether the Minimum Required Contribution has been satisfied.

If the plan sponsor fails to pay the minimum required contribution by 8½ months after the end of the plan year, the plan sponsor will be required to pay a 10% excise tax under IRC Section 4971 on the amount any unpaid minimum required contributions. This tax can increase to 100% if the unpaid minimum required contribution is not corrected in subsequent plan years.

Minimum Required Contribution

Summary of Minimum Required Contribution:

1.	Effective interest rate		6.65%
2.	Target normal cost		$115,000
3.	Shortfall amortization charge		3,306,435
4.	Credit for excess assets		
	(a)	Adjusted Assets	98,969,492
	(b)	Funding Target	122,979,285
	(c)	Excess assets: (a)-(b), not less than 0	0
5.	Preliminary minimum required contribution (MRC): (2)+(3)-(4)(c), not less than 0		3,421,435
6.	Credit balances		
	(a)	Eligible to apply against MRC?: Yes if prior year funded ratio >= 80%	Yes
	(b)	Funding Standard Carryover Balance (FSCB)	0
	(c)	Elected to apply FSCB against MRC?	Yes
	(d)	Prefunding Balance (PFB)	17,980
	(e)	Elected to apply PFB against MRC?	Yes
	(f)	Balances eligible to apply against MRC: (b)+(d) if eligible and elected	17,980
7.	MRC adjusted for credit balances: (5)-(6)(f), not less than 0		3,403,455
8.	Required quarterly contributions		
	(a)	Quarterlies required?: Yes if prior year funding shortfall	Yes
	(b)	Prior year minimum required contribution	4,549,271
	(c)	Current year MRC: (5)	3,421,435
	(d)	Required annual payment: lesser of (b) and 90% of (c), if applicable	3,079,292
	(e)	Required installment: 25% of (d)	$769,823

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Schedule of Contributions

The plan's "Effective Interest Rate" for any particular plan year is the single rate that, if used to discount the plan's expected benefit payments, would produce the same Funding Target that the Segment Rates produce. The Effective Interest Rate is the rate at which interest is charged on contributions until the date they are actually made.

The Effective Interest Rate for the 2010 Plan Year is: 6.65%

The Minimum Required Contribution as of January 1, 2010 is: $3,403,455

The Plan is subject to the quarterly contribution requirement for the 2010 plan year. The following table provides the contribution schedule that meets the quarterly installment requirements, if applicable, as well as satisfies the Minimum Required Contribution requirement when discounted back to January 1, 2010 at the 2010 Effective Interest Rate:

Date	Contribution
April 15, 2010	$769,823
July 15, 2010	$769,823
October 15, 2010	$769,823
January 15, 2011	$769,823
September 15, 2011	$504,377
Total	**$3,583,669**

Preliminary Contribution Schedule for the 2011 Plan Year

Since there is a Funding Shortfall in 2010, the Plan will be subject to the quarterly contribution requirement for the 2011 plan year. The amount of the 2011 quarterly installments will be no greater than $855,359 and each will be due on or before April 15, 2011, July 15, 2011, October 15, 2011 and January 15, 2012.

Maximum Deductible Contribution Limit

Contributions to a qualified pension plan may be deducted for tax purposes, subject to limitations contained in Section 404(a) of the IRC. If the plan sponsor's taxable year and plan year coincide, the limit for a taxable year is the maximum amount for the coinciding plan year. Otherwise, the limit for the taxable year is the maximum amount with respect to either the plan year that commences or the plan year that ends in the taxable year (or a weighted average of the respective maximum amounts). Once the method for matching plan years to taxable years is established, it may not be changed without prior approval from the IRS.

For a contribution to be deductible in a particular taxable year, the contribution must be made during the taxable year or not later than the time for filing a tax return, which is the 15th day of the third month following the end of the taxable year. A later contribution may be deductible if the IRS has granted an approval to extend the deadline for filing the tax return.

Any contribution in excess of the tax-deductible limit for a taxable year may not be deducted in that year, even though the sponsor may have taken deductions in previous years that were less than the applicable tax-deductible limits. Contributions in excess of the tax-deductible limit may be deducted in succeeding taxable years, but may be subject to a 10% excise tax under Section 4972 of the IRC. The amount (if any) of the excess that may be deducted in a later year may not exceed the tax-deductible limit for that year minus the amount contributed in such later year.

For purposes of this report, the following assumptions have been made:

- The tax year begins January 1, 2010 and ends on December 31, 2010; and
- Historically, the deductible limit has been established based upon the plan year beginning in this tax year.

Since the tax-deductible contribution is dependent upon the relationship between the taxable year and the plan year and previous tax deductions, we recommend that you consult with your tax advisor with respect to the tax treatment of contributions to the plan.

In accordance with IRC Sections 404(a) and 404(o), the maximum deductible contribution for a limitation year shall be the greatest of:

a) Target Normal Cost plus 150% of the Funding Target* less the Actuarial Value of Plan Assets
b) Minimum Required Contribution
c) If a plan is not "at-risk", the Target Normal Cost and Funding Target (both determined as if the plan were "at-risk") less the Actuarial Value of Plan Assets.

* The Funding Target for this purpose is determined including compensation increases after the current plan year (if the plan is pay-related) or including schedule benefit increases

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Maximum Deductible Contribution Limit

Summary of Maximum Tax Deductible Contribution

1.	Funding target			$122,979,285
2.	Target normal cost			115,000
3.	Cushion amount			
	(a)	50% of funding target: 50% of (1)		61,489,643
	(b)	Expected benefit increases		
		(i)	Not-at-risk maximum liability	122,979,285
		(ii)	At-risk maximum liability	142,216,035
		(iii)	Per-participant load	N/A
		(iv)	Liability load: 4% of (i)	N/A
		(v)	At-risk target: (ii)+(iii)+(iv), not less than (i)	142,216,035
		(vi)	Transition percentage	0.00%
		(vii)	Maximum funding target: (i)+[(vi)x((v)-(i))]	122,979,285
	(c)	Cushion amount: (a)+(b)(vii)-(1)		61,489,643
4.	Actuarial value of assets			98,987,472
5.	Preliminary limit: (1)+(2)+(3)(c)-(4), not less than 0			85,596,456
6.	Maximum if not at-risk			
	(a)	At-risk funding liability		142,216,035
	(b)	At-risk normal cost (incl. expenses)		115,000
	(c)	Maximum if not at-risk: (a)+(b)-(4), not less than 0		43,343,563
7.	Minimum required contribution			3,583,669
8.	Maximum tax deductible contribution: max of (5),(6) and (7)			$85,596,456

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Supplementary Exhibits

PBGC Premiums

ERISA established the Pension Benefit Guaranty Corporation (PBGC), under the jurisdiction of the Department of Labor, to guarantee most vested retirement benefits and certain disability and survivor pensions.

PBGC guarantees are limited. For example, the PBGC does not guarantee benefits that had not vested prior to the plan termination or benefits for which all age, service, or other requirements had not been met at the time the plan terminates. Further, benefit increases and new benefits that have been in place for less than a year are not guaranteed, and those that have been in place for less than 5 years are only partly guaranteed. The maximum guaranteed benefit under a plan terminating in 2010 payable as a single life annuity at age 65, is $4,500 per month. Lower guarantees apply if benefits begin before age 65 or if survivor benefits are payable. Benefits other than pension benefits, such as health insurance, life insurance, death benefits, vacation pay, or severance pay are not guaranteed, and the PBGC does not pay lump sums exceeding $5,000 (even if available under the plan prior to termination).

Plans covered by the PBGC insurance program must file an annual premium filing each year with the PBGC via their online myPAA system within 9-1/2 months after the beginning of the plan year. Plans covering more than 500 participants must also file an Estimated Premium Filing through myPAA by the end of the second month of the plan year. All plans must pay a basic premium of $35 times the number of participants as of the end of the previous plan year, and plans with unfunded vested benefits must also pay an additional risk-related premium to the PBGC.

Development of PBGC Premium for 2010:

1.	Flat-rate premium			
	(a)	National Average Wage (NAW), 2 years prior		$41,334.97
	(b)	Flat-rate: $30 x (a)/$35,648.55 (2004 NAW), rounded		35
	(c)	Participant count (excludes 3 Alternate Payees)		1,042
	(d)	Flat-rate premium: (b)x(c)		$36,470
2.	Variable-rate premium			
	(a)	PBGC funding target		
		(i)	Not-at-risk PBGC liability	122,759,203
		(ii)	At-risk PBGC liability	141,942,701
		(iii)	Per-participant load	N/A
		(iv)	Liability load: 4% x (i)	N/A
		(v)	At-risk PBGC target: (ii)+(iii)+(iv), not less than (i)	141,942,701
		(vi)	Transition percentage	0.00%
		(vii)	PBGC funding target: (i)+[(vi)x((v)-(i))]	122,759,203
	(b)	Market value of plan assets		93,420,736
	(c)	Unfunded vested benefits: (a)(vii)-(b), min zero, rounded up to $1,000		29,339,000
	(d)	Variable-rate premium: 0.009x(c), or zero if exempt		264,051
3.	PBGC Premium: (1)(d)+(2)(d)			$300,521

ASC 960 Information (previously known as FAS 35)

Transfers based on Accrual Method

The information in this exhibit is intended to satisfy the requirements under Accounting Standards Codification Topic 960 (ASC 960) with regard to the financials of the plan. It is not intended to meet the requirements of Accounting Standards Codification Topic 715 (ASC 715) (previously known as FAS 87) which are the financials of the plan sponsor. If applicable, information for ASC 715 is presented in a separate report.

The Present Value of Accumulated Plan Benefits has been calculated using the Actuarial Assumptions Supplementary Exhibit. No future increases in salaries, Social Security benefits, or benefit service were assumed.

1.	Actuarial present value of accrued plan benefits			
	(a)	Actuarial present value of vested benefits		
		(i)	Participants currently receiving benefits	$64,589,966
		(ii)	Participants entitled to deferred benefits	1,683,593
		(iii)	Other participants	37,898,841
		(iv)	Total	104,172,400
	(b)	Actuarial present value of nonvested benefits		164,069
	(c)	Actuarial present value of accrued plan benefits: (a)(iv)+(b)		104,336,469
2.	Market value of assets (includes receivables)			93,452,495
3.	Unfunded PVAB (Surplus assets): (1)(c)-(2)			10,883,974
4.	Funded percentage: (2)/(1)(c)			89.57%
5.	Changes in present value			
	(a)	PVAB as of January 1, 2009		101,228,133
	(b)	Changes due to:		
		(i)	Decrease in discount period at 8.00%	7,651,453
		(ii)	Benefits paid	(10,169,064)
		(iii)	Assumption changes	0
		(iv)	Plan amendments	0
		(v)	Additional benefits earned, including experience gains and losses	5,284,231
		(vi)	Amount Transferred	341,716
		(vii)	Total change	3,108,336
	(c)	PVAB as of January 1, 2010: (a)+(b)(vi)		$104,336,469

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ASC 960 Information (previously known as FAS 35)

Transfers based on Cash Method

The information in this exhibit is intended to satisfy the requirements under Accounting Standards Codification Topic 960 (ASC 960) with regard to the financials of the plan. It is not intended to meet the requirements of Accounting Standards Codification Topic 715 (ASC 715) (previously known as FAS 87) which are the financials of the plan sponsor. If applicable, information for ASC 715 is presented in a separate report.

The Present Value of Accumulated Plan Benefits has been calculated using the Actuarial Assumptions Supplementary Exhibit. No future increases in salaries, Social Security benefits, or benefit service were assumed.

1.	Actuarial present value of accrued plan benefits			
	(a)	Actuarial present value of vested benefits		
		(i)	Participants currently receiving benefits	$64,589,966
		(ii)	Participants entitled to deferred benefits	1,683,593
		(iii)	Other participants	37,604,985
		(iv)	Total	103,878,544
	(b)	Actuarial present value of nonvested benefits		164,069
	(c)	Actuarial present value of accrued plan benefits: (a)(iv)+(b)		104,042,613
2.	Market value of assets (includes receivables)			93,158,639
3.	Unfunded PVAB (Surplus assets): (1)(c)-(2)			10,883,974
4.	Funded percentage: (2)/(1)(c)			89.54%
5.	Changes in present value			
	(a)	PVAB as of January 1, 2009		99,876,495
	(b)	Changes due to:		
		(i)	Decrease in discount period at 8.0%	7,651,453
		(ii)	Benefits paid	(10,169,064)
		(iii)	Assumption changes	0
		(iv)	Plan amendments	0
		(v)	Additional benefits earned, including experience gains and losses	5,284,231
		(vi)	Amount transferred	1,399,498
		(vii)	Total change	4,166,118
	(c)	PVAB as of January 1, 2010: (a)+(b)(vi)		$104,042,613

Participant Data

	January 1, 2010	January 1, 2009
Active Participants		
Number	441	515
Average age	48.72	48.36
Average past service	19.79	19.24
Average future service	12.79	13.09
Covered payroll:		
- Total	N/A	$39,014,551
- Average	N/A	$75,756
Terminated Vested Participants		
Number	55	32
Average age	47.07	45.44
Annual benefits:		
- Total	$374,411	$220,931
- Average	$6,807	$6,904
Retirees and Beneficiaries		
Number	549	533
Average age	74.29	74.45
Annual benefits:		
- Total	$7,749,022	$7,196,126
- Average	$14,115	$13,501
Total Participant Count	1,045	1,080

Participant Data

Reconciliation of Participant Data:

	Active	Terminated Vested	Retirees and Beneficiaries	Total
As of January 1, 2009	515	32	533	1,080
New Hires	0	0	0	0
Rehires	0	0	0	0
Nonvested termination	(3)	0	0	(3)
Vested termination	(23)	23	0	0
Lump sum cashout	(20)	(3)	0	(23)
Retirement	(32)	(1)	33	0
Disability	0	0	0	0
Deceased	0	0	(20)	(20)
New beneficiaries	0	0	6	6
Transfers In	4	0	0	4
Transfers Out	0	0	0	0
Miscellaneous	0	4	(3)	1
As of January 1, 2010*	441	55	549	1,045

**Includes 3 Alternate Payees under Qualified Domestic Relations Orders*

Distribution of Inactive Benefits Inforce:

Attained Age	Retired, Survivor, and Disabled No.	Retired, Survivor, and Disabled Avg. Annuities	Vested No.	Vested Avg. Annuities
Under 30	0	$0	1	$3,771
30 to 34	0	0	9	3,844
35 to 39	1	3,963	6	5,175
40 to 44	0	0	6	6,420
45 to 49	0	0	9	4,245
50 to 54	4	8,181	14	7,716
55 to 59	13	16,951	8	12,508
60 to 64	88	22,914	0	0
65 to 69	92	17,475	1	16,033
70 to 74	82	12,287	0	0
75 to 79	94	13,220	0	0
80 to 84	102	10,260	0	0
85 to 89	53	8,460	1	4,148
90 to 94	15	6,542	0	0
95 & up	5	4,935	0	0
Total	549	$14,115	55	$6,807

Active Participant Data

	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up	Total
Attained Age	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Under 25											
25 to 29		4	6								10
30 to 34		10	23	4							37
35 to 39		4	17	15	1						37
40 to 44		3	13	9	13	2					40
45 to 49		3	17	9	21	9	34				93
50 to 54		2	13	10	6	12	30	33			106
55 to 59			9	4	4	4	15	28	17		81
60 to 64			4		3		6	5	10	6	34
65 to 69			1				1				2
70 & up			1								1
Total		26	104	51	48	27	86	66	27	6	441

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Actuarial Cost Method

Funding Target / Target Normal Cost

An Actuarial Cost Method is an allocation of the expected cost of a pension plan on a year-by-year basis. The primary objective of an Actuarial Cost Method is to accumulate enough assets prior to each participant's retirement to provide the promised pension benefits.

The Pension Protection Act of 2006 (PPA) mandates the use of the Traditional Unit Credit Actuarial Cost Method. Under this method, the accrued benefit is estimated based upon service and, if applicable, earnings as of the valuation date. The Funding Target is equal to the actuarial present value of all accrued benefits as of the valuation date. The Target Normal Cost is the actuarial present value, as of the valuation date, of the expected increases in projected accrued benefit attributable to service expected to be completed during the plan year (i.e., if applicable, one year's salary growth is reflected in the determination of Target Normal Cost).

For tax deduction purposes, the Funding Target may reflect the value of future pay increases on accrued benefits, if applicable.

PPA Discounting Method

The plan sponsor is responsible for making the following decisions with regard to the discounting method:

- Full yield-curve spot rates or a segmented yield-curve of a 24-month average rates of corporate bond rates
- If the segmented yield curve is used, the rates as of the month of the valuation may be used or as of a lookback month up to 4 months prior to the valuation date (the full yield curve must use the rates as of the month of the valuation starting in 2010)

For purposes of this valuation, the following discounting method was used and is assumed to be approved by the plan sponsor:

- Segment Rates (Changed from Full Yield Curve used last year)
- Rates through the month of August preceding the valuation date (Changed from October used last year)

Asset Valuation Method

The Plan Assets for purposes of this Actuarial Valuation are valued under the asset averaging method, including, if applicable, discounted receivable contributions. The value of plan assets is set equal to the average of the fair market value of assets on the valuation date and the adjusted fair market value of assets (including expected earnings) determined for the two earlier annual determination dates. Expected earnings are calculated using the third segment rate of the segmented yield-curve in effect at the beginning of each valuation year. The resulting average value must be constrained so that it falls between 90 and 110 percent of the fair market value of assets on the valuation date.

Changes

The interest rate methodology change (from the October Full Yield Curve to August Segments) is subject to automatic approval based on guidance issued by the IRS.

Actuarial Assumptions

Actuarial Assumptions

Actuarial assumptions are estimates of the occurrence of future events affecting the costs of the plan. The assumptions have been chosen to anticipate the long-term experience of the plan. The enrolled actuary will certify the reasonableness of these assumptions, as required by ERISA.

The actuarial assumptions used to compute this year's plan costs are as follows:

Economic Assumptions

PPA Segment Rates	Funding Target	PBGC
- Segment 1: Up to Year 5	5.03%	5.03%
- Segment 2: Years 5-20	6.73%	6.73%
- Segment 3: Years 20+	6.82%	6.82%

ASC 960 Assumed Investment Return 8.00%

Annual rates of increase:

- Salaries	N/A
- Future Social Security wage bases	N/A
- Statutory limits on compensation and benefits	N/A

Demographic Assumptions

Mortality:

- Funding Target / PBGC IRS 2010 Static Mortality Table
- ASC 960 1994 Group Annuity Mortality Table

Terminations: Rates vary by age and sex. Illustrative annual rates of withdrawal are as follows:

Age	Male	Female
25	7.18%	15.05%
40	1.57%	2.14%
55	0.29%	0.42%

Disability: None

Actuarial Assumptions

Assumed Retirement Age (Actives): Rates varying by age.
Representative rates:

Age	Rate
55	3%
56-58	1%
59	3%
60-61	10%
62	25%
63-64	20%
65	100%

Assumed Retirement Age (Vested Terms): Age 62

Benefit Commencement date:

Preretirement Death Benefit: Surviving spouse benefits commence at the later of the death of the active participant or the date the participant would have attained age 55.

Deferred Vested Benefit: Upon termination of employment (if lump sum) or at early retirement date (if annuity)

Retirement Benefit: Upon termination of employment

Form of Payment: Life annuity. Retirement benefit loaded 6.4% for subsidized option factor. Withdrawal benefits are assumed to be paid as a lump sum for participants hired on or before January 1, 2004, otherwise they are assumed to be paid as a life annuity commencing at the participant's early retirement date.

Miscellaneous Assumptions

Percent Married: 80%

Spouse Age: Wife three years younger than husband

Administrative Expense: $115,000 (Prior year's administrative expenses rounded up to nearest $5,000)

Summary of Plan Provisions

Summary of Plan Provisions

Effective Dates:	Original Plan: January 1, 1955
Employee:	All non-union employees of MDU Resources Group, Inc., Montana-Dakota Utilities Co. and other designated subsidiaries.
Eligibility Requirements:	Age: 21 for employees hired on or after 1/1/85; if hired prior to 1/1/04, no service required. Service: One Year of Service Maximum Age: None Plan eligibility is frozen for employees hired after December 31, 2005.
Plan Entry Date:	An eligible employee will enter the plan on the first day of the month following completion of the eligibility requirements. No employee hired after December 31, 2005 may enter the plan.
Year of Service:	12-consecutive month computation period in which an employee is credited with 1,000 or more hours of service. Eligibility: Computation period commences on employee's date of hire. Vesting: One year for each 1,000-hour calendar year of employment by MDU Resources Group, Inc., or a related company.
Credited Service:	Service following age 21 with a maximum of 35 years; full year if 2,080 hours in a year, prorate for less than 2,080 hours. Except for years of hire and termination, exclude years with less than 1,000 hours. Credited Service is frozen as of December 31, 2009.

Summary of Plan Provisions

Normal Retirement Date (NRD):	Last day of the month in which 65th birthday occurs.
Basic Monthly Compensation:	Basic rate of regular compensation as of the first day of the first payroll period of the month, including Section 125 and 401(k) deferrals. Special rules for commissioned and part-time employees.
Final Average Monthly Compensation:	The average of the highest 60 consecutive basic monthly compensation rates in the last 120 months of employment. Compensation earned after December 31, 2009 is not taken into consideration.
Normal Retirement Benefit:	Monthly pension benefit determined as of NRD. Effective December 31, 2009, benefit accruals are frozen.
Normal Form of Benefit:	Single: Life Annuity Married: 50% Joint and Survivor
Early Retirement Eligibility:	Retire before NRD and on or after both attaining age 55 and completing five years of vesting service.
Early Retirement Benefit:	Monthly pension benefit determined as of early retirement date. For retirements prior to age 60, the benefit is reduced .25% for each month that commencement of payment precedes age 60.
Deferred Vested Eligibility:	Terminate for reasons other than death or retirement after completing five years of vesting service.
Deferred Vested Benefit:	-Monthly pension benefit determined as of date of termination payable at NRD -Monthly pension benefit determined as of termination date, reduced .25% for each month that commencement of payments precedes age 62. -Participants hired before January 1, 2004 who are not eligible for early retirement may elect a single sum payment equal to the actuarial

Deferred Vested Benefit (cont):	equivalent of the benefit payable at age 55, based on the interest and mortality assumptions specified under IRC 417(e)(3).
Pre-Retirement Spousal Death Benefit:	If death while active employee after age 45, 50% of monthly pension benefit at date of death reduced for early payment to employee's date of death. If death while active employee before age 45 or after termination, 50% of monthly pension benefit at date of death reduced for the 50% joint and survivor annuity for payment as early as the employee's 55th birthday.
Monthly Pension Benefit:	The greater of total Pension Credits and the Final Pay Benefit, with a minimum benefit equal to the pension benefit as of December 31 preceding termination. A modified formula is applied for participants who had annualized basic compensation during a plan year prior to 1994 in excess of $150,000.
Pension Credits:	For employees who began participation and attained age 40 on or before February 28, 1990, a pension credit for each year after December 31, 1988 equal to 1.65% of the first $1,100 of basic monthly compensation as of the first day of the first payroll period of the plan year plus 2% of the excess; proportionately reduced for less than 2,080 hours of service. Different formulas applied for service prior to 1989.
Final Pay Benefit:	1.1% of final average monthly compensation up to the integration level plus 1.45% of the final average monthly compensation in excess of the integration level, times years of credited service (maximum of 35 years).

Integration Level:	For plan years after 1989, the integration level equals $1,400 multiplied by a fraction equal to the current year Taxable Wage Base divided by $48,000. Integration Level is frozen as of December 31, 2009.

MDU Resources Group, Inc., Pension Plan for Non-Bargaining Unit Employees

Determination of the

Net Periodic Pension Cost

for the Fiscal Year Ending December 31, 2010

Prepared by:

New York Life Retirement Plan Services

690 Canton Street

Westwood, MA 02090

TABLE OF CONTENTS

I. Introduction

The purpose of this report is to present certain financial information in accordance with FASB Accounting Standards Codification (ASC) 715-30 (formerly FAS 87).

This report was based on information submitted to our firm in the form of payroll and asset data, as well as ancillary material pertaining to the Plan. In addition, the actuarial assumptions as to weighted-average discount rate, rate of increase in compensation levels, and expected long-term rate of return on plan assets described in Section IV of this report were supported by the plan sponsor and its auditors.

Actuarial computations under FASB ASC 715-30 are for purposes of fulfilling employer accounting requirements. The calculations reported herein have been made on a basis consistent with our understanding of FASB ASC 715-30. Determinations for purposes other than meeting employer financial accounting requirements may be significantly different from the results reported herein. Accordingly, additional determinations are needed for other purposes, such as judging benefit security at termination or adequacy of funding for an ongoing plan.

The Net Periodic Pension cost has been determined to be ($1,338,494) for the Fiscal Year Ending December 31, 2010. The assumptions used to determine the Net Periodic Pension Cost include a discount rate of 5.75% and are illustrated in Section IV.

6/18/2010
Date

Mark B Magnus
Mark B. Magnus, A.S.A., Enrolled Actuary

II. DETERMINATION OF NET PERIODIC PENSION COST
FISCAL YEAR ENDING DECEMBER 31, 2010

1. Employer Service Cost	
a) Amount at beginning of year	$0
b) Interest	0
c) Total service cost (a)+(b)	0
2. Interest Cost	
a) Projected Benefit Obligation (PBO) at beginning of year	130,693,476
b) Expected distributions	8,240,135
c) Average expected PBO	126,230,070
d) Discount rate	5.75%
e) Interest cost (c)x(d)	7,258,229
3. Expected return on assets	
a) Market-related value at beginning of year	106,469,568
b) Expected distributions	8,240,135
c) Total expected contributions	3,871,657
d) Expected expenses	0
e) Average market-related value of assets	104,202,698
f) Long term rate of return	8.25%
g) Expected return (e)x(f)	8,596,723
4. Amortization of Transition (Asset) or Obligation	0
- Attachment A	
5. Amortization of Prior Service Cost	0
- Attachment B	
6. Amortization of (Gain) or Loss	0
-Attachment C-2, end of year	
7. Net Periodic Pension Cost	**($1,338,494)**
(1c)+(2e)-(3g)+(4)+(5)+(6)	

Attachment A

AMORTIZATION OF TRANSITION OBLIGATION (ASSET)

Fiscal Year Ending	Unrecognized Amount - Beginning of year	Amount Recognized	Unrecognized Amount - End of year
2010	0	0	0
2011	0	0	0
2012	0	0	0
2013	0	0	0
2014	0	0	0
2015	0	0	0
2016	0	0	0
2017	0	0	0
2018	0	0	0
2019	0	0	0
2020	0	0	0
2021	0	0	0
2022	0	0	0
2023	0	0	0
2024	0	0	0
2025	0	0	0
2026	0	0	0
2027	0	0	0
2028	0	0	0
2029	0	0	0
2030	0	0	0
2031	0	0	0
2032	0	0	0
2033	0	0	0
2034	0	0	0
2035	0	0	0
2036	0	0	0
2037	0	0	0
2038	0	0	0

Attachment B

AMORTIZATION OF PRIOR SERVICE COST

Summary for Fiscal Year Ending 12/31/10

Date Established	Beginning of Year Balance	Amount Recognized	End of Year Balance
Total	0	0	0

Attachment C-1

CALCULATION OF (GAIN) OR LOSS

1. Net actuarial (gain) or loss from December 31, 2009 disclosure	$24,475,706
2. PBO from December 31, 2009 disclosure	129,364,543
3. Fair value of plan assets from December 31, 2009 disclosure	91,596,451
4. PBO as of January 1, 2010	130,693,476
5. Fair value of plan assets as of January 1, 2010	91,890,307
6. (Gain)/Loss (1)-(2)+(3)+(4)-(5)	25,510,783

Attachment C-2

(GAIN) OR LOSS SUBJECT TO AMORTIZATION

	Fiscal Year Ending December 31, 2010
1.(Gain)/loss-Attachment C-1,line 6	$25,510,783
2.PBO - Attachment C-1,line 4	130,693,476
3.(Gain) or loss not reflected in market-related value	
a) Fair value	91,890,307
b) Market-related value	106,469,568
c) Amount not reflected in (b) (a)-(b)	(14,579,261)
4. (Gain) or loss subject to amortization (1)+(3c)	10,931,522
5. Greater of (2) or (3b)	130,693,476
6. 10% of (5)	13,069,348
7. (Gain) or loss subject to amortization excess of (4) over (6)	0
8. Average future service of participants expected to receive benefits	12.79
9. Amortization amount (7)/(8)	$0

IV. ACTUARIAL ASSUMPTIONS

For determining the Net Periodic Pension Cost for the Fiscal Year Ending December 31, 2010

Measurement Date:	December 31, 2009
Discount Rate:	5.75%
Annual Rate of Increase in Compensation:	N/A
Expected Long Term Rate of Return on Plan Assets:	8.25%
Mortality:	1994 GAM

Turnover:

Rates vary by age and sex.
Representative rates:

Age	Male	Female
25	7.2%	15.1%
40	1.6%	2.1%
55	0.3%	0.4%

Taxable Wage Base Increase:	N/A
Cost of Living Increase:	3.25%
Expenses:	None

V. DEFINITIONS

Discount Rate. This Discount Rate reflects the rate used to adjust for the time value of money. It should reflect the rates at which the pension benefits could effectively be settled.

Expected Long Term Rate of Return on Plan Assets. This is an assumption concerning the rate of return on plan assets. The product of the Expected Long Term Rate of Return on Plan Assets and the plan's assets is applied as a credit towards the current year's net periodic pension cost.

Gain or Loss. Gains and Losses measure the difference between actual experience and that assumed. Under ASC 715 the impact of changes in actuarial assumptions is also measured as a Gain or Loss.

Fair Value of Plan Assets. The market value of assets.

Measurement Date. The date at which plan assets and obligations are measured.

Net Transition (Asset) Obligation. The excess(deficit) of the PBO over the Fair Value of assets (adjusted for previously recognized accrued or prepaid pension costs) as of the date of initial compliance with ASC 715.

Prior Service Cost. This is the amount of change in the Projected Benefit Obligation due to amendments to the plan.

Projected Benefit Obligation (PBO). This represents the present value of pension benefits based on service earned to date and expected future increases in salary. It is comparable to accrued liability used in determining the plan's funding levels under ERISA.

Net Periodic Pension Cost. This represents the pension expense for the fiscal year. The Net Periodic Pension Cost consists of the following:

(1) **Service Cost**. The Service Cost represents the value of benefits earned each year. This is comparable to the normal cost used in determining funding levels under ERISA.

(2) **Interest Cost**. The Interest Cost equals the product of the Discount Rate and the Projected Benefit Obligation adjusted for benefit payments expected during the year.

(3) **Return on Plan Assets**. The Return on Plan Assets is the product of the Expected Long Term Rate of Return on Plan Assets and the Fair Value of Plan Assets adjusted for contributions and benefit payments expected during the year. This component represents a credit which reduces the Net Periodic Pension Cost for the year.

(4) **Amortization of Unrecognized Gain or Loss**. Amortization payments are included in the Net Periodic Pension Cost to systematically recognize cumulative Gains and Losses that are unrecognized as they occur.

(5) **Amortization of Unrecognized Prior Service Cost**. This is the amortization of increases or decreases in the Projected Benefit Obligation due to amendments to the plan.

(6) **Amortization of Unrecognized Net Obligation or Asset at Transition**. This represents the amortization of the Net Obligation(Asset) that existed at transition in the initial year of ASC 715 compliance.

Projected Unit Credit Cost Method. Under this method, the benefit for each participant is projected to retirement and a pro-rata part of this benefit is then assigned to each year of service from hire date to the participant's retirement date. The Service Cost for each participant is the present value of the pro-rata benefit assigned to the current year. The Service Cost for the Fiscal Year is equal to the sum of the individual Service Costs for all participants. This method is required to be used in all calculations under ASC 715.

MDU Resources Group, Inc. Pension Plan for Collective Bargaining Unit Employees

Actuarial Valuation as of January 1, 2010

NEW YORK LIFE

Prepared by New York Life Retirement Plan Services, 690 Canton Street Westwood, MA 02090.

Executive Summary

	January 1, 2010	January 1, 2009
Contribution Range		
Minimum Required Contribution	$0	$0
Maximum Deductible Contribution	$43,773,245	$29,519,399
Credit Balances		
Carryover Balance	$5,469,774	$4,543,002
PreFunding Balance	$0	$0
Total	$5,469,774	$4,543,002
Assets and Liabilities		
Target Normal Cost	$1,820,613	$1,699,193
Funding Target	$65,251,432	$54,361,124
Actuarial Value of Assets	$66,018,293	$62,378,381
Funding Target Attainment Percentage	92.79%	106.39%
Market Value of Assets	$61,891,998	$56,707,619
Estimated Rate of Return on Market Value of Assets	20.40%	(26.15%)
Census Information		
Active Participants	321	374
Terminated Vested Participants	37	31
Retirees and Beneficiaries	415	398
Total	773	803
Assumptions		
Interest Discounting	August 2009 Segment Rates	October 2008 Full Yield Curve
Effective Interest Rate	6.65%	8.20%

Executive Summary

Changes in Plan Provisions Since Prior Valuation

There have been no changes in plan provisions since the prior valuation.

Changes in Actuarial Assumptions and Methods

The interest discounting assumption was changed from the Full Yield Curve rates (with an October lookback period) to the PPA Segment Rates (with an August lookback period.

Summary of Other Significant Changes

We are not aware of the occurrence of any other significant event that would have a material effect on this valuation.

Executive Summary

Quarterly Contribution Requirement and Recommended Contribution Schedule for 2010

The plan is not subject to the quarterly contribution requirement for the 2010 plan year.

Estimated Quarterly Contribution Requirement for 2011

The plan will be subject to the quarterly contribution requirement for the 2011 plan year. Based upon 2010 actuarial valuation results, the estimated quarterly contribution required for the 2011 plan year will be $455,153. A contribution in this amount must be made on or before April 15, 2011, July 15, 2011, October 15, 2011 and January 15, 2012. Once the 2011 actuarial valuation is complete, we will communicate the final contribution requirements for the 2011 plan year.

Funding Policy Contribution

The plan sponsor's funding policy is to contribute the amount to meet the minimum funding requirements of Internal Revenue Code Sections 412 and 430. From time to time, and with regard to their cash and tax position, the plan sponsor may contribute an amount above the minimum required contribution.

Actuary's Commentary

General Comments

This valuation assumes that the Plan Sponsor agrees to the use of the actuarial cost methods as shown on page 30 of this report.

At-Risk Status

The plan is not at-risk for the 2010 plan year since the 2009 Funding Target Attainment Percentage (FTAP) of 106.39% is greater than 75%. The plan will not be at risk in 2011 since the 2010 FTAP of 92.79% is greater than 80%.

Benefit Restrictions

The plan's Adjusted Funding Target Attainment Percentage (AFTAP) is greater than 80%. No benefit restrictions apply for the 2010 plan year.

Next year, until the AFTAP for the 2011 plan year is certified, the presumed AFTAP will be equal to the 2010 AFTAP until March 31, 2011. On April 1, 2011, if the 2011 AFTAP is still not certified, the presumed AFTAP for 2011 becomes the 2010 AFTAP less 10%.

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Actuarial Certification

This report presents the results of the actuarial valuation as of January 1, 2010 for the MDU Resources Group, Inc. Pension Plan for Collective Bargaining Unit Employees. The purpose of this report is to provide guidance to management with regard to the minimum required contribution in accordance with ERISA and the maximum tax-deductible contribution as allowed by the Internal Revenue Code.

This report is not an AFTAP certification, nor should it be relied upon for any other purpose by any party other than the plan sponsor.

This valuation has been conducted in accordance with generally accepted actuarial principles and practices. In preparing the results presented in this report, we have relied upon information provided to us regarding plan provisions, plan participants and plan assets. We have reviewed this information for overall reasonableness, but we have not audited this information. The accuracy of the results presented in this report is dependent upon the accuracy and completeness of the underlying information.

The assumptions for interest and mortality are mandated by the Internal Revenue Service. All other assumptions have been selected by New York Life Retirement Plan Services, with concurrence of the plan sponsor, and are considered to be reasonable and within the "best-estimate range" as described by the Actuarial Standards of Practice.

The information contained in this report was prepared for the internal use of MDU Resources Group, Inc. and its auditors in connection with our actuarial valuation of the MDU Resources Group, Inc. Pension Plan for Collective Bargaining Unit Employees. It is neither intended nor necessarily suitable for other purposes.

The Consulting Actuary is a member of the Society of Actuaries, member of the American Academy of Actuaries and other professional actuarial organizations and meets their "General Qualifications Standard for Prescribed Statements of Actuarial Opinion" relating to pension plans.

Mark B. Magnus — 6/18/2010

Mark B. Magnus, ASA, MAAA, Enrolled Actuary
Enrolled Actuary No. 08-02866

Date

Plan Assets

I. Asset Valuation Method

IRC Section 430(g) provides that plan assets be valued at either their fair market value on the valuation date or at the "average" value of assets on the valuation date. Under this average value, the value of plan assets is set equal to the average of the fair market value of assets on the valuation date and the adjusted fair market value of assets (including expected earnings) determined for one or more earlier determination dates (up to a 2-year limit). The resulting average value must be constrained so that it falls between 90 and 110 percent of the fair market value of plan assets on the valuation date.

Contributions for a prior plan year that are made after the beginning of this plan year must be adjusted for interest at the effective interest rate under Section 430(h)(2). This contribution adjustment requirement is effective beginning for contributions for the 2008 plan year. Contributions for the 2007 plan year made in 2008 are not adjusted for interest.

The Plan Assets for purposes of this Actuarial Valuation are valued under the asset averaging method.

II. Contributions for Plan Year Beginning January 1, 2009

None.

Plan Assets

III. Market Value of Assets as of January 1, 2010

	Fair Market Value
Cash	$362,350
Wells Fargo Unitized Assets	61,363,318
MainStay Cash Reserves Fund I	460,186
MARKET VALUE (No Receivables)	$62,185,854
Transfer Payable	(293,856)
TOTAL	$61,891,998
Discounted Receivable Contributions*	0
MARKET VALUE OF ASSETS AS OF January 1, 2010	$61,891,998

**Contributions for the 2009 Plan Year that are made after December 31, 2009 are discounted back to January 1, 2010 at the 2009 Effective Interest Rate of 8.20%*

Plan Assets

IV. Reconciliation of Market Value of Assets

1. Market Value of Assets as of January 1, 2009	$57,797,230
2. Contributions Made During Calendar Year	0
3. Interplan Transfers	(1,129,584)
4. Investment Income	11,403,446
5. Benefit Payments	(5,520,379)
6. Expenses	(364,859)
7. Transfer Amount Payable	(293,856)
8. Market Value of Assets as of December 31, 2009 (1+2+3+4+5+6+7)	$61,891,998
Estimated Gross Rate of Return on Assets:	20.40%

The estimated rate of return is based on the time weighting of contributions, benefit payments and expenses

65

Plan Assets

V. Actuarial Value of Assets

1. Market value of assets, January 1, 2010	$61,891,998
2. Prior year gains/(losses):	
(a) Asset gain/(loss) for year-2	
(i) Initial asset gain/(loss)	(27,334,107)
(ii) Weight	0.333
(iii) Unrecognized amount: (i)x(ii)	(9,111,369)
(b) Asset gain/(loss) for year-1	
(i) Initial asset gain/(loss)	7,477,611
(ii) Weight	0.667
(iii) Unrecognized amount: (i)x(ii)	4,985,074
3. Total amount unrecognized: sum of (2)(iii)	(4,126,295)
4. Preliminary actuarial value: (1)-(3)	66,018,293
5. Market value corridor override	
(a) Lower bound: 0.9 x(1)	55,702,799
(b) Upper bound: 1.1 x(1)	68,081,197
(c) Adjustment to corridor	0
6. Actuarial assets, January 1, 2010: (4)+(5)(c)	$66,018,293

VI. Development of Asset Gain/(Loss)

1. Development of 2008 Gain/(Loss)

(a)	Expected Return on Assets		6.43%
(b)	Market Value at January 1, 2008		$85,885,009
(c)	Benefit Payments and Expenses		(6,083,540)
(d)	Expected Return at 6.43% Interest		
	(i) Market Value	5,522,406	
	(ii) Benefit Payments	(192,539)	
	(iii) Contributions	0	
	(iv) Total		5,329,867
(e)	Actual Return on Market Value		(22,004,240)
(f)	(Gain)/Loss: (e)-(d)(iv)		$27,334,107

2. Development of 2009 Gain/(Loss)

(a)	Expected Return on Assets		6.69%
(b)	Market Value at January 1, 2009		$57,797,229
(c)	Benefit Payments and Expenses		(6,734,016)
(d)	Expected Return at 6.69% Interest		
	(i) Market Value	3,866,635	
	(ii) Benefit Payments	(221,606)	
	(iii) Contributions	0	
	(iv) Total		3,645,029
(e)	Actual Return on Market Value		11,122,640
(f)	(Gain)/Loss: (e)-(d)(iv)		($7,477,611)

Credit Balances

With the enactment of the Pension Protection Act of 2006, credit balances were maintained; however, they were bifurcated into the following two categories:

1. The credit balance, if any, as of the end of the 2007 plan year establishes the Carryover Balance; and
2. Contributions made on or after the 2008 plan year in excess of minimum funding requirements will be credited to the Prefunding Balance.

Maintaining credit balances is elective. Plan sponsors may "waive" some or all of the Carryover Balance or Prefunding Balance in order to avoid asset reductions for purposes of determining:

1. whether the plan is "at-risk",
2. the Funding Target Attainment Percentage,
3. the Shortfall Amortization Base, and
4. whether benefit restrictions apply

If the credit balances are to be waived, the Carryover Balance must be waived first prior to any waiver of the Prefunding Balance.

After 2007, interest on the Carryover and Prefunding Balance will be credited at the rate determined on the actual return on the market value of plan assets.

Credit balances may be used toward the current year's minimum funding requirement only if, for the prior year, the Actuarial Value of Assets less the Prefunding Balance is greater than 80% of the "not-at-risk" Funding Target. If the Credit Balances are going to be used as an offset to the Minimum Funding Requirement, the Carryover Balance must be used first prior to the use of the Prefunding Balance.

Credit Balances

Detailed below is the development of the Credit Balances as of the beginning of the 2010 plan year:

1.	Funding Standard Carryover Balance (FSCB)	
(a)	FSCB as of 01/01/2009	$4,543,002
(b)	Waived FSCB	0
(c)	FSCB after waivers: (a) – (b)	4,543,002
(d)	FSCB applied to minimum required contribution	0
(e)	Remaining FSCB as of 01/01/2009: (c) – (d)	4,543,002
(f)	Rate of Return on Plan Assets During Plan Year 2009	20.40%
(g)	FSCB as of 01/01/2010 (e)(1 + f)	5,469,774
2.	Prefunding Balance (PFB)	
(a)	PFB as of 01/01/2009	0
(b)	Waived PFB balance	0
(c)	PFB after waivers: (a)-(b)	0
(d)	PFB applied to minimum required contributions	0
(e)	Excess contributions (Excess)	
	(i) Employer contributions discounted to BOY	0
	(ii) Preliminary minimum required contribution (MRC)	0
	(iii) Credit balances applied to MRC	0
	(iv) Excess: (i)-(ii)+(iii), min zero	0
	(v) Excess above MRC: (i)-(ii), min zero	0
	(vi) Excess due to use of credit balances: (iv)-(v)	0
(f)	Effective rate	8.20%
(g)	Rate of Return on Plan Assets During Plan Year 2009	20.40%
(h)	Interest Calculation: (e)(v) x (f) + [(c)-(d) + (e)(vi)] x (g)	0
(i)	PFB at01/01/2010: (c)-(d)+(e)(iv)+(h)	$0

Credit Balances

The following chart details what, if any, portion of the Credit Balances will be waived for 2010:

1.	Waived credit balance(s) to avoid benefit restrictions			
	(a)	Adjusted Funding Target Attainment Percentage (AFTAP) before waivers		
		(i)	Actuarial assets	$66,018,293
		(ii)	Funding Standard Carryover Balance (FSCB)	5,469,774
		(iii)	Prefunding Balance (PFB)	0
		(iv)	Not-at-risk funding liability	65,251,432
		(v)	Non-HCE annuity purchases in last 2 years	0
		(vi)	Preliminary AFTAP: ((i)-(ii)-(iii)+(v))/((iv)+(v))	92.79%
		(vii)	Funded Ratio: (i)/(iv)	101.17%
	(b)	Transition percentage		96.00%
	(c)	Credit balance(s) waived to avoid benefit restrictions, if possible		0
	(d)	AFTAP after benefit restriction waivers		
		(i)	FSCB after benefit restriction waivers	5,469,774
		(ii)	PFB after benefit restriction waivers	0
		(iii)	AFTAP after benefit restriction waivers: if (a)(vii)>=(b), ((a)(i)+(a)(v))/((a)(iv)+(a)(v)), else ((a)(i)-(i)-(ii)+(a)(v))/((a)(iv)+(a)(v))	101.17%
2.	Waived credit balance(s) to avoid At-Risk status			
	(a)	Not-at-Risk Funding Target Attainment Percentage (NAR FTAP) before waivers to avoid At-Risk status: ((1)(a)(i)-(1)(d)(i)-(1)(d)(ii))/(1)(a)(iv)		92.79%
	(b)	At-Risk Funding Target Attainment Percentage (AR FTAP) before waivers to avoid At-Risk status		
		(i)	At-risk funding liability	74,284,401
		(ii)	Preliminary AR FTAP: ((1)(a)(i)-(1)(d)(i)-(1)(d)(ii))/(i)	81.51%
	(c)	Funding Target Benefit percentage for following year		80.00%
	(d)	At-Risk in following year? Yes if (a)<(c), (b)(ii)<70%, and >500 participants		No
	(e)	Credit balance(s) waived to avoid At-Risk status, if possible		0
	(f)	FTAPs after waivers		
		(i)	FSCB after waivers	5,469,774
		(ii)	PFB after waivers	0
		(iii)	NAR FTAP: ((1)(a)(i)-(i)-(ii))/(1)(a)(iv)	92.79%
		(iv)	AR FTAP: ((1)(a)(i)-(i)-(ii))/(b)(i)	81.51%

Credit Balances

3.	Funding Standard Carryover Balance		
	(a)	FSCB at January 1, 2010	5,469,774
	(b)	Waived FSCB balance	0
	(c)	FSCB after waivers: (a)-(b)	5,469,774
	(d)	FSCB applied to MRC or quarterly contributions	1,820,613
	(e)	FSCB at December 31, 2010 before investment return: (c)-(d)	3,649,161
4.	Prefunding Balance		
	(a)	PFB at January 1, 2010	0
	(b)	Waived PFB balance	0
	(c)	PFB after waivers: (a)-(b)	0
	(d)	PFB applied to MRC	0
	(e)	Excess contributions (Excess)	
		(i) Employer contributions discounted to BOY	0
		(ii) Preliminary (MRC)	1,820,613
		(iii) Credit balances applied to MRC	1,820,613
		(iv) Excess: (i)-(ii)+(iii), min zero	0
		(v) Excess above MRC: (i)-(ii), min zero	0
		(vi) Excess due to use of credit balances: (iv)-(v)	0
	(f)	Effective rate	6.65%
	(g)	Interest on excess contributions: (e) (v) x (f)	0
	(h)	PFB at December 31, 2010 before investment return: (c)-(d)+(e)(iv)+(g)	$0

Funding Target

In accordance with Section 430(d) of the Internal Revenue Code, the Funding Target is the present value of all benefits accrued or earned under the plan as of the beginning of the plan year.

The Funding Target for plans that are "not-at-risk" is determined based on the following:

- Interest discounting is mandated through use of a segmented yield curve based on high-quality (AAA,AA,A) corporate bond yields. The three segments include benefits expected to be paid over the next 5 years, between years 5 and 20 and after year 20. The segmented yield curve is based on a 24-month unweighted average and there is an optional 3-year phase-in from the prior discounting basis beginning in 2008. There is also an optional lookback period up to 4 months prior to the beginning of the plan year. Alternatively, plan sponsors may elect to use the full yield curve in lieu of the segmented rates. The full yield curve, however, represents the rates for one month as opposed to the 24-month average.
- The mortality assumption is mandated by the IRS. The table is based upon the RP-2000 Mortality Table with separate tables for annuitant and non-annuitant mortality. Plan sponsors may use either the table with static projections or a table with generational projections. The static projection table projects non-annuitant mortality rates (i.e., prior to benefit commencement) 15 years beyond the valuation year and annuitant mortality rates (i.e. after benefit commencement) 7 years beyond the valuation year. The generational projection table projects mortality rates (annuitant and non-annuitant) to all future years. All projections are performed using Scale AA.
- Assumed utilization of lump sums, if applicable, is reflected.
- All other assumptions that are individually reasonable and, in combination, offer the enrolled actuary's best estimate of anticipated experience.

A plan is considered to be "at-risk" for the current plan year if it meets all of the following requirements:

- The Funding Target Attainment Percentage for the prior plan year is less than 80%*
- As of the prior plan year, the Actuarial Value of Assets less any Credit Balances is less than 70% of the "at-risk" Funding Target**
- Total participants in all defined benefit plans sponsored by the employer (or any member of the employer's controlled group) is greater than 500.

* The 80% threshold is phased-in over 4 years. For plan years beginning in 2008, 2009 and 2010, 80% is replaced by 65%, 70% and 75%, respectively. In accordance with IRS Proposed Regulation §1.436-1, Current Liability for the 2007 plan year replaces Funding Target to determine the Funding Target Attainment Percentage for the 2007 plan year.

** Determined without regard to the expense load

Funding Target

The Funding Target for a plan that is "at-risk" is determined using the following additional mandated assumptions:

- Participants who will be eligible to elect benefits in the next 10 years will assume to do so at their earliest eligibility date
- Participants are assumed to elect the most-valuable form of benefit
- If a plan has been in "at-risk" status for at least 2 of the 4 preceding plan years, a loading factor is added equal to $700 per participant plus 4% of the "not-at-risk" Funding Target
- In no event shall the "at-risk" Funding Target be less than the "not-at-risk" Funding Target

Funding Target

Development of Funding Target

1.	More than 500 participants in controlled group in prior year?		Yes
2.	Prior year funding target attainment percentage		
	(a)	Not-at-risk liability	106.4%
	(b)	At-risk liability	92.7%
3.	Funding target benchmark percentage		75.0%
4.	At-risk status		
	(a)	Current year: If (1) and (2)(a)<(3) and (2)(b)<70%	No
	(b)	Year-1	No
	(c)	Year-2	No
	(d)	Year-3	No
	(e)	Year-4	No
	(f)	At-risk current year and 2 of preceding 4 years? (If yes, loads apply)	No
5.	Not-at-risk funding liability		
	(a)	Funding liability	
		(i) Retirees and benef. receiving payments	42,646,411
		(ii) Terminated vested participants	1,826,181
		(iii) Active participants, vested liability	20,027,226
		(iv) Active participants, total liability	20,778,840
		(v) Total liability: (i)+(ii)+(iv)	65,251,432
	(b)	Normal cost before adjustments	1,735,613
	(c)	Expenses included in Normal Cost	85,000
	(d)	Normal cost: (b)+(c)	1,820,613

Funding Target

6.	At-risk funding liability		
	(a)	At-risk funding liability	
		(i) Retirees and benef. receiving payments	42,646,411
		(ii) Terminated vested participants	2,262,996
		(iii) Active participants, vested liability	27,624,904
		(iv) Active participants, total liability	29,374,994
		(v) Total liability: (i)+(ii)+(iv)	74,284,401
	(b)	Number of plan participants	773
	(c)	Per-participant load: \$700 x (b)	N/A
	(d)	Liability load: 4% of (5)(a)(v)	N/A
	(e)	At-risk funding target: (a)(v)+(c)+(d), not less than (5)(a)(v)	74,284,401
	(f)	Preliminary at-risk normal cost (adj. for expenses)	2,542,167
	(g)	Normal cost load: 4% of (5)(b)	N/A
	(h)	At-risk normal cost: (f)+(g), not less than (5)(d)	2,542,167
7.	Funding target		
	(a)	Number of consecutive years at-risk (max 5)	0
	(b)	Transition percentage: 20% x (a)	0.0%
	(c)	Funding target: (5)(a)(v)+[(b)x((6)(e)-(5)(a)(v))]	65,251,432
	(d)	Target normal cost: (5)(d)+[(b)x((6)(h)-(5)(d)]	\$1,820,613

Development of Shortfall Amortization Charge

In accordance with Section 430(c) of the Internal Revenue Code, the Shortfall Amortization Charge for any plan year is the aggregate total (not less than zero) of the shortfall amortization installments for such plan year with respect to the shortfall amortization bases for the current plan year and 6 preceding plan years.

In the initial year of application of PPA, the Shortfall Amortization Base is equal to the initial Funding Shortfall. In subsequent years, a Shortfall Amortization Base is created equal to that year's Funding Shortfall less the present value of remaining Shortfall Amortization Installments.

If the Actuarial Value of Assets reduced by the Prefunding Balance is greater than or equal to the Funding Target for a plan year, the plan is exempt from establishing a Shortfall Amortization Base.

The Worker, Retiree and Employer Recover Act of 2008 provided transition relief for certain eligible plans* with regard to establishing a Shortfall Amortization Charge. For these plans, only the amount by which the assets (as reduced by the Credit Balance) are less than 92% of the Funding Target need be established as a Shortfall Amortization Base in 2008. This percentage increases to 94% in 2009, to 96% in 2010 and is then 100% in 2011 and beyond.

In any year in which the Funding Shortfall is zero, all Shortfall Amortization Bases are considered fully amortized.

* To be eligible for this transition relief, the plan must have been exempt from the Additional Funding Charge rules in the 2007 plan year.

Development of Shortfall Amortization Charge

1.	1st segment rate			5.03%
	2nd segment rate			6.73%
2.	Funding target			$65,251,432
3.	Adjusted plan assets			
	(a)	Actuarial assets		66,018,293
	(b)	Funding Standard Carryover Balance		5,469,774
	(c)	Prefunding Balance (PFB)		0
	(d)	Adjusted assets: (a)-(b)-(c), not less than 0		60,548,519
4.	Funding shortfall: (2)-(3)(d), not less than 0			4,702,913
5.	Current shortfall amortization installments			
	(a)	Annual installments		
		(i)	Year -1 base (6 years remaining)	0
		(ii)	Year -2 base (5 years remaining)	0
		(iii)	Year -3 base (4 years remaining)	0
		(iv)	Year -4 base (3 years remaining)	0
		(v)	Year -5 base (2 years remaining)	0
		(vi)	Year -6 base (1 years remaining)	0
	(b)	Total annual installments		0
	(c)	Present value of annual installments		
		(i)	Year -1 base (6 years remaining)	0
		(ii)	Year -2 base (5 years remaining)	0
		(iii)	Year -3 base (4 years remaining)	0
		(iv)	Year -4 base (3 years remaining)	0
		(v)	Year -5 base (2 years remaining)	0
		(vi)	Year -6 base (1 years remaining)	0
	(d)	Total present value of annual installments		0
6.	Exemption from new shortfall amortization base			
	(a)	Target liability percentage		96.00%
	(b)	Shortfall funding target: (2)x(a)		62,641,375
	(c)	Prefunding Balance if used to reduce the Minimum Required Contribution, else 0		0
	(d)	Exempt?: [(3)(a)-(c)]>=(b)		Yes

Development of Shortfall Amortization Charge

7.	Shortfall amortization base	
	(a) Adjusted funding shortfall: (6)(b)-(3)(d), not less than 0	2,092,856
	(b) New current year base: (a)-(5)(d), or 0 if exempt	0
	(c) New 7-year installment amount	0
8.	Shortfall amortization charge: (5)(b)+(7)(c), not less than 0	$0

Minimum Required Contribution

If the Actuarial Value of Assets reduced by the Credit Balances is less than the Funding Target, then the Minimum Required Contribution for such plan year shall be the sum of the Target Normal Cost and the Shortfall Amortization Charge.

If the Actuarial Value of Assets reduced by the Credit Balances is greater than the Funding Target for a year, then the Minimum Required Contribution for such plan year shall be the Target Normal Cost less the excess of adjusted assets over the Funding Target, but not less than $0.

Quarterly contributions are required if the Funding Shortfall was greater than $0 on the prior valuation date. If applicable, the quarterly contribution is due on or before the 15th day following the end of each quarter. If the quarterly contribution is not made on time, late interest is charged at the Effective Interest Rate plus 5%. If applicable, the quarterly contribution amount is 25% of the lesser of 90% of the current year's minimum required contribution or 100% of the prior year's minimum required contribution.

Contributions can be made up to 8½ months after the end of the plan year for such plan year. All contributions will be discounted back to the valuation date with interest at the Effective Interest Rate, including contributions made after the end of the plan year, to determine whether the Minimum Required Contribution has been satisfied.

If the plan sponsor fails to pay the minimum required contribution by 8½ months after the end of the plan year, the plan sponsor will be required to pay a 10% excise tax under IRC Section 4971 on the amount any unpaid minimum required contributions. This tax can increase to 100% if the unpaid minimum required contribution is not corrected in subsequent plan years.

Minimum Required Contribution

Summary of Minimum Required Contribution:

1.	Effective interest rate		6.65%
2.	Target normal cost		$1,820,613
3.	Shortfall amortization charge		0
4.	Credit for excess assets		
	(a)	Adjusted Assets	60,548,519
	(b)	Funding Target	65,251,432
	(c)	Excess assets: (a)-(b), not less than 0	0
5.	Preliminary minimum required contribution (MRC): (2)+(3)-(4)(c), not less than 0		1,820,613
6.	Credit balances		
	(a)	Eligible to apply against MRC?: Yes if prior year funded ratio >= 80%	Yes
	(b)	Funding Standard Carryover Balance (FSCB)	5,469,774
	(c)	Elected to apply FSCB against MRC?	Yes
	(d)	Prefunding Balance (PFB)	0
	(e)	Elected to apply PFB against MRC?	Yes
	(f)	Balances eligible to apply against MRC: (b)+(d) if eligible and elected	5,469,774
7.	MRC adjusted for credit balances: (5)-(6)(f), not less than 0		0
8.	Required quarterly contributions		
	(a)	Quarterlies required?: Yes if prior year funding shortfall	No
	(b)	Prior year minimum required contribution	0
	(c)	Current year MRC: (5)	1,820,613
	(d)	Required annual payment: lesser of (b) and 90% of (c), if applicable	0
	(e)	Required installment: 25% of (d)	$0

Schedule of Contributions

The plan's "Effective Interest Rate" for any particular plan year is the single rate that, if used to discount the plan's expected benefit payments, would produce the same Funding Target that the Segment Rates produce. The Effective Interest Rate is the rate at which interest is charged on contributions until the date they are actually made.

The Effective Interest Rate for the 2010 Plan Year is:	6.65%
The Minimum Required Contribution as of January 1, 2010 is:	$0

The Plan is not subject to the quarterly contribution requirement for the 2010 plan year.

Preliminary Contribution Schedule for the 2011 Plan Year

Since there is a Funding Shortfall in 2010, the Plan will be subject to the quarterly contribution requirement for the 2011 plan year. The amount of the 2011 quarterly installments will be no greater than $455,153 and each will be due on or before April 15, 2011, July 15, 2011, October 15, 2011 and January 15, 2012. Any existing credit balance can be used to satisfy the quarterly contribution requirement.

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Maximum Deductible Contribution Limit

Contributions to a qualified pension plan may be deducted for tax purposes, subject to limitations contained in Section 404(a) of the IRC. If the plan sponsor's taxable year and plan year coincide, the limit for a taxable year is the maximum amount for the coinciding plan year. Otherwise, the limit for the taxable year is the maximum amount with respect to either the plan year that commences or the plan year that ends in the taxable year (or a weighted average of the respective maximum amounts). Once the method for matching plan years to taxable years is established, it may not be changed without prior approval from the IRS.

For a contribution to be deductible in a particular taxable year, the contribution must be made during the taxable year or not later than the time for filing a tax return, which is the 15th day of the third month following the end of the taxable year. A later contribution may be deductible if the IRS has granted an approval to extend the deadline for filing the tax return.

Any contribution in excess of the tax-deductible limit for a taxable year may not be deducted in that year, even though the sponsor may have taken deductions in previous years that were less than the applicable tax-deductible limits. Contributions in excess of the tax-deductible limit may be deducted in succeeding taxable years, but may be subject to a 10% excise tax under Section 4972 of the IRC. The amount (if any) of the excess that may be deducted in a later year may not exceed the tax-deductible limit for that year minus the amount contributed in such later year.

For purposes of this report, the following assumptions have been made:

- The tax year begins January 1, 2010 and ends on December 31, 2010; and
- Historically, the deductible limit has been established based upon the plan year beginning in this tax year.

Since the tax-deductible contribution is dependent upon the relationship between the taxable year and the plan year and previous tax deductions, we recommend that you consult with your tax advisor with respect to the tax treatment of contributions to the plan.

In accordance with IRC Sections 404(a) and 404(o), the maximum deductible contribution for a limitation year shall be the greatest of:

a) Target Normal Cost plus 150% of the Funding Target* less the Actuarial Value of Plan Assets
b) Minimum Required Contribution
c) If a plan is not "at-risk", the Target Normal Cost and Funding Target (both determined as if the plan were "at-risk") less the Actuarial Value of Plan Assets.

* The Funding Target for this purpose is determined including compensation increases after the current plan year (if the plan is pay-related) or including schedule benefit increases

Maximum Deductible Contribution Limit

Summary of Maximum Tax Deductible Contribution

1.	Funding target			$65,251,432
2.	Target normal cost			1,820,613
3.	Cushion amount			
	(a)	50% of funding target: 50% of (1)		32,625,716
	(b)	Expected benefit increases		
		(i)	Not-at-risk maximum liability	75,345,209
		(ii)	At-risk maximum liability	80,413,554
		(iii)	Per-participant load	N/A
		(iv)	Liability load: 4% of (i)	N/A
		(v)	At-risk target: (ii)+(iii)+(iv), not less than (i)	80,413,554
		(vi)	Transition percentage	0.00%
		(vii)	Maximum funding target: (i)+[(vi)x((v)-(i))]	75,345,209
	(c)	Cushion amount: (a)+(b)(vii)-(1)		42,719,493
4.	Actuarial value of assets			66,018,293
5.	Preliminary limit: (1)+(2)+(3)(c)-(4), not less than 0			43,773,245
6.	Maximum if not at-risk			
	(a)	At-risk funding liability		74,284,401
	(b)	At-risk normal cost (incl. expenses)		2,542,167
	(c)	Maximum if not at-risk: (a)+(b)-(4), not less than 0		10,808,275
7.	Minimum required contribution			0
8.	Maximum tax deductible contribution: max of (5),(6) and (7)			$43,773,245

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Supplementary Exhibits

PBGC Premiums

ERISA established the Pension Benefit Guaranty Corporation (PBGC), under the jurisdiction of the Department of Labor, to guarantee most vested retirement benefits and certain disability and survivor pensions.

PBGC guarantees are limited. For example, the PBGC does not guarantee benefits that had not vested prior to the plan termination or benefits for which all age, service, or other requirements had not been met at the time the plan terminates. Further, benefit increases and new benefits that have been in place for less than a year are not guaranteed, and those that have been in place for less than 5 years are only partly guaranteed. The maximum guaranteed benefit under a plan terminating in 2010 payable as a single life annuity at age 65, is $4,500 per month. Lower guarantees apply if benefits begin before age 65 or if survivor benefits are payable. Benefits other than pension benefits, such as health insurance, life insurance, death benefits, vacation pay, or severance pay are not guaranteed, and the PBGC does not pay lump sums exceeding $5,000 (even if available under the plan prior to termination).

Plans covered by the PBGC insurance program must file an annual premium filing each year with the PBGC via their online myPAA system within 9-1/2 months after the beginning of the plan year. Plans covering more than 500 participants must also file an Estimated Premium Filing through myPAA by the end of the second month of the plan year. All plans must pay a basic premium of $35 times the number of participants as of the end of the previous plan year, and plans with unfunded vested benefits must also pay an additional risk-related premium to the PBGC.

Development of PBGC Premium for 2010:

1.	Flat-rate premium			
	(a)	National Average Wage (NAW), 2 years prior		$41,334.97
	(b)	Flat-rate: $30 x (a)/$35,648.55 (2004 NAW), rounded		35
	(c)	Participant count (excludes 2 Alternate Payees)		771
	(d)	Flat-rate premium: (b)x(c)		$26,985
2.	Variable-rate premium			
	(a)	PBGC funding target		
		(i)	Not-at-risk PBGC liability	65,115,699
		(ii)	At-risk PBGC liability	74,141,622
		(iii)	Per-participant load	N/A
		(iv)	Liability load: 4% x (i)	N/A
		(v)	At-risk PBGC target: (ii)+(iii)+(iv), not less than (i)	74,141,622
		(vi)	Transition percentage	0.00%
		(vii)	PBGC funding target: (i)+[(vi)x((v)-(i))]	65,115,699
	(b)	Market value of plan assets		61,891,998
	(c)	Unfunded vested benefits: (a)(vii)-(b), min zero, rounded up to $1,000		3,224,000
	(d)	Variable-rate premium: 0.009x(c), or zero if exempt		29,016
3.	PBGC Premium: (1)(d)+(2)(d)			$56,001

ASC 960 Information (previously known as FAS 35)

Transfers based on Accrual Method

The information in this exhibit is intended to satisfy the requirements under Accounting Standards Codification Topic 960 (ASC 960) with regard to the financials of the plan. It is not intended to meet the requirements of Accounting Standards Codification Topic 715 (ASC 715) (previously known as FAS 87) which are the financials of the plan sponsor. If applicable, information for ASC 715 is presented in a separate report.

The Present Value of Accumulated Plan Benefits has been calculated using the Actuarial Assumptions Supplementary Exhibit. No future increases in salaries, Social Security benefits, or benefit service were assumed.

1.	Actuarial present value of accrued plan benefits			
	(a)	Actuarial present value of vested benefits		
		(i)	Participants currently receiving benefits	$37,522,963
		(ii)	Participants entitled to deferred benefits	1,443,260
		(iii)	Other participants	16,026,663
		(iv)	Total	54,992,886
	(b)	Actuarial present value of nonvested benefits		96,070
	(c)	Actuarial present value of accrued plan benefits: (a)(iv)+(b)		55,088,956
2.	Market value of assets (includes receivables)			61,891,998
3.	Unfunded PVAB (Surplus assets): (1)(c)-(2)			(6,803,042)
4.	Funded percentage: (2)/(1)(c)			112.35%
5.	Changes in present value			
	(a)	PVAB as of January 1, 2009		53,526,317
	(b)	Changes due to:		
		(i)	Decrease in discount period at 8.00%	4,105,511
		(ii)	Benefits paid	(5,520,379)
		(iii)	Assumption changes	0
		(iv)	Plan amendments	0
		(v)	Additional benefits earned, including experience gains and losses	3,311,336
		(vi)	Amount Transferred	(333,829)
		(vii)	Total change	1,562,639
	(c)	PVAB as of January 1, 2010: (a)+(b)(vi)		$55,088,956

ASC 960 Information (previously known as FAS 35)

Transfers based on Cash Method

The information in this exhibit is intended to satisfy the requirements under Accounting Standards Codification Topic 960 (ASC 960) with regard to the financials of the plan. It is not intended to meet the requirements of Accounting Standards Codification Topic 715 (ASC 715) (previously known as FAS 87) which are the financials of the plan sponsor. If applicable, information for ASC 715 is presented in a separate report.

The Present Value of Accumulated Plan Benefits has been calculated using the Actuarial Assumptions Supplementary Exhibit. No future increases in salaries, Social Security benefits, or benefit service were assumed.

1.	Actuarial present value of accrued plan benefits			
	(a)	Actuarial present value of vested benefits		
		(i)	Participants currently receiving benefits	$37,522,963
		(ii)	Participants entitled to deferred benefits	1,443,260
		(iii)	Other participants	16,230,519
		(iv)	Total	55,286,742
	(b)	Actuarial present value of nonvested benefits		96,070
	(c)	Actuarial present value of accrued plan benefits: (a)(iv)+(b)		55,382,812
2.	Market value of assets (includes receivables)			62,185,854
3.	Unfunded PVAB (Surplus assets): (1)(c)-(2)			(6,803,042)
4.	Funded percentage: (2)/(1)(c)			112.28%
5.	Changes in present value			
	(a)	PVAB as of January 1, 2009		54,615,928
	(b)	Changes due to:		
		(i)	Decrease in discount period at 8.00%	4,105,511
		(ii)	Benefits paid	(5,520,379)
		(iii)	Assumption changes	0
		(iv)	Plan amendments	0
		(v)	Additional benefits earned, including experience gains and losses	3,311,336
		(vi)	Amount Transferred	(1,129,584)
		(vii)	Total change	766,884
	(c)	PVAB as of January 1, 2010: (a)+(b)(vii)		$55,382,812

Participant Data

	January 1, 2010	January 1, 2009
Active Participants		
Number	321	374
Average age	44.94	44.51
Average past service	16.54	15.95
Average future service	15.44	15.60
Covered payroll:		
- Total	$21,263,502	$23,552,401
- Average	$66,241	$62,974
Terminated Vested Participants		
Number	37	31
Average age	49.46	50.69
Annual benefits:		
- Total	$291,991	$240,702
- Average	$7,892	$7,765
Retirees and Beneficiaries		
Number	415	398
Average age	73.80	73.64
Annual benefits:		
- Total	$4,397,816	$4,071,230
- Average	$10,597	$10,229
Total Participant Count	773	803

Participant Data

Reconciliation of Participant Data:

	Active	Terminated Vested	Retirees and Beneficiaries	Total
As of January 1, 2009	374	31	398	803
New Hires	0	0	0	0
Rehires	0	0	0	0
Nonvested termination	(11)	0	0	(11)
Vested termination	(8)	8	0	0
Lump sum cashout	(9)	(1)	0	(10)
Retirement	(19)	(3)	22	0
Disability	0	0	0	0
Deceased	(1)	0	(11)	(12)
New beneficiaries	0	1	6	7
Transfers In	0	0	0	0
Transfers Out	(5)	0	0	(5)
Miscellaneous	0	1	0	1
As of January 1, 2010*	321	37	415	773

**Includes 2 Alternate Payees under Qualified Domestic Relations Orders*

Distribution of Inactive Benefits Inforce:

Attained Age	Retired, Survivor, and Disabled		Vested	
	No.	Avg. Annuities	No.	Avg. Annuities
Under 30	0	$0	1	$3,540
30 to 34	0	0	4	4,025
35 to 39	0	0	1	4,189
40 to 44	1	1,788	2	3,274
45 to 49	1	3,824	8	4,943
50 to 54	1	2,347	12	10,738
55 to 59	13	13,702	4	12,153
60 to 64	61	16,089	4	10,855
65 to 69	76	13,870	0	0
70 to 74	74	11,248	1	1,185
75 to 79	80	8,729	0	0
80 to 84	63	7,610	0	0
85 to 89	29	4,117	0	0
90 to 94	12	3,169	0	0
95 & up	4	2,183	0	0
Total	415	$10,597	37	$7,892

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Active Participant Data

Age		Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up	Total
		Years of credited service										
Under 25	Count		3									3
	Avg Sal											
25 to 29	Count		9	12								21
	Avg Sal											65,385
30 to 34	Count		10	23	4							37
	Avg Sal			67,379								65,174
35 to 39	Count		6	19	18	3						46
	Avg Sal											66,264
40 to 44	Count		2	12	11	12						37
	Avg Sal											66,497
45 to 49	Count		2	13	10	20	7	10				62
	Avg Sal					68,954						66,923
50 to 54	Count			8	6	15	1	24	13			67
	Avg Sal							63,522				65,525
55 to 59	Count					6		5	14	11		36
	Avg Sal											68,008
60 to 64	Count					2	1	1	2	4	1	11
	Avg Sal											
65 to 69	Count					1						1
	Avg Sal											
70 & up	Count											
	Avg Sal											
Total	Count		32	87	49	59	9	40	29	15	1	321
	Avg Sal		60,598	66,094	66,694	67,916		66,121	68,071			66,241

Actuarial Cost Method

Funding Target / Target Normal Cost

An Actuarial Cost Method is an allocation of the expected cost of a pension plan on a year-by-year basis. The primary objective of an Actuarial Cost Method is to accumulate enough assets prior to each participant's retirement to provide the promised pension benefits.

The Pension Protection Act of 2006 (PPA) mandates the use of the Traditional Unit Credit Actuarial Cost Method. Under this method, the accrued benefit is estimated based upon service and, if applicable, earnings as of the valuation date. The Funding Target is equal to the actuarial present value of all accrued benefits as of the valuation date. The Target Normal Cost is the actuarial present value, as of the valuation date, of the expected increases in projected accrued benefit attributable to service expected to be completed during the plan year (i.e., if applicable, one year's salary growth is reflected in the determination of Target Normal Cost).

For tax deduction purposes, the Funding Target may reflect the value of future pay increases on accrued benefits, if applicable.

PPA Discounting Method

The plan sponsor is responsible for making the following decisions with regard to the discounting method:

- Full yield-curve spot rates or a segmented yield-curve of a 24-month average rates of corporate bond rates
- If the segmented yield curve is used, the rates as of the month of the valuation may be used or as of a lookback month up to 4 months prior to the valuation date (the full yield curve must use the rates as of the month of the valuation starting in 2010)

For purposes of this valuation, the following discounting method was used and is assumed to be approved by the plan sponsor:

- Segment Rates (Changed from Full Yield Curve used last year)
- Rates through the month of August preceding the valuation date (Changed from October used last year)

Asset Valuation Method

The Plan Assets for purposes of this Actuarial Valuation are valued under the asset averaging method, including, if applicable, discounted receivable contributions. The value of plan assets is set equal to the average of the fair market value of assets on the valuation date and the adjusted fair market value of assets (including expected earnings) determined for the two earlier annual determination dates. Expected earnings are calculated using the third segment rate of the segmented yield-curve in effect at the beginning of each valuation year. The resulting average value must be constrained so that it falls between 90 and 110 percent of the fair market value of assets on the valuation date.

Changes

The interest rate methodology change (from the October Full Yield Curve to August Segments) is subject to automatic approval based on guidance issued by the IRS.

Actuarial Assumptions

Actuarial Assumptions

Actuarial assumptions are estimates of the occurrence of future events affecting the costs of the plan. The assumptions have been chosen to anticipate the long-term experience of the plan. The enrolled actuary will certify the reasonableness of these assumptions, as required by ERISA.

The actuarial assumptions used to compute this year's plan costs are as follows:

Economic Assumptions

PPA Segment Rates	Funding Target	PBGC
- Segment 1: Up to Year 5	5.03%	5.03%
- Segment 2: Years 5-20	6.73%	6.73%
- Segment 3: Years 20+	6.82%	6.82%

ASC 960 Assumed Investment Return	8.00%
Annual rates of increase:	
- Salaries	4.00%
- Future Social Security wage bases	3.25%
- Statutory limits on compensation and benefits	N/A

Demographic Assumptions

Mortality:

- Funding Target / PBGC	IRS 2010 Static Mortality Table
- ASC 960	1994 Group Annuity Mortality Table

Terminations: Rates vary by age and sex. Illustrative annual rates of withdrawal are as follows:

Age	Male	Female
25	7.18%	15.05%
40	1.57%	2.14%
55	0.29%	0.42%

Disability: None

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Actuarial Assumptions

Assumed Retirement Age (Actives):	Rates varying by age. Representative rates:

Age	Rate
55	3%
56-58	1%
59	3%
60-61	10%
62	25%
63-64	20%
65	100%

Assumed Retirement Age (Vested Terms): Age 62

Benefit Commencement date:

Preretirement Death Benefit: Surviving spouse benefits commence at the later of the death of the active participant or the date the participant would have attained age 55.

Deferred Vested Benefit: Upon termination of employment (if lump sum) or at early retirement date (if annuity)

Retirement Benefit: Upon termination of employment

Form of Payment: Life annuity. Retirement benefit loaded 6.4% for subsidized option factor. Withdrawal benefits are assumed to be paid as a lump sum for participants hired on or before January 1, 2004, otherwise they are assumed to be paid as a life annuity commencing at the participant's early retirement date.

Miscellaneous Assumptions

Percent Married: 80%

Spouse Age: Wife three years younger than husband

Covered Pay: Annualized base salary rate as of valuation date

Administrative Expenses: $85,000 (Prior year's administrative expenses rounded up to nearest $5,000)

Summary of Plan Provisions

Summary of Plan Provisions

Effective Dates:	Original Plan: January 1, 1955	
Employee:	All bargaining employees of Montana-Dakota Utilities Co.	
Eligibility Requirements:	Age:	21 for employees hired on or after 1/1/85; if hired prior to 1/1/04, no service required.
	Service:	One Year of Service
	Maximum Age:	None
	Plan eligibility is frozen for employees hired after June 30, 2007.	
Plan Entry Date:	An eligible employee will enter the plan on the first day of the month following completion of the eligibility requirements. No employee hired after June 30, 2007 may enter the plan.	
Year of Service:	12-consecutive month computation period in which an employee is credited with 1,000 or more hours of service.	
	Eligibility:	Computation period commences on employee's date of hire.
	Vesting:	One year for each 1,000-hour calendar year of employment by MDU Resources Group, Inc., or a related company.
Credited Service:	Service following age 21 with a maximum of 35 years; full year if 2,080 hours in a year, prorate for less than 2,080 hours. Except for years of hire and termination, exclude years with less than 1,000 hours.	

Summary of Plan Provisions

Normal Retirement Date (NRD):	Last day of the month in which 65^{th} birthday occurs
Basic Monthly Compensation:	Basic rate of regular compensation as of the first day of the first payroll period of the month, including Section 125 and 401(k) deferrals. Special rules for commissioned and part-time employees.
Final Average Monthly Compensation:	The average of the highest 60 consecutive basic monthly compensation rates in the last 120 months of employment.
Normal Retirement Benefit:	Monthly pension benefit determined as of NRD.
Normal Form of Benefit:	Single: Life Annuity Married: 50% Joint and Survivor
Early Retirement Eligibility:	Retire before NRD and on or after both attaining age 55 and completing five years of vesting service.
Early Retirement Benefit:	Monthly pension benefit determined as of early retirement date. For retirements prior to age 60, the benefit is reduced .25% for each month that commencement of payment precedes age 60.
Deferred Vested Eligibility:	Terminate for reason other than death or retirement after completing five years of vesting service.
Deferred Vested Benefit:	-Monthly pension benefit determined as of date of termination payable at NRD -Monthly pension benefit determined as of termination date, reduced .25% for each month that commencement of payments precedes age 62. -Participants hired before January 1, 2004 who are not eligible for early retirement may elect a single sum payment equal to the actuarial

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Deferred Vested Benefit:	equivalent of the benefit payable at age 55, based on the interest and mortality assumptions specified under IRC 417(e)(3).
Pre-Retirement Spousal Death Benefit:	If death while active employee after age 45, 50% of monthly pension benefit at date of death reduced for early payment to employee's date of death. If death while active employee before age 45 or after termination, 50% of monthly pension benefit at date of death reduced for the 50% joint and survivor annuity option, payable as early as the employee's 55th birthday.
Monthly Pension Benefit:	The greater of total Pension Credits and the Final Pay Benefit, with a minimum benefit equal to the pension benefit as of December 31 preceding termination. A modified formula is applied for participants who had annualized basic compensation during a plan year prior to 1994 in excess of $150,000.
Pension Credits:	For employees who began participation and attained age 40 on or before February 28, 1990, a pension credit for each year after December 31, 1988 equal to 1.65% of the first $1,100 of basic monthly compensation as of the first day of the first payroll period of the plan year plus 2% of the excess; proportionately reduced for less than 2,080 hours of service. Different formulas applied for service prior to 1989.
Final Pay Benefit:	1.1% of final average monthly compensation up to the integration level plus 1.45% of the final average monthly compensation in excess of the integration level, times years of credited service (maximum of 35 years).
Integration Level:	For plan years after 1989, the integration level equals $1,400 multiplied by a fraction equal to the current year Taxable Wage Base divided by $48,000.

MDU Resources Group, Inc. Pension Plan for Collective Bargaining Unit Employees

Determination of the

Net Periodic Pension Cost

for the Fiscal Year Ending December 31, 2010

Prepared by:

New York Life Retirement Plan Services

690 Canton Street

Westwood, MA 02090

TABLE OF CONTENTS

I. Introduction

The purpose of this report is to present certain financial information in accordance with FASB Accounting Standards Codification (ASC) 715-30 (formerly FAS 87).

This report was based on information submitted to our firm in the form of payroll and asset data, as well as ancillary material pertaining to the Plan. In addition, the actuarial assumptions as to weighted-average discount rate, rate of increase in compensation levels, and expected long-term rate of return on plan assets described in Section IV of this report were supported by the plan sponsor and its auditors.

Actuarial computations under FASB ASC 715-30 are for purposes of fulfilling employer accounting requirements. The calculations reported herein have been made on a basis consistent with our understanding of FASB ASC 715-30. Determinations for purposes other than meeting employer financial accounting requirements may be significantly different from the results reported herein. Accordingly, additional determinations are needed for other purposes, such as judging benefit security at termination or adequacy of funding for an ongoing plan.

The Net Periodic Pension cost has been determined to be $1,333,166 for the Fiscal Year Ending December 31, 2010. The assumptions used to determine the Net Periodic Pension Cost include a discount rate of 5.75% and are illustrated in Section IV.

6/18/2010
Date

Mark B. Magnus
Mark B. Magnus, A.S.A., Enrolled Actuary

II. DETERMINATION OF NET PERIODIC PENSION COST FISCAL YEAR ENDING DECEMBER 31, 2010

1. Employer Service Cost	
a) Amount at beginning of year	$1,726,786
b) Interest	99,290
c) Total service cost (a)+(b)	1,826,076
2. Interest Cost	
a) Projected Benefit Obligation (PBO) at beginning of year	80,513,650
b) Expected distributions	4,576,441
c) Average expected PBO	78,034,744
d) Discount rate	5.75%
e) Interest cost (c)x(d)	4,486,998
3. Expected return on assets	
a) Market-related value at beginning of year	72,999,407
b) Expected distributions	4,576,441
c) Total expected contributions	0
d) Expected expenses	0
e) Average market-related value of assets	70,520,501
f) Long term rate of return	8.25%
g) Expected return (e)x(f)	5,817,941
4. Amortization of Transition (Asset) or Obligation - Attachment A	0
5. Amortization of Prior Service Cost - Attachment B	264,947
6. Amortization of (Gain) or Loss -Attachment C-2, end of year	573,086
7. Net Periodic Pension Cost (1c)+(2e)-(3g)+(4)+(5)+(6)	**$1,333,166**

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Attachment A

AMORTIZATION OF TRANSITION OBLIGATION (ASSET)

Fiscal Year Ending	Unrecognized Amount - Beginning of year	Amount Recognized	Unrecognized Amount - End of year
2010	0	0	0
2011	0	0	0
2012	0	0	0
2013	0	0	0
2014	0	0	0
2015	0	0	0
2016	0	0	0
2017	0	0	0
2018	0	0	0
2019	0	0	0
2020	0	0	0
2021	0	0	0
2022	0	0	0
2023	0	0	0
2024	0	0	0
2025	0	0	0
2026	0	0	0
2027	0	0	0
2028	0	0	0
2029	0	0	0
2030	0	0	0
2031	0	0	0
2032	0	0	0
2033	0	0	0
2034	0	0	0
2035	0	0	0
2036	0	0	0
2037	0	0	0
2038	0	0	0

Attachment B

AMORTIZATION OF PRIOR SERVICE COST

Summary for Fiscal Year Ending 12/31/10

	Date Established	Beginning of Year Balance	Amount Recognized	End of Year Balance
1. Amendment #1	1/1/1995	77,991	41,951	36,040
2. Amendment #2	1/1/2000	661,873	105,108	556,765
3. Amendment #3	1/1/2001	559,439	75,846	483,593
4. Amendment #4	1/1/2001	300,201	40,700	259,501
5. Amendment #5	1/1/2003	13,083	1,342	11,741
Total		1,612,587	264,947	1,347,640

Attachment C-1

CALCULATION OF (GAIN) OR LOSS

1. Net actuarial (gain) or loss from December 31, 2009 disclosure	$27,455,977
2. PBO from December 31, 2009 disclosure	80,256,264
3. Fair value of plan assets from December 31, 2009 disclosure	62,185,854
4. PBO as of January 1, 2010	80,513,650
5. Fair value of plan assets as of January 1, 2010	61,891,998
6. (Gain)/Loss (1)-(2)+(3)+(4)-(5)	28,007,219

INC

Attachment C-2

(GAIN) OR LOSS SUBJECT TO AMORTIZATION

	Fiscal Year Ending
	December 31, 2010
1.(Gain)/loss-Attachment C-1,line 6	$28,007,219
2.PBO - Attachment C-1,line 4	80,513,650
3.(Gain) or loss not reflected in market-related value	
a) Fair value	61,891,998
b) Market-related value	72,999,407
c) Amount not reflected in (b) (a)-(b)	(11,107,409)
4. (Gain) or loss subject to amortization (1)+(3c)	16,899,810
5. Greater of (2) or (3b)	80,513,650
6. 10% of (5)	8,051,365
7. (Gain) or loss subject to amortization excess of (4) over (6)	8,848,445
8. Average future service of participants expected to receive benefits	15.44
9. Amortization amount (7)/(8)	$573,086

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IV. ACTUARIAL ASSUMPTIONS

For determining the Net Periodic Pension Cost for the Fiscal Year Ending December 31, 2010

Measurement Date:	December 31, 2009
Discount Rate:	5.75%
Annual Rate of Increase in Compensation:	4.00%
Expected Long Term Rate of Return on Plan Assets:	8.25%
Mortality:	1994 GAM

Turnover:

Rates vary by age and sex.
Representative rates:

Age	Male	Female
25	7.2%	15.1%
40	1.6%	2.1%
55	0.3%	0.4%

Taxable Wage Base Increase:	3.25%
Cost of Living Increase:	3.25%
Expenses:	None

V. DEFINITIONS

Discount Rate. This Discount Rate reflects the rate used to adjust for the time value of money. It should reflect the rates at which the pension benefits could effectively be settled.

Expected Long Term Rate of Return on Plan Assets. This is an assumption concerning the rate of return on plan assets. The product of the Expected Long Term Rate of Return on Plan Assets and the plan's assets is applied as a credit towards the current year's net periodic pension cost.

Gain or Loss. Gains and Losses measure the difference between actual experience and that assumed. Under ASC 715 the impact of changes in actuarial assumptions is also measured as a Gain or Loss.

Fair Value of Plan Assets. The market value of assets.

Measurement Date. The date at which plan assets and obligations are measured.

Net Transition (Asset) Obligation. The excess(deficit) of the PBO over the Fair Value of assets (adjusted for previously recognized accrued or prepaid pension costs) as of the date of initial compliance with ASC 715.

Prior Service Cost. This is the amount of change in the Projected Benefit Obligation due to amendments to the plan.

Projected Benefit Obligation (PBO). This represents the present value of pension benefits based on service earned to date and expected future increases in salary. It is comparable to accrued liability used in determining the plan's funding levels under ERISA.

Net Periodic Pension Cost. This represents the pension expense for the fiscal year. The Net Periodic Pension Cost consists of the following:

(1) **Service Cost**. The Service Cost represents the value of benefits earned each year. This is comparable to the normal cost used in determining funding levels under ERISA.
(2) **Interest Cost**. The Interest Cost equals the product of the Discount Rate and the Projected Benefit Obligation adjusted for benefit payments expected during the year.
(3) **Return on Plan Assets**. The Return on Plan Assets is the product of the Expected Long Term Rate of Return on Plan Assets and the Fair Value of Plan Assets adjusted for contributions and benefit payments expected during the year. This component represents a credit which reduces the Net Periodic Pension Cost for the year.
(4) **Amortization of Unrecognized Gain or Loss**. Amortization payments are included in the Net Periodic Pension Cost to systematically recognize cumulative Gains and Losses that are unrecognized as they occur.
(5) **Amortization of Unrecognized Prior Service Cost**. This is the amortization of increases or decreases in the Projected Benefit Obligation due to amendments to the plan.
(6) **Amortization of Unrecognized Net Obligation or Asset at Transition**. This represents the amortization of the Net Obligation(Asset) that existed at transition in the initial year of ASC 715 compliance.

Projected Unit Credit Cost Method. Under this method, the benefit for each participant is projected to retirement and a pro-rata part of this benefit is then assigned to each year of service from hire date to the participant's retirement date. The Service Cost for each participant is the present value of the pro-rata benefit assigned to the current year. The Service Cost for the Fiscal Year is equal to the sum of the individual Service Costs for all participants. This method is required to be used in all calculations under ASC 715.

MDU Resources Group, Inc. Pension Plan for Non-Bargaining Unit Employees

Actuarial Valuation as of January 1, 2011

Prepared by New York Life Retirement Plan Services, 690 Canton Street Westwood, MA 02090.

Executive Summary

	January 1, 2011	January 1, 2010
	Contribution Range	
Minimum Required Contribution	$4,785,451 (as of 1/1/2011)	$3,403,455 (as of 1/1/2010)
Maximum Deductible Contribution	$89,940,417	$85,596,456
	Credit Balances	
Carryover Balance	$0	$0
PreFunding Balance	$0	$17,980
Total	$0	$17,980
	Assets and Liabilities	
Target Normal Cost	$85,000	$115,000
Funding Target	$128,364,882	$122,979,285
Actuarial Value of Assets	$102,691,906	$98,987,472
Funding Target Attainment Percentage	80.00%	80.47%
Market Value of Assets	$110,469,284	$93,420,736
Estimated Rate of Return on Market Value of Assets	14.30%	20.31%
	Census Information	
Active Participants	416	441
Terminated Vested Participants	56	55
Retirees and Beneficiaries	546	549
Total	1,018	1,045
	Assumptions	
Interest Discounting	August 2010 Segment Rates	August 2009 Segment Rates
Effective Interest Rate	6.24%	6.65%

Executive Summary

Changes in Plan Provisions Since Prior Valuation

There have been no changes in plan provisions since the prior valuation.

Changes in Actuarial Assumptions and Methods

The interest rates and mortality were updated to comply with the plan's funding method.

In addition, the ASC 960 interest rate and mortality table were changed to 7.75% (from 8.00%) and RP 2000 Mortality Table projected to 2010 (from 1994 Group Annuity Table), respectively.

Summary of Other Significant Changes

We are not aware of the occurrence of any other significant event that would have a material effect on this valuation.

Executive Summary

Quarterly Contribution Requirement and Recommended Contribution Schedule for 2011

The plan is subject to the quarterly contribution requirement for the 2011 plan year. In order to avoid late interest penalties and potential notifications to the PBGC and participants, the following schedule of contributions should be followed:

Due Date (On or Before)	Contribution
April 15, 2011	$855,359
July 15, 2011	$855,359
October 15, 2011	$855,359
January 15, 2012	$855,359
September 15, 2012	$1,660,739
Total	**$5,082,175**

Estimated Quarterly Contribution Requirement for 2012

The plan will be subject to the quarterly contribution requirement for the 2012 plan year. Based upon 2011 actuarial valuation results, the estimated quarterly contribution required for the 2012 plan year will be $1,196,363. A contribution in this amount must be made on or before April 15, 2012, July 15, 2012, October 15, 2012 and January 15, 2013. Once the 2012 actuarial valuation is complete, we will communicate the final contribution requirements for the 2012 plan year.

Funding Policy Contribution

The plan sponsor's funding policy is to contribute the amount to meet the minimum funding requirements of Internal Revenue Code Sections 412 and 430. From time to time, and with regard to their cash and tax position, the plan sponsor may contribute an amount above the minimum required contribution.

Actuary's Commentary

At-Risk Status

The plan is not "at-risk" for the 2011 plan year since the 2010 Funding Target Attainment Percentage (FTAP) of 80.47% is at least 80%. The plan will not be "at-risk" in 2012 since the 2011 FTAP of 80.00% is at least 80%.

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Sections **Page**

Actuarial Certification

This report presents the results of the actuarial valuation as of January 1, 2011 for the MDU Resources Group, Inc. Pension Plan for Non-Bargaining Unit Employees. The purpose of this report is to review the plan's experience for the prior year and to provide the plan sponsor with an acceptable range of contributions for the plan year in accordance with ERISA and the Internal Revenue Code.

This report is not an AFTAP certification, nor should it be relied upon for any other purpose by any party other than the plan sponsor.

This valuation has been conducted in accordance with generally accepted actuarial principles and practices. In preparing the results presented in this report, we have relied upon information provided to us regarding plan provisions, plan participants and plan assets. We have reviewed this information for overall reasonableness, but we have not audited this information. The accuracy of the results presented in this report is dependent upon the accuracy and completeness of the underlying information.

The assumptions for interest and mortality are mandated by the Internal Revenue Service. All other assumptions have been selected by New York Life Retirement Plan Services, with concurrence of the plan sponsor, and are considered to be reasonable and within the "best-estimate range" as described by the Actuarial Standards of Practice.

The information contained in this report was prepared for the internal use of MDU Resources Group, Inc. and its auditors in connection with our actuarial valuation of the MDU Resources Group, Inc. Pension Plan for Non-Bargaining Unit Employees. It is neither intended nor necessarily suitable for other purposes.

The Consulting Actuary is a member of the Society of Actuaries, member of the American Academy of Actuaries and other professional actuarial organizations and meets their "General Qualifications Standard for Prescribed Statements of Actuarial Opinion" relating to pension plans.

April 28, 2011 — Mark B Magnus

Date

Mark B. Magnus, ASA, MAAA, Enrolled Actuary
Enrolled Actuary No. 11-02866

Plan Assets

I. Asset Valuation Method

IRC Section 430(g) provides that plan assets be valued at either their fair market value on the valuation date or at the "average" value of assets on the valuation date. Under this average value, the value of plan assets is set equal to the average of the fair market value of assets on the valuation date and the adjusted fair market value of assets (including expected earnings) determined for one or more earlier determination dates (up to a 2-year limit). The resulting average value must be constrained so that it falls between 90 and 110 percent of the fair market value of plan assets on the valuation date.

Contributions for a prior plan year that are made after the beginning of this plan year must be adjusted for interest at the effective interest rate under Section 430(h)(2). This contribution adjustment requirement is effective beginning for contributions for the 2008 plan year. Contributions for the 2007 plan year made in 2008 are not adjusted for interest.

The Plan Assets for purposes of this Actuarial Valuation are valued under the asset averaging method.

II. Contributions for Plan Year Beginning January 1, 2010

Date	Amount
April 15, 2010	769,823
July 15, 2010	769,823
October 15, 2010	769,823
January 14, 2011	769,823
March 28, 2011	10,421,233
Total:	**$13,500,525**

Plan Assets

III. Market Value of Assets as of January 1, 2011

	Fair Market Value	% OF TOTAL
Wells Fargo Unitized Assets	98,799,946	99.35%
Cash	642,368	0.65%
TOTAL	$99,442,314	100.00%
Discounted Receivable Contributions*	$11,026,970	
MARKET VALUE OF ASSETS AS OF JANUARY 1, 2011	$110,469,284	

**Contributions for the 2010 Plan Year that are made after December 31, 2010 are discounted back to January 1, 2011 at the 2010 Effective Interest Rate of 6.65%*

Plan Assets

IV. Reconciliation of Market Value of Assets

1. Market Value of Assets as of January 1, 2010	$91,596,451
2. Contributions Made During Calendar Year	3,871,657
3. Interplan Transfers	301,041
4. Investment Income	12,786,963
5. Benefit Payments	(9,031,651)
6. Administrative Expenses	(82,147)
7. Market Value of Assets as of December 31, 2010 (1+2+3+4+5+6)	$99,442,314

Estimated Gross Rate of Return on Assets: 14.30%

The estimated rate of return is based on the time weighting of contributions, benefit payments and expenses

V. Actuarial Value of Assets

1. Market value of assets, January 1, 2011	$110,469,284
2. Prior year gains/(losses):	
(a) Asset gain/(loss) for year-2	
(i) Initial asset gain/(loss)	10,013,017
(ii) Weight	0.333
(iii) Unrecognized amount: (i)x(ii)	3,337,672
(b) Asset gain/(loss) for year-1	
(i) Initial asset gain/(loss)	6,659,559
(ii) Weight	0.667
(iii) Unrecognized amount: (i)x(ii)	4,439,706
3. Total amount unrecognized: sum of (2)(iii)	7,777,378
4. Preliminary actuarial value: (1)-(3)	102,691,906
5. Market value corridor override	
(a) Lower bound: 0.9 x(1)	99,422,356
(b) Upper bound: 1.1 x(1)	121,516,212
(c) Adjustment to corridor	0
6. Actuarial assets, January 1, 2011: (4)+(5)(c)	$102,691,906

VI. Development of Asset Gain/(Loss)

1. Development of 2009 Gain/(Loss)

(a)	Expected Return on Assets			6.69%
(b)	Market Value at January 1, 2009			$81,699,395
(c)	Benefit Payments and Expenses			(8,883,828)
(d)	Expected Return at 6.69% Interest			
	(i)	Market Value	5,465,690	
	(ii)	Benefit Payments	(292,354)	
	(iii)	Contributions	98,850	
	(iv)	Total		5,272,186
(e)	Actual Return on Market Value			15,285,203
(f)	Gain/(Loss): (e)-(d)(iv)			$10,013,017

2. Development of 2010 Gain/(Loss)

(a)	Expected Return on Assets			6.82%
(b)	Market Value at January 1, 2010			$93,126,880
(c)	Benefit Payments and Expenses			(8,812,757)
(d)	Expected Return at 6.82% Interest			
	(i)	Market Value	6,351,253	
	(ii)	Benefit Payments	(295,559)	
	(iii)	Contributions	71,710	
	(iv)	Total		6,127,404
(e)	Actual Return on Market Value			12,786,963
(f)	Gain/(Loss): (e)-(d)(iv)			$6,659,559

Credit Balances

With the enactment of the Pension Protection Act of 2006, credit balances were maintained; however, they were bifurcated into the following two categories:

1. The credit balance, if any, as of the end of the 2007 plan year establishes the Carryover Balance; and
2. Contributions made on or after the 2008 plan year in excess of minimum funding requirements will be credited to the Prefunding Balance.

Maintaining credit balances is elective. Plan sponsors may "waive" some or all of the Carryover Balance or Prefunding Balance in order to avoid asset reductions for purposes of determining:

1. whether the plan is "at-risk",
2. the Funding Target Attainment Percentage,
3. the Shortfall Amortization Base, and
4. whether benefit restrictions apply

If the credit balances are to be waived, the Carryover Balance must be waived first prior to any waiver of the Prefunding Balance.

After 2007, interest on the Carryover and Prefunding Balance will be credited at the rate determined on the actual return on the market value of plan assets.

Credit balances may be used toward the current year's minimum funding requirement only if, for the prior year, the Actuarial Value of Assets less the Prefunding Balance is greater than 80% of the "not-at-risk" Funding Target. If the Credit Balances are going to be used as an offset to the Minimum Funding Requirement, the Carryover Balance must be used first prior to the use of the Prefunding Balance.

Credit Balances

Detailed below is the development of the Credit Balances as of the beginning of the 2011 plan year:

1.	Funding Standard Carryover Balance (FSCB)		
(a)	FSCB as of January 1, 2010 after waivers		0
(b)	FSCB applied to minimum required contribution		0
(c)	Remaining FSCB as of January 1, 2010: (a)–(b)		0
(d)	Rate of return on plan assets during plan year 2010		14.30%
(e)	Interest on (c) : (c)x(d)		0
(f)	FSCB as of January 1, 2011: (c)+(e)		0
(g)	Waived FSCB		0
(h)	FSCB as of January 1, 2011 after waivers: (f)-(g)		$0
2.	Prefunding Balance (PFB)		
(a)	PFB as of January 1, 2010 after waivers		17,980
(b)	PFB applied to minimum required contributions		0
(c)	Remaining PFB as of January 1, 2010: (a)–(b)		17,980
(d)	Rate of return on plan assets during plan year 2010		14.30%
(e)	Interest on (c): (c)x(d)		2,571
(f)	Excess contributions		
	(i)	Employer contributions discounted to BOY	12,570,846
	(ii)	Preliminary minimum required contribution (MRC)	3,421,435
	(iii)	Credit balances applied to MRC	0
	(iv)	Excess: (i)-(ii)+(iii), min zero	9,149,411
	(v)	Excess above MRC: (i)-(ii), min zero	9,149,411
	(vi)	Excess due to use of credit balances: (iv)-(v)	0
	(vii)	Effective rate	6.65%
	(viii)	Interest on excess contributions: (v)x(vii)+(vi)x(d)	608,436
	(ix)	Total available to add to PFB: (iv)+(viii)	9,757,847
	(x)	Portion of (ix) added to PFB	0
(g)	PFB as of January 1, 2011: (c)+(e)+(f)(x)		20,551
(h)	Waived PFB		20,551
(i)	PFB as of January 1, 2011 after waivers: (g)-(h)		$0

Credit Balances

The following chart details what, if any, portion of the Credit Balances will be waived for 2011:

1.	Waived credit balance(s) to avoid benefit restrictions			
	(a)	Preliminary Adjusted Funding Target Attainment Percentage (AFTAP) before waivers		
		(i)	Actuarial assets	$102,691,906
		(ii)	Funding Standard Carryover Balance (FSCB)	0
		(iii)	Prefunding Balance (PFB)	0
		(iv)	Not-at-risk funding liability	128,364,882
		(v)	Non-HCE annuity purchases in last 2 years	0
		(vi)	Preliminary AFTAP prior to benefit restriction waivers: ((i)-(ii)-(iii)+(v))/((iv)+(v))	80.00%
		(vii)	Funded Ratio: (i)/(iv)	80.00%
	(b)	Transition percentage		100.00%
	(c)	Credit balance(s) waived to avoid benefit restrictions, if possible		0
	(d)	Preliminary AFTAP after benefit restriction waivers		
		(i)	FSCB after benefit restriction waivers	0
		(ii)	PFB after benefit restriction waivers	0
		(iii)	Preliminary AFTAP after benefit restriction waivers: if (a)(vii)>=(b), ((a)(i)+(a)(v))/((a)(iv)+(a)(v)), else ((a)(i)-(i)-(ii)+(a)(v))/((a)(iv)+(a)(v))	80.00%
2.	Waived credit balance(s) to avoid At-Risk status			
	(a)	Not-at-Risk Funding Target Attainment Percentage (NAR FTAP) before waivers to avoid At-Risk status: ((1)(a)(i)-(1)(d)(i)-(1)(d)(ii))/(1)(a)(iv)		80.00%
	(b)	At-Risk Funding Target Attainment Percentage (AR FTAP) before waivers to avoid At-Risk status		
		(i)	At-risk funding liability	147,044,121
		(ii)	Preliminary AR FTAP: ((1)(a)(i)-(1)(d)(i)-(1)(d)(ii))/(i)	69.83%
	(c)	Funding Target Benefit percentage for following year		80.00%
	(d)	At-Risk in following year? Yes if (a)<(c), (b)(ii)<70%, and >500 participants		No
	(e)	Credit balance(s) waived to avoid At-Risk status, if possible		0
	(f)	FTAPs after waivers		
		(i)	FSCB after waivers	0
		(ii)	PFB after waivers	0
		(iii)	NAR FTAP: ((1)(a)(i)-(i)-(ii))/(1)(a)(iv)	80.00%
		(iv)	AR FTAP: ((1)(a)(i)-(i)-(ii))/(b)(i)	69.83%

Funding Target

In accordance with Section 430(d) of the Internal Revenue Code, the Funding Target is the present value of all benefits accrued or earned under the plan as of the beginning of the plan year.

The Funding Target for plans that are "not-at-risk" is determined based on the following:

- Interest discounting is mandated through use of a segmented yield curve based on high-quality (AAA,AA,A) corporate bond yields. The three segments include benefits expected to be paid over the next 5 years, between years 5 and 20 and after year 20. The segmented yield curve is based on a 24-month unweighted average and there is an optional 3-year phase-in from the prior discounting basis beginning in 2008. There is also an optional lookback period up to 4 months prior to the beginning of the plan year. Alternatively, plan sponsors may elect to use the full yield curve in lieu of the segmented rates. The full yield curve, however, represents the rates for one month as opposed to the 24-month average.
- The mortality assumption is mandated by the IRS. The table is based upon the RP-2000 Mortality Table with separate tables for annuitant and non-annuitant mortality. Plan sponsors may use either the table with static projections or a table with generational projections. The static projection table projects non-annuitant mortality rates (i.e., prior to benefit commencement) 15 years beyond the valuation year and annuitant mortality rates (i.e. after benefit commencement) 7 years beyond the valuation year. The generational projection table projects mortality rates (annuitant and non-annuitant) to all future years. All projections are performed using Scale AA.
- Assumed utilization of lump sums, if applicable, is reflected.
- All other assumptions that are individually reasonable and, in combination, offer the enrolled actuary's best estimate of anticipated experience.

A plan is considered to be "at-risk" for the current plan year if it meets all of the following requirements:

- The Funding Target Attainment Percentage for the prior plan year is less than 80%*
- As of the prior plan year, the Actuarial Value of Assets less any Credit Balances is less than 70% of the "at-risk" Funding Target**
- Total participants in all defined benefit plans sponsored by the employer (or any member of the employer's controlled group) is greater than 500.

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* The 80% threshold is phased-in over 4 years. For plan years beginning in 2008, 2009 and 2010, 80% is replaced by 65%, 70% and 75%, respectively. In accordance with IRS Proposed Regulation §1.436-1, Current Liability for the 2007 plan year replaces Funding Target to determine the Funding Target Attainment Percentage for the 2007 plan year.

** Determined without regard to the expense load

Funding Target

The Funding Target for a plan that is "at-risk" is determined using the following additional mandated assumptions:

- Participants who will be eligible to elect benefits in the next 10 years will assume to do so at their earliest eligibility date
- Participants are assumed to elect the most-valuable form of benefit
- If a plan has been in "at-risk" status for at least 2 of the 4 preceding plan years, a loading factor is added equal to $700 per participant plus 4% of the "not-at-risk" Funding Target
- In no event shall the "at-risk" Funding Target be less than the "not-at-risk" Funding Target

If a plan is deemed to be "at-risk", the Funding Target for purposes of determining the contribution requirement will be based upon a 5-year "phase-in" of the "at-risk" Funding Target.

Funding Target

Development of Funding Target

1.	More than 500 participants in controlled group in prior year?				Yes
2.	Prior year funding target attainment percentage				
	(a)	Not-at-risk liability			80.47%
	(b)	At-risk liability			69.59%
3.	Funding target benchmark percentage				80.0%
4.	At-risk status				
	(a)	Current year: If (1) and (2)(a)<(3) and (2)(b)<70%			No
	(b)	Year-1			No
	(c)	Year-2			No
	(d)	Year-3			No
	(e)	Year-4			No
	(f)	At-risk current year and 2 of preceding 4 years? (If yes, loads apply)			No
5.	Not-at-risk funding liability				
	(a)	Funding liability			
			(i)	Retirees and benef. receiving payments	77,211,741
			(ii)	Terminated vested participants	2,341,255
			(iii)	Active participants, vested liability	48,811,886
			(iv)	Active participants, total liability	48,811,886
			(v)	Total liability: (i)+(ii)+(iv)	128,364,882
	(b)	Normal cost before adjustments			0
	(c)	Expenses included in Normal Cost			85,000
	(d)	Normal cost: (b)+(c)			85,000

Funding Target

6.	At-risk funding liability			
	(a)	At-risk funding liability		
		(i)	Retirees and benef. receiving payments	77,211,741
		(ii)	Terminated vested participants	2,896,476
		(iii)	Active participants, vested liability	66,935,904
		(iv)	Active participants, total liability	66,935,904
		(v)	Total liability: (i)+(ii)+(iv)	147,044,121
	(b)	Number of plan participants		1,018
	(c)	Per-participant load: $700 x (b)		N/A
	(d)	Liability load: 4% of (5)(a)(v)		N/A
	(e)	At-risk funding target: (a)(v)+(c)+(d), not less than (5)(a)(v)		147,044,121
	(f)	Preliminary at-risk normal cost (adj. for expenses)		85,000
	(g)	Normal cost load: 4% of (5)(b)		N/A
	(h)	At-risk normal cost: (f)+(g), not less than (5)(d)		85,000
7.	Funding target			
	(a)	Number of consecutive years at-risk (max 5)		0
	(b)	Transition percentage: 20% x (a)		0.0%
	(c)	Funding target: (5)(a)(v)+[(b)x((6)(e)-(5)(a)(v))]		128,364,882
	(d)	Target normal cost: (5)(d)+[(b)x((6)(h)-(5)(d)]		$85,000

Development of Shortfall Amortization Charge

In accordance with Section 430(c) of the Internal Revenue Code, the Shortfall Amortization Charge for any plan year is the aggregate total (not less than zero) of the shortfall amortization installments for such plan year with respect to the shortfall amortization bases for the current plan year and 6 preceding plan years.

In the initial year of application of PPA, the Shortfall Amortization Base is equal to the initial Funding Shortfall. In subsequent years, a Shortfall Amortization Base is created equal to that year's Funding Shortfall less the present value of remaining Shortfall Amortization Installments.

If the Actuarial Value of Assets reduced by the Prefunding Balance is greater than or equal to the Funding Target for a plan year, the plan is exempt from establishing a Shortfall Amortization Base.

The Worker, Retiree and Employer Recover Act of 2008 provided transition relief for certain eligible plans* with regard to establishing a Shortfall Amortization Charge. For these plans, only the amount by which the assets (as reduced by the Credit Balance) are less than 92% of the Funding Target need be established as a Shortfall Amortization Base in 2008. This percentage increases to 94% in 2009, to 96% in 2010 and is then 100% in 2011 and beyond.

In any year in which the Funding Shortfall is zero, all Shortfall Amortization Bases are considered fully amortized.

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* To be eligible for this transition relief, the plan must have been exempt from the Additional Funding Charge rules in the 2007 plan year.

Development of Shortfall Amortization Charge

1.	1st segment rate			3.78%
	2nd segment rate			6.31%
2.	Funding target			$128,364,882
3.	Adjusted plan assets			
	(a)	Actuarial assets		102,691,906
	(b)	Funding Standard Carryover Balance		0
	(c)	Prefunding Balance (PFB)		0
	(d)	Adjusted assets: (a)-(b)-(c), not less than 0		102,691,906
4.	Funding shortfall: (2)-(3)(d), not less than 0			25,672,976
5.	Current shortfall amortization installments			
	(a)	Annual installments		
		(i)	Year -1 base (6 years remaining)	2,484,016
		(ii)	Year -2 base (5 years remaining)	822,419
		(iii)	Year -3 base (4 years remaining)	0
		(iv)	Year -4 base (3 years remaining)	0
		(v)	Year -5 base (2 years remaining)	0
		(vi)	Year -6 base (1 years remaining)	0
	(b)	Total annual installments		3,306,435
	(c)	Present value of annual installments		
		(i)	Year -1 base (6 years remaining)	13,376,975
		(ii)	Year -2 base (5 years remaining)	3,823,257
		(iii)	Year -3 base (4 years remaining)	0
		(iv)	Year -4 base (3 years remaining)	0
		(v)	Year -5 base (2 years remaining)	0
		(vi)	Year -6 base (1 years remaining)	0
	(d)	Total present value of annual installments		17,200,232
6.	Exemption from new shortfall amortization base			
	(a)	Target liability percentage		100.00%
	(b)	Shortfall funding target: (2)x(a)		128,364,882
	(c)	Prefunding Balance if used to reduce the Minimum Required Contribution, else 0		0
	(d)	Exempt?: [(3)(a)-(c)]>=(b)		No

Development of Shortfall Amortization Charge

7.	Shortfall amortization base		
	(a)	Adjusted funding shortfall: (6)(b)-(3)(d), not less than 0	25,672,976
	(b)	New current year base: (a)-(5)(d), or 0 if exempt	8,472,744
	(c)	New 7-year installment amount	1,394,016
8.	Shortfall amortization charge: (5)(b)+(7)(c), not less than 0		$4,700,451

Minimum Required Contribution

If the Actuarial Value of Assets reduced by the Credit Balances is less than the Funding Target, then the Minimum Required Contribution for such plan year shall be the sum of the Target Normal Cost and the Shortfall Amortization Charge.

If the Actuarial Value of Assets reduced by the Credit Balances is greater than the Funding Target for a year, then the Minimum Required Contribution for such plan year shall be the Target Normal Cost less the excess of adjusted assets over the Funding Target, but not less than $0.

Quarterly contributions are required if the Funding Shortfall was greater than $0 on the prior valuation date. If applicable, the quarterly contribution is due on or before the 15th day following the end of each quarter. If the quarterly contribution is not made on time, late interest is charged at the Effective Interest Rate plus 5%. If applicable, the quarterly contribution amount is 25% of the lesser of 90% of the current year's minimum required contribution or 100% of the prior year's minimum required contribution.

Contributions can be made up to 8½ months after the end of the plan year for such plan year. All contributions will be discounted back to the valuation date with interest at the Effective Interest Rate, including contributions made after the end of the plan year, to determine whether the Minimum Required Contribution has been satisfied.

If the plan sponsor fails to pay the minimum required contribution by 8½ months after the end of the plan year, the plan sponsor will be required to pay a 10% excise tax under IRC Section 4971 on the amount of any unpaid minimum required contributions. This tax can increase to 100% if the unpaid minimum required contribution is not corrected in subsequent plan years.

Minimum Required Contribution

Summary of Minimum Required Contribution:

1.	Effective interest rate		6.24%
2.	Target normal cost		$85,000
3.	Shortfall amortization charge		4,700,451
4.	Credit for excess assets		
	(a)	Adjusted Assets	102,691,906
	(b)	Funding Target	128,364,882
	(c)	Excess assets: (a)-(b), not less than 0	0
5.	Preliminary minimum required contribution (MRC): (2)+(3)-(4)(c), not less than 0		4,785,451
6.	Credit balances		
	(a)	Eligible to apply against MRC?: Yes if for prior year, assets minus prefunding balance >= 80% of not-at-risk funding target	Yes
	(b)	Funding Standard Carryover Balance (FSCB)	0
	(c)	Elected to apply FSCB against MRC?	Yes
	(d)	Prefunding Balance (PFB)	0
	(e)	Elected to apply PFB against MRC?	Yes
	(f)	Balances eligible to apply against MRC: (b)+(d) if eligible and elected	0
7.	MRC adjusted for credit balances: (5)-(6)(f), not less than 0		4,785,451
8.	Required quarterly contributions		
	(a)	Quarterlies required?: Yes if prior year funding shortfall	Yes
	(b)	Prior year minimum required contribution	3,421,435
	(c)	Current year MRC: (5)	4,785,451
	(d)	Required annual payment: lesser of (b) and 90% of (c), if applicable	3,421,435
	(e)	Required installment: 25% of (d)	$855,359

Schedule of Contributions

The plan's "Effective Interest Rate" for any particular plan year is the single rate that, if used to discount the plan's expected benefit payments, would produce the same Funding Target that the Segment Rates produce. The Effective Interest Rate is the rate at which interest is charged on contributions until the date they are actually made.

The Effective Interest Rate for the 2011 Plan Year is:	6.24%
The Minimum Required Contribution as of January 1, 2011 is:	$4,785,451

The Plan is subject to the quarterly contribution requirement for the 2011 plan year. The following table provides the contribution schedule that meets the quarterly installment requirements, if applicable, as well as satisfies the Minimum Required Contribution requirement when discounted back to January 1, 2011 at the 2011 Effective Interest Rate:

Date	Contribution
April 15, 2011	$855,359
July 15, 2011	$855,359
October 15, 2011	$855,359
January 15, 2012	$855,359
September 15, 2012	$1,660,739
Total	**$5,082,175**

Preliminary Contribution Schedule for the 2012 Plan Year

Since there is a Funding Shortfall in 2011, the Plan will be subject to the quarterly contribution requirement for the 2012 plan year. The amount of the 2012 quarterly installments will be no greater than $1,196,363 and each will be due on or before April 15, 2012, July 15, 2012, October 15, 2012 and January 15, 2013.

Maximum Deductible Contribution Limit

Contributions to a qualified pension plan may be deducted for tax purposes, subject to limitations contained in Section 404(a) of the IRC. If the plan sponsor's taxable year and plan year coincide, the limit for a taxable year is the maximum amount for the coinciding plan year. Otherwise, the limit for the taxable year is the maximum amount with respect to either the plan year that commences or the plan year that ends in the taxable year (or a weighted average of the respective maximum amounts). Once the method for matching plan years to taxable years is established, it may not be changed without prior approval from the IRS.

For a contribution to be deductible in a particular taxable year, the contribution must be made during the taxable year or not later than the time for filing a tax return, which is the 15th day of the third month following the end of the taxable year. A later contribution may be deductible if the IRS has granted an approval to extend the deadline for filing the tax return.

Any contribution in excess of the tax-deductible limit for a taxable year may not be deducted in that year, even though the sponsor may have taken deductions in previous years that were less than the applicable tax-deductible limits. Contributions in excess of the tax-deductible limit may be deducted in succeeding taxable years, but may be subject to a 10% excise tax under Section 4972 of the IRC. The amount (if any) of the excess that may be deducted in a later year may not exceed the tax-deductible limit for that year minus the amount contributed in such later year.

For purposes of this report, the following assumptions have been made:

- The tax year begins January 1, 2011 and ends on December 31, 2011; and
- Historically, the deductible limit has been established based upon the plan year beginning in this tax year.

Since the tax-deductible contribution is dependent upon the relationship between the taxable year and the plan year and previous tax deductions, we recommend that you consult with your tax advisor with respect to the tax treatment of contributions to the plan.

In accordance with IRC Sections 404(a) and 404(o), the maximum deductible contribution for a limitation year shall be the greatest of:

a) Target Normal Cost plus 150% of the Funding Target* less the Actuarial Value of Plan Assets
b) Minimum Required Contribution
c) If a plan is not "at-risk", the Target Normal Cost and Funding Target (both determined as if the plan were "at-risk") less the Actuarial Value of Plan Assets.

* The Funding Target for this purpose is determined including compensation increases after the current plan year (if the plan is pay-related) or including schedule benefit increases

Maximum Deductible Contribution Limit

Summary of Maximum Tax Deductible Contribution

1.	Funding target			$128,364,882
2.	Target normal cost			85,000
3.	Cushion amount			
	(a)	50% of funding target: 50% of (1)		64,182,441
	(b)	Expected benefit increases		
		(i)	Not-at-risk maximum liability	128,364,882
		(ii)	At-risk maximum liability	147,044,121
		(iii)	Per-participant load	N/A
		(iv)	Liability load: 4% of (i)	N/A
		(v)	At-risk target: (ii)+(iii)+(iv), not less than (i)	147,044,121
		(vi)	Transition percentage	0.00%
		(vii)	Maximum funding target: (i)+[(vi)x((v)-(i))]	128,364,882
	(c)	Cushion amount: (a)+(b)(vii)-(1)		64,182,441
4.	Actuarial value of assets			102,691,906
5.	Preliminary limit: (1)+(2)+(3)(c)-(4), not less than 0			89,940,417
6.	Maximum if not at-risk			
	(a)	At-risk funding liability		147,044,121
	(b)	At-risk normal cost (incl. expenses)		85,000
	(c)	Maximum if not at-risk: (a)+(b)-(4), not less than 0		44,437,215
7.	Minimum required contribution			5,082,175
8.	Maximum tax deductible contribution: max of (5),(6) and (7)			$89,940,417

Supplementary Exhibits

PBGC Premiums

ERISA established the Pension Benefit Guaranty Corporation (PBGC), under the jurisdiction of the Department of Labor, to guarantee most vested retirement benefits and certain disability and survivor pensions.

PBGC guarantees are limited. For example, the PBGC does not guarantee benefits that had not vested prior to the plan termination or benefits for which all age, service, or other requirements had not been met at the time the plan terminates. Further, benefit increases and new benefits that have been in place for less than a year are not guaranteed, and those that have been in place for less than 5 years are only partly guaranteed. The maximum guaranteed benefit under a plan terminating in 2011 payable as a single life annuity at age 65, is $4,500 per month. Lower guarantees apply if benefits begin before age 65 or if survivor benefits are payable. Benefits other than pension benefits, such as health insurance, life insurance, death benefits, vacation pay, or severance pay are not guaranteed, and the PBGC does not pay lump sums exceeding $5,000 (even if available under the plan prior to termination).

Plans covered by the PBGC insurance program must file an annual premium filing each year with the PBGC via their online myPAA system within 9 1/2 months after the beginning of the plan year. Plans covering more than 500 participants must also file an Estimated Premium Filing through myPAA by the end of the second month of the plan year. All plans must pay a basic premium of $35 times the number of participants as of the end of the previous plan year, and plans with unfunded vested benefits must also pay an additional risk-related premium to the PBGC.

Development of PBGC Premium for 2011:

1.	Flat-rate premium			
	(a)	National Average Wage (NAW), 2 years prior		$40,711.61
	(b)	Flat-rate: $30 x (a)/$35,648.55 (2004 NAW), rounded		35
	(c)	Participant count (excludes 3 Alternate Payees)		1,015
	(d)	Flat-rate premium: (b)x(c)		$35,525
2.	Variable-rate premium			
	(a)	PBGC funding target		
		(i)	Not-at-risk PBGC liability	128,364,882
		(ii)	At-risk PBGC liability	147,044,121
		(iii)	Per-participant load	N/A
		(iv)	Liability load: 4% x (i)	N/A
		(v)	At-risk PBGC target: (ii)+(iii)+(iv), not less than (i)	147,044,121
		(vi)	Transition percentage	0.00%
		(vii)	PBGC funding target: (i)+[(vi)x((v)-(i))]	128,364,882
	(b)	Market value of plan assets		110,469,284
	(c)	Unfunded vested benefits: (a)(vii)-(b), min zero, rounded up to $1,000		17,896,000
	(d)	Variable-rate premium: 0.009x(c), or zero if exempt		161,064
3.	PBGC Premium: (1)(d)+(2)(d)			$196,589

ASC 960 Information (previously known as FAS 35)

Transfers based on Accrual Method

The information in this exhibit is intended to satisfy the requirements under Accounting Standards Codification Topic 960 (ASC 960) with regard to the financials of the plan. It is not intended to meet the requirements of Accounting Standards Codification Topic 715 (ASC 715) (previously known as FAS 87) which are the financials of the plan sponsor. If applicable, information for ASC 715 is presented in a separate report.

The Present Value of Accumulated Plan Benefits has been calculated using the Actuarial Assumptions Supplementary Exhibit. No future increases in salaries, Social Security benefits, or benefit service were assumed.

1.	Actuarial present value of accrued plan benefits			
	(a)	Actuarial present value of vested benefits		
		(i)	Participants currently receiving benefits	$67,498,499
		(ii)	Participants entitled to deferred benefits	1,878,984
		(iii)	Other participants	39,599,037
		(iv)	Total	108,976,520
	(b)	Actuarial present value of nonvested benefits		0
	(c)	Actuarial present value of accrued plan benefits: (a)(iv)+(b)		108,976,520
2.	Market value of assets (includes receivables)*			110,633,370
3.	Unfunded PVAB (Surplus assets): (1)(c)-(2)			(1,656,850)
4.	Funded percentage: (2)/(1)(c)			102%
5.	Changes in present value			
	(a)	PVAB as of January 1, 2010		104,336,469
	(b)	Changes due to:		
		(i)	Decrease in discount period at 8.00%	7,992,601
		(ii)	Benefits paid	(9,031,651)
		(iii)	Assumption changes**	4,465,139
		(iv)	Plan amendments	0
		(v)	Additional benefits earned, including experience gains and losses	1,206,777
		(vi)	Amount Transferred	7,185
		(vii)	Total change	4,640,051
	(c)	PVAB as of January 1, 2011: (a)+(b)(vii)		$108,976,520

**Receivables for ASC 960 purposes are not discounted at the Effective Interest Rate.*
***Discount rate changed from 8.00% to 7.75% and a mortality projection was added.*

ASC 960 Information (previously known as FAS 35)

Transfers based on Cash Method

The information in this exhibit is intended to satisfy the requirements under Accounting Standards Codification Topic 960 (ASC 960) with regard to the financials of the plan. It is not intended to meet the requirements of Accounting Standards Codification Topic 715 (ASC 715) (previously known as FAS 87) which are the financials of the plan sponsor. If applicable, information for ASC 715 is presented in a separate report.

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1.	Actuarial present value of accrued plan benefits			
	(a)	Actuarial present value of vested benefits		
		(i)	Participants currently receiving benefits	$67,498,499
		(ii)	Participants entitled to deferred benefits	1,878,984
		(iii)	Other participants	39,599,037
		(iv)	Total	108,976,520
	(b)	Actuarial present value of nonvested benefits		0
	(c)	Actuarial present value of accrued plan benefits: (a)(iv)+(b)		108,976,520
2.	Market value of assets (includes receivables)*			110,633,370
3.	Unfunded PVAB (Surplus assets): (1)(c)-(2)			(1,656,850)
4.	Funded percentage: (2)/(1)(c)			102%
5.	Changes in present value			
	(a)	PVAB as of January 1, 2010		104,042,613
	(b)	Changes due to:		
		(i)	Decrease in discount period at 8.00%	7,992,601
		(ii)	Benefits paid	(9,031,651)
		(iii)	Assumption changes**	4,465,139
		(iv)	Plan amendments	0
		(v)	Additional benefits earned, including experience gains and losses	1,206,777
		(vi)	Amount Transferred	301,041
		(vii)	Total change	4,933,907
	(c)	PVAB as of January 1, 2011: (a)+(b)(vii)		$108,976,520

**Receivables for ASC 960 purposes are not discounted at the Effective Interest Rate.*

***Discount rate changed from 8.00% to 7.75% and a mortality projection was added.*

Participant Data

	January 1, 2011	January 1, 2010
Active Participants		
Number	416	441
Average age	49.61	48.72
Average past service	20.75	19.79
Average future service	11.74	12.79
Terminated Vested Participants		
Number	56	55
Average age	47.00	47.07
Annual benefits:		
- Total	$390,165	$374,411
- Average	$6,967	$6,807
Retirees and Beneficiaries		
Number	546	549
Average age	74.69	74.29
Annual benefits:		
- Total	$7,946,923	$7,749,022
- Average	$14,555	$14,115
Total Participant Count	1,018	1,045

Participant Data

Reconciliation of Participant Data:

	Active	Terminated Vested	Retirees and Beneficiaries	Total
As of January 1, 2010	441	55	549	1,045
New Hires	0	0	0	0
Rehires	0	0	0	0
Nonvested termination	(1)	0	0	(1)
Vested termination	(10)	10	0	0
Lump sum cashout	(6)	(3)	0	(9)
Retirement	(6)	(6)	12	0
Disability	0	0	0	0
Deceased	(1)	0	(18)	(19)
New beneficiaries	0	0	3	3
Miscellaneous	(1)	0	0	(1)
As of January 1, 2011*	416	56	546	1,018

**Includes 3 Alternate Payees under Qualified Domestic Relations Orders*

Distribution of Inactive Benefits Inforce:

	Retired, Survivor, and Disabled		Vested	
Attained Age	No.	Avg. Annuities	No.	Avg. Annuities
Under 30	0	$0	0	$0
30 to 34	0	0	8	4,008
35 to 39	1	3,963	8	3,713
40 to 44	0	0	7	6,129
45 to 49	0	0	6	3,299
50 to 54	2	5,982	21	9,138
55 to 59	12	11,178	3	9,576
60 to 64	87	22,520	1	28,665
65 to 69	89	19,782	1	16,033
70 to 74	89	13,601	0	0
75 to 79	87	13,386	0	0
80 to 84	98	10,283	1	4,690
85 to 89	61	9,443	0	0
90 to 94	13	5,968	0	0
95 & up	7	5,808	0	0
Total	546	$14,555	56	$6,967

Active Participant Data

Years of credited service

Attained Age	Under 1 No.	1 to 4 No.	5 to 9 No.	10 to 14 No.	15 to 19 No.	20 to 24 No.	25 to 29 No.	30 to 34 No.	35 to 39 No.	40 & up No.	Total No.
Under 25											
25 to 29			5								5
30 to 34			31	3							34
35 to 39			21	14	1						36
40 to 44			14	7	11	5					37
45 to 49			18	8	18	7	23				74
50 to 54			12	12	5	6	40	29			104
55 to 59			10	5		6	13	32	18		84
60 to 64			2	2	4	1	5	5	14	6	39
65 to 69				1			1				2
70 & up			1								1
Total			114	52	39	25	82	66	32	6	416

Actuarial Cost Method

Funding Target / Target Normal Cost

An Actuarial Cost Method is an allocation of the expected cost of a pension plan on a year-by-year basis. The primary objective of an Actuarial Cost Method is to accumulate enough assets prior to each participant's retirement to provide the promised pension benefits.

The Pension Protection Act of 2006 (PPA) mandates the use of the Traditional Unit Credit Actuarial Cost Method. Under this method, the accrued benefit is estimated based upon service and, if applicable, earnings as of the valuation date. The Funding Target is equal to the actuarial present value of all accrued benefits as of the valuation date. The Target Normal Cost is the actuarial present value, as of the valuation date, of the expected increases in projected accrued benefit attributable to service expected to be completed during the plan year (i.e. if applicable, one year's salary growth is reflected in the determination of Target Normal Cost).

For tax deduction purposes, the Funding Target may reflect the value of future pay increases on accrued benefits, if applicable.

PPA Discounting Method

The plan sponsor is responsible for making the following decisions with regard to the discounting method:

- Full yield-curve spot rates or a segmented yield-curve of 24-month average rates of corporate bond rates
- If the segmented yield curve is used, the rates as of the month of the valuation may be used or as of a lookback month up to 4 months prior to the valuation date (the full yield curve must use the rates as of the month of the valuation starting in 2010)

For purposes of this valuation, the following discounting method was used and is assumed to be approved by the plan sponsor:

- Rates through the month of August preceding the valuation date
- Segment Rates

Asset Valuation Method

The Plan Assets for purposes of this Actuarial Valuation are valued under the asset averaging method, including, if applicable, discounted receivable contributions. The value of plan assets is set equal to the average of the fair market value of assets on the valuation date and the adjusted fair market value of assets (including expected earnings) determined for the two earlier annual determination dates. Expected earnings are calculated using the third segment rate of the segmented yield-curve in effect at the beginning of each valuation year. The resulting average value must be constrained so that it falls between 90 and 110 percent of the fair market value of assets on the valuation date.

Actuarial Assumptions

Actuarial Assumptions

Actuarial assumptions are estimates of the occurrence of future events affecting the costs of the plan. The assumptions have been chosen to anticipate the long-term experience of the plan. The enrolled actuary will certify the reasonableness of these assumptions, as required by ERISA.

The actuarial assumptions used to compute this year's plan costs are as follows:

Economic Assumptions

PPA Segment Rates	Funding Target	PBGC
- Segment 1: Up to Year 5	3.78%	3.78%
- Segment 2: Years 5-20	6.31%	6.31%
- Segment 3: Years 20+	6.57%	6.57%

ASC 960 Assumed Investment Return 7.75%

Annual rates of increase:	
- Salaries	N/A
- Future Social Security wage bases	N/A
- Statutory limits on compensation and benefits	N/A

Demographic Assumptions

Mortality:

- Funding Target / PBGC: IRS 2011 Static Mortality Table
- ASC 960: RP 2000 Mortality Table Projected to 2010

Terminations: Rates vary by age and sex. Illustrative annual rates of withdrawal are as follows:

Age	Male	Female
25	7.18%	15.05%
40	1.57%	2.14%
55	0.29%	0.42%

Disability: None

Actuarial Assumptions

Assumed Retirement Age (Actives): Rates varying by age.
Representative rates:

Age	Rate
55	3%
56-58	1%
59	3%
60-61	10%
62	25%
63-64	20%
65	100%

Assumed Retirement Age (Vested Terms): Age 62

Benefit Commencement date:

Preretirement Death Benefit: Surviving spouse benefits commence at the later of the death of the active participant or the date the participant would have attained age 55.

Deferred Vested Benefit: Upon termination of employment (if lump sum) or at early retirement date (if annuity)

Retirement Benefit: Upon termination of employment

Form of Payment: Life annuity. Retirement benefit loaded 6.4% for subsidized option factor. Withdrawal benefits are assumed to be paid as a lump sum for participants hired on or before January 1, 2004, otherwise they are assumed to be paid as a life annuity commencing at the participant's early retirement date.

Miscellaneous Assumptions

Percent Married: 80%

Spouse Age: Wife three years younger than husband

Administrative Expense: $85,000 (Prior year's administrative expenses rounded up to nearest $5,000)

Summary of Plan Provisions

Summary of Plan Provisions

Effective Dates:	Original Plan: January 1, 1955
Employee:	All non-union employees of MDU Resources Group, Inc., Montana-Dakota Utilities Co. and other designated subsidiaries.
Eligibility Requirements:	Age: 21 for employees hired on or after 1/1/85; if hired prior to 1/1/04, no service required. Service: One Year of Service Maximum Age: None Plan eligibility is frozen for employees hired after December 31, 2005.
Plan Entry Date:	An eligible employee will enter the plan on the first day of the month following completion of the eligibility requirements. No employee hired after December 31, 2005 may enter the plan.
Year of Service:	12-consecutive month computation period in which an employee is credited with 1,000 or more hours of service. Eligibility: Computation period commences on employee's date of hire. Vesting: One year for each 1,000-hour calendar year of employment by MDU Resources Group, Inc., or a related company.
Credited Service:	Service following age 21 with a maximum of 35 years; full year if 2,080 hours in a year, prorate for less than 2,080 hours. Except for years of hire and termination, exclude years with less than 1,000 hours. Credited Service is frozen as of December 31, 2009.

Summary of Plan Provisions

Normal Retirement Date (NRD):	Last day of the month in which 65th birthday occurs.
Basic Monthly Compensation:	Basic rate of regular compensation as of the first day of the first payroll period of the month, including Section 125 and 401(k) deferrals. Special rules for commissioned and part-time employees.
Final Average Monthly Compensation:	The average of the highest 60 consecutive basic monthly compensation rates in the last 120 months of employment. Compensation earned after December 31, 2009 is not taken into consideration.
Normal Retirement Benefit:	Monthly pension benefit determined as of NRD. Effective December 31, 2009, benefit accruals are frozen.
Normal Form of Benefit:	Single: Life Annuity Married: 50% Joint and Survivor
Early Retirement Eligibility:	Retire before NRD and on or after both attaining age 55 and completing five years of vesting service.
Early Retirement Benefit:	Monthly pension benefit determined as of early retirement date. For retirements prior to age 60, the benefit is reduced .25% for each month that commencement of payment precedes age 60.
Deferred Vested Eligibility:	Terminate for reasons other than death or retirement after completing five years of vesting service.
Deferred Vested Benefit:	-Monthly pension benefit determined as of date of termination payable at NRD -Monthly pension benefit determined as of termination date, reduced .25% for each month that commencement of payments precedes age 62. -Participants hired before January 1, 2004 who are not eligible for early retirement may elect a single sum payment equal to the actuarial

Summary of Plan Provisions

Deferred Vested Benefit (cont):	equivalent of the benefit payable at age 55, based on the interest and mortality assumptions specified under IRC 417(e)(3).
Pre-Retirement Spousal Death Benefit:	If death while active employee after age 45, 50% of monthly pension benefit at date of death reduced for early payment to employee's date of death. If death while active employee before age 45 or after termination, 50% of monthly pension benefit at date of death reduced for the 50% joint and survivor annuity for payment as early as the employee's 55^{th} birthday.
Monthly Pension Benefit:	The greater of total Pension Credits and the Final Pay Benefit, with a minimum benefit equal to the pension benefit as of December 31 preceding termination. A modified formula is applied for participants who had annualized basic compensation during a plan year prior to 1994 in excess of $150,000.
Pension Credits:	For employees who began participation and attained age 40 on or before February 28, 1990, a pension credit for each year after December 31, 1988 equal to 1.65% of the first $1,100 of basic monthly compensation as of the first day of the first payroll period of the plan year plus 2% of the excess; proportionately reduced for less than 2,080 hours of service. Different formulas applied for service prior to 1989.
Final Pay Benefit:	1.1% of final average monthly compensation up to the integration level plus 1.45% of the final average monthly compensation in excess of the integration level, times years of credited service (maximum of 35 years).

Integration Level:	For plan years after 1989, the integration level equals $1,400 multiplied by a fraction equal to the current year Taxable Wage Base divided by $48,000. Integration Level is frozen as of December 31, 2009.

MDU Resources Group, Inc., Pension Plan for Non-Bargaining Unit Employees

Determination of the

Net Periodic Pension Cost

for the Fiscal Year Ending December 31, 2011

Prepared by:

New York Life Retirement Plan Services

690 Canton Street

Westwood, MA 02090

TABLE OF CONTENTS

I. INTRODUCTION

The purpose of this report is to present certain financial information in accordance with FASB Accounting Standards Codification (ASC) 715-30 (formerly FAS 87).

This report was based on information submitted to our firm in the form of payroll and asset data, as well as ancillary material pertaining to the Plan. In addition, the actuarial assumptions as to weighted-average discount rate, rate of increase in compensation levels, and expected long-term rate of return on plan assets described in Section IV of this report were supported by the plan sponsor and its auditors.

Actuarial computations under FASB ASC 715-30 are for purposes of fulfilling employer accounting requirements. The calculations reported herein have been made on a basis consistent with our understanding of FASB ASC 715-30. Determinations for purposes other than meeting employer financial accounting requirements may be significantly different from the results reported herein. Accordingly, additional determinations are needed for other purposes, such as judging benefit security at termination or adequacy of funding for an ongoing plan.

The Net Periodic Pension cost has been determined to be ($765,939) for the Fiscal Year Ending December 31, 2011. The assumptions used to determine the Net Periodic Pension Cost include a discount rate of 5.20% and are illustrated in Section IV.

In preparing the results presented in this report, we have relied upon information provided to us regarding plan provisions, plan participants and plan assets. This information is summarized in the 2011 funding valuation for the plan. We have reviewed this information for overall reasonableness, but we have not audited this information. The accuracy of the results presented in this report is dependent upon the accuracy and completeness of the underlying information.

April 28, 2011	Mark B Magnus
Date	Mark B. Magnus, A.S.A., Enrolled Actuary

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II. DETERMINATION OF NET PERIODIC PENSION COST FISCAL YEAR ENDING DECEMBER 31, 2011

1. Employer Service Cost	
a) Amount at beginning of year	$0
b) Interest	0
c) Total service cost (a)+(b)	0
2. Interest Cost	
a) Projected Benefit Obligation (PBO) at beginning of year	141,529,816
b) Expected distributions	8,442,170
c) Average expected PBO	136,956,974
d) Discount rate	5.20%
e) Interest cost (c)x(d)	7,121,763
3. Expected return on assets	
a) Market-related value at beginning of year	104,858,398
b) Expected distributions	8,442,170
c) Total expected contributions	13,757,133
d) Expected expenses	0
e) Average market-related value of assets	110,015,347
f) Long term rate of return	7.75%
g) Expected return (e)x(f)	8,526,189
4. Amortization of Transition (Asset) or Obligation - Attachment A	0
5. Amortization of Prior Service Cost - Attachment B	0
6. Amortization of (Gain) or Loss -Attachment C-2, end of year	638,487
7. Net Periodic Pension Cost (1c)+(2e)-(3g)+(4)+(5)+(6)	**($765,939)**

III. ATTACHMENTS - Attachment A

AMORTIZATION OF TRANSITION OBLIGATION (ASSET)

Fiscal Year Ending	Unrecognized Amount - Beginning of year	Amount Recognized	Unrecognized Amount - End of year
2011	0	0	0
2012	0	0	0
2013	0	0	0
2014	0	0	0
2015	0	0	0
2016	0	0	0
2017	0	0	0
2018	0	0	0
2019	0	0	0
2020	0	0	0
2021	0	0	0
2022	0	0	0
2023	0	0	0
2024	0	0	0
2025	0	0	0
2026	0	0	0
2027	0	0	0
2028	0	0	0
2029	0	0	0
2030	0	0	0
2031	0	0	0
2032	0	0	0
2033	0	0	0
2034	0	0	0
2035	0	0	0
2036	0	0	0
2037	0	0	0
2038	0	0	0
2039	0	0	0

III. ATTACHMENTS - Attachment B

AMORTIZATION OF PRIOR SERVICE COST

Summary for Fiscal Year Ending 12/31/11

	Date Established	Beginning of Year Balance	Amount Recognized	End of Year Balance
Total		$0	$0	$0

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III. ATTACHMENTS - Attachment C-1

CALCULATION OF (GAIN) OR LOSS

1. Net actuarial (gain) or loss from December 31, 2010 disclosure	$33,097,107
2. PBO from December 31, 2010 disclosure	140,621,656
3. Fair value of plan assets from December 31, 2010 disclosure	99,442,314
4. PBO as of January 1, 2011	141,529,816
5. Fair value of plan assets as of January 1, 2011	99,442,314
6. (Gain)/Loss (1)-(2)+(3)+(4)-(5)	$34,005,267

III. ATTACHMENTS - Attachment C-2

(GAIN) OR LOSS SUBJECT TO AMORTIZATION

	Fiscal Year Ending
	<u>December 31, 2011</u>
1.(Gain)/loss-Attachment C-1,line 6	$34,005,267
2.PBO - Attachment C-1,line 4	141,529,816
3.(Gain) or loss not reflected in market-related value	
a) Fair value	99,442,314
b) Market-related value	104,858,398
c) Amount not reflected in (b) (a)-(b)	(5,416,084)
4. (Gain) or loss subject to amortization (1)+(3c)	28,589,183
5. Greater of (2) or (3b)	141,529,816
6. 10% of (5)	14,152,982
7. (Gain) or loss subject to amortization excess of (4) over (6)	14,436,201
8. Average future life expectancy of plan participants	22.61
9. Amortization amount (7)/(8)	$638,487

IV. ACTUARIAL ASSUMPTIONS

For determining the Net Periodic Pension Cost for the Fiscal Year Ending December 31, 2011

Measurement Date: December 31, 2010

Discount Rate: 5.20%

Annual Rate of Increase in Compensation: N/A

Expected Long Term Rate of Return on Plan Assets: 7.75%

Mortality: RP2000 Combined Healthy Mortality Table projected to 2010

Turnover:

Rates vary by age and sex.
Representative rates:

Age	Male	Female
25	7.2%	15.1%
40	1.6%	2.1%
55	0.3%	0.4%

Taxable Wage Base Increase: N/A

Cost of Living Increase: 3.25%

Expenses: None

V. DEFINITIONS

Discount Rate. This Discount Rate reflects the rate used to adjust for the time value of money. It should reflect the rates at which the pension benefits could effectively be settled.

Expected Long Term Rate of Return on Plan Assets. This is an assumption concerning the rate of return on plan assets. The product of the Expected Long Term Rate of Return on Plan Assets and the plan's assets is applied as a credit towards the current year's net periodic pension cost.

Gain or Loss. Gains and Losses measure the difference between actual experience and that assumed. Under US GAAP the impact of changes in actuarial assumptions is also measured as a Gain or Loss.

Fair Value of Plan Assets. The market value of assets.

Measurement Date. The date at which plan assets and obligations are measured.

Net Transition (Asset) Obligation. The excess(deficit) of the PBO over the Fair Value of assets (adjusted for previously recognized accrued or prepaid pension costs) as of the date of initial compliance with US GAAP.

Prior Service Cost. This is the amount of change in the Projected Benefit Obligation due to amendments to the plan.

Projected Benefit Obligation (PBO). This represents the present value of pension benefits based on service earned to date and expected future increases in salary.

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V. DEFINITIONS

<u>Net Periodic Pension Cost</u>. This represents the pension expense for the fiscal year. The Net Periodic Pension Cost consists of the following:

(1) **<u>Service Cost</u>**. The Service Cost represents the value of benefits earned each year. This is comparable to the normal cost used in determining funding levels under ERISA.

(2) **<u>Interest Cost</u>**. The Interest Cost equals the product of the Discount Rate and the Projected Benefit Obligation adjusted for benefit payments expected during the year.

(3) **<u>Return on Plan Assets</u>**. The Return on Plan Assets is the product of the Expected Long Term Rate of Return on Plan Assets and the Fair Value of Plan Assets adjusted for contributions and benefit payments expected during the year. This component represents a credit which reduces the Net Periodic Pension Cost for the year.

(4) **<u>Amortization of Unrecognized Gain or Loss</u>**. Amortization payments are included in the Net Periodic Pension Cost to systematically recognize cumulative Gains and Losses that are unrecognized as they occur.

(5) **<u>Amortization of Unrecognized Prior Service Cost</u>**. This is the amortization of increases or decreases in the Projected Benefit Obligation due to amendments to the plan.

(6) **<u>Amortization of Unrecognized Net Obligation or Asset at Transition</u>**. This represents the amortization of the Net Obligation(Asset) that existed at transition in the initial year of US GAAP compliance.

<u>Projected Unit Credit Cost Method</u>. Under this method, the benefit for each participant is projected to retirement and a pro-rata part of this benefit is then assigned to each year of service from hire date to the participant's retirement date. The Service Cost for each participant is the present value of the pro-rata benefit assigned to the current year. The Service Cost for the Fiscal Year is equal to the sum of the individual Service Costs for all participants. This method is required to be used in all calculations under US GAAP.

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MDU Resources Group, Inc.
Pension Plan for Collective Bargaining Unit Employees

Actuarial Valuation as of January 1, 2011

Prepared by New York Life Retirement Plan Services, 690 Canton Street Westwood, MA 02090.

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Executive Summary

	January 1, 2011	January 1, 2010
	Contribution Range	
Minimum Required Contribution	$146,304 (as of 1/1/2011)	$0
Maximum Deductible Contribution	$57,567,319	$43,773,245
	Credit Balances	
Carryover Balance	$4,088,713	$5,469,774
PreFunding Balance	$0	$0
Total	$4,088,713	$5,469,774
	Assets and Liabilities	
Target Normal Cost	$1,934,656	$1,820,613
Funding Target	$69,907,256	$65,251,432
Actuarial Value of Assets	$60,014,518	$66,018,293
Funding Target attainment Percentage	80.00%	92.79%
Market Value of Assets	$65,409,443	$61,891,998
Estimated Rate of Return on Market Value of Assets	14.13%	20.40%
	Census Information	
Active Participants	299	321
Terminated Vested Participants	41	37
Retirees and Beneficiaries	408	415
Total	748	773
	Assumptions	
Interest Discounting	August 2010 Segment Rates	August 2009 Segment Rates
Effective Interest Rate	6.25%	6.65%

Changes in Plan Provisions Since Prior Valuation

There have been no changes in plan provisions since the prior valuation.

Changes in Actuarial Assumptions and Methods

The interest rates and mortality were updated to comply with the plan's funding method.

In addition, the ASC 960 interest rate and mortality table were changed to 7.75% (from 8.00%) and RP 2000 Mortality Table projected to 2010 (from 1994 Group Annuity Table), respectively.

Summary of Other Significant Changes

We are not aware of the occurrence of any other significant event that would have a material effect on this valuation.

Quarterly Contribution Requirement and Recommended Contribution Schedule for 2011

The plan is subject to the quarterly contribution requirement for the 2011 plan year. In order to avoid late interest penalties and potential notifications to the PBGC and participants, the following schedule of contributions should be followed:

Due Date (On or Before)	Contribution
September 15, 2012	$162,254
Total	**$162,254**

The above schedule assumes that the Plan Sponsor elects to apply the Plan's Carryover Balance to satisfy the minimum contribution requirement.

Estimated Quarterly Contribution Requirement for 2012

The plan will be subject to the quarterly contribution requirement for the 2012 plan year. Based upon 2011 actuarial valuation results, the estimated quarterly contribution required for the 2012 plan year will be $1,058,754. A contribution in this amount must be made on or before April 15, 2012, July 15, 2012, October 15, 2012 and January 15, 2013. Once the 2012 actuarial valuation is complete, we will communicate the final contribution requirements for the 2012 plan year.

Funding Policy Contribution

The plan sponsor's funding policy is to contribute the amount to meet the minimum funding requirements of Internal Revenue Code Sections 412 and 430. From time to time, and with regard to their cash and tax position, the plan sponsor may contribute an amount above the minimum required contribution.

Actuary's Commentary

At-Risk Status

The plan is not "at-risk" for the 2011 plan year since the 2010 Funding Target Attainment Percentage (FTAP) of 92.79% is at least 80%. The plan will not be "at-risk" in 2012 since the 2011 FTAP of 80.00% is at least 80%.

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Actuarial Certification

This report presents the results of the actuarial valuation as of January 1, 2011 for the MDU Resources Group, Inc. Pension Plan for Collective Bargaining Unit Employees. The purpose of this report is to review the plan's experience for the prior year and to provide the plan sponsor with an acceptable range of contributions for the plan year in accordance with ERISA and the Internal Revenue Code.

This report is not an AFTAP certification, nor should it be relied upon for any other purpose by any party other than the plan sponsor.

This valuation has been conducted in accordance with generally accepted actuarial principles and practices. In preparing the results presented in this report, we have relied upon information provided to us regarding plan provisions, plan participants and plan assets. We have reviewed this information for overall reasonableness, but we have not audited this information. The accuracy of the results presented in this report is dependent upon the accuracy and completeness of the underlying information.

The assumptions for interest and mortality are mandated by the Internal Revenue Service. All other assumptions have been selected by New York Life Retirement Plan Services, with concurrence of the plan sponsor, and are considered to be reasonable and within the "best-estimate range" as described by the Actuarial Standards of Practice.

The information contained in this report was prepared for the internal use of MDU Resources Group, Inc. and its auditors in connection with our actuarial valuation of the MDU Resources Group, Inc. Pension Plan for Collective Bargaining Unit Employees. It is neither intended nor necessarily suitable for other purposes.

The Consulting Actuary is a member of the Society of Actuaries, member of the American Academy of Actuaries and other professional actuarial organizations and meets their "General Qualifications Standard for Prescribed Statements of Actuarial Opinion" relating to pension plans.

April 28, 2011	Mark B Magnus
Date	Mark B. Magnus, ASA, MAAA, Enrolled Actuary Enrolled Actuary No. 11-02866

Plan Assets

I. Asset Valuation Method

IRC Section 430(g) provides that plan assets be valued at either their fair market value on the valuation date or at the "average" value of assets on the valuation date. Under this average value, the value of plan assets is set equal to the average of the fair market value of assets on the valuation date and the adjusted fair market value of assets (including expected earnings) determined for one or more earlier determination dates (up to a 2-year limit). The resulting average value must be constrained so that it falls between 90 and 110 percent of the fair market value of plan assets on the valuation date.

Contributions for a prior plan year that are made after the beginning of this plan year must be adjusted for interest at the effective interest rate under Section 430(h)(2). This contribution adjustment requirement is effective beginning for contributions for the 2008 plan year. Contributions for the 2007 plan year made in 2008 are not adjusted for interest.

The Plan Assets for purposes of this Actuarial Valuation are valued under the asset averaging method.

II. Contributions for Plan Year Beginning January 1, 2010

None.

Plan Assets

III. Market Value of Assets as of January 1, 2011

	Fair Market Value	% OF TOTAL
MainStay Cash Reserves Fund I	401,442	0.61%
Wells Fargo Unitized Assets	64,638,784	98.82%
Cash	369,217	0.57%
TOTAL	$65,409,443	100.00%
Discounted Receivable Contributions*	$0	
MARKET VALUE OF ASSETS AS OF JANUARY 1, 2011	$65,409,443	

**Contributions for the 2010 Plan Year that are made after December 31, 2010 are discounted back to January 1, 2011 at the 2010 Effective Interest Rate of 6.65%*

Plan Assets

IV. Reconciliation of Market Value of Assets

1. Market Value of Assets as of January 1, 2010	$62,185,854
2. Contributions Made During Calendar Year	0
3. Interplan Transfers	(301,041)
3. Investment Income	8,420,369
4. Benefit Payments	(4,860,506)
5. Administrative Expenses	(35,233)
6. Market Value of Assets as of December 31, 2010 (1+2+3+4+5+6)	$65,409,443
Estimated Gross Rate of Return on Assets:	14.13%

The estimated rate of return is based on the time weighting of contributions, benefit payments and expenses

Plan Assets

V. Actuarial Value of Assets

1. Market value of assets, January 1, 2011	$65,409,443
2. Prior year gains/(losses):	
(a) Asset gain/(loss) for year-2	
(i) Initial asset gain/(loss)	7,477,611
(ii) Weight	0.333
(iii) Unrecognized amount: (i)x(ii)	2,492,537
(b) Asset gain/(loss) for year-1	
(i) Initial asset gain/(loss)	4,353,582
(ii) Weight	0.667
(iii) Unrecognized amount: (i)x(ii)	2,902,388
3. Total amount unrecognized: sum of (2)(iii)	5,394,925
4. Preliminary actuarial value: (1)-(3)	60,014,518
5. Market value corridor override	
(a) Lower bound: 0.9 x(1)	58,868,499
(b) Upper bound: 1.1 x(1)	71,950,387
(c) Adjustment to corridor	0
6. Actuarial assets, January 1, 2011: (4)+(5)(c)	$60,014,518

VI. Development of Asset Gain/(Loss)

1. Development of 2009 Gain/(Loss)

(a)	Expected Return on Assets		6.69%
(b)	Market Value at January 1, 2009		$57,797,230
(c)	Benefit Payments and Expenses		(6,734,016)
(d)	Expected Return at 6.69% Interest		
	(i) Market Value	3,866,635	
	(ii) Benefit Payments	(221,606)	
	(iii) Contributions	0	
	(iv) Total		3,645,029
(e)	Actual Return on Market Value		11,122,640
(f)	Gain/(Loss): (e)-(d)(iv)		$7,477,611

2. Development of 2010 Gain/(Loss)

(a)	Expected Return on Assets		6.82%
(b)	Market Value at January 1, 2010		$62,185,854
(c)	Benefit Payments and Expenses		(5,196,780)
(d)	Expected Return at 6.82% Interest		
	(i) Market Value	4,241,075	
	(ii) Benefit Payments	(174,288)	
	(iii) Contributions	0	
	(iv) Total		4,066,787
(e)	Actual Return on Market Value		8,420,369
(f)	Gain/(Loss): (e)-(d)(iv)		$4,353,582

Credit Balances

With the enactment of the Pension Protection Act of 2006, credit balances were maintained; however, they were bifurcated into the following two categories:

1. The credit balance, if any, as of the end of the 2007 plan year establishes the Carryover Balance; and
2. Contributions made on or after the 2008 plan year in excess of minimum funding requirements will be credited to the Prefunding Balance.

Maintaining credit balances is elective. Plan sponsors may "waive" some or all of the Carryover Balance or Prefunding Balance in order to avoid asset reductions for purposes of determining:

1. whether the plan is "at-risk",
2. the Funding Target Attainment Percentage,
3. the Shortfall Amortization Base, and
4. whether benefit restrictions apply

If the credit balances are to be waived, the Carryover Balance must be waived first prior to any waiver of the Prefunding Balance.

After 2007, interest on the Carryover and Prefunding Balance will be credited at the rate determined on the actual return on the market value of plan assets.

Credit balances may be used toward the current year's minimum funding requirement only if, for the prior year, the Actuarial Value of Assets less the Prefunding Balance is greater than 80% of the "not-at-risk" Funding Target. If the Credit Balances are going to be used as an offset to the Minimum Funding Requirement, the Carryover Balance must be used first prior to the use of the Prefunding Balance.

Credit Balances

Detailed below is the development of the Credit Balances as of the beginning of the 2011 plan year:

1. Funding Standard Carryover Balance (FSCB)	
(a) FSCB as of January 1, 2010 after waivers	5,469,774
(b) FSCB applied to minimum required contribution	1,820,613
(c) Remaining FSCB as of January 1, 2010: (a)–(b)	3,649,161
(d) Rate of return on plan assets during plan year 2010	14.13%
(e) Interest on (c) : (c)x(d)	515,626
(f) FSCB as of January 1, 2011: (c)+(e)	4,164,787
(g) Waived FSCB	76,074
(h) FSCB as of January 1, 2011 after waivers: (f)-(g)	$4,088,713
2. Prefunding Balance (PFB)	
(a) PFB as of January 1, 2010 after waivers	0
(b) PFB applied to minimum required contributions	0
(c) Remaining PFB as of January 1, 2010: (a)–(b)	0
(d) Rate of return on plan assets during plan year 2010	14.13%
(e) Interest on (c): (c)x(d)	0
(f) Excess contributions	
(i) Employer contributions discounted to BOY	0
(ii) Preliminary minimum required contribution (MRC)	1,820,613
(iii) Credit balances applied to MRC	1,820,613
(iv) Excess: (i)-(ii)+(iii), min zero	0
(v) Excess above MRC: (i)-(ii), min zero	0
(vi) Excess due to use of credit balances: (iv)-(v)	0
(vii) Effective rate	6.65%
(viii) Interest on excess contributions: (v)x(vii)+(vi)x(d)	0
(ix) Total available to add to PFB: (iv)+(viii)	0
(x) Portion of (ix) added to PFB	0
(g) PFB as of January 1, 2011: (c)+(e)+(f)(x)	0
(h) Waived PFB	0
(i) PFB as of January 1, 2011 after waivers: (g)-(h)	$0

Credit Balances

The following chart details what, if any, portion of the Credit Balances will be waived for 2011:

1.	Waived credit balance(s) to avoid benefit restrictions			
	(a)	Preliminary Adjusted Funding Target Attainment Percentage (AFTAP) before waivers		
		(i)	Actuarial assets	$60,014,518
		(ii)	Funding Standard Carryover Balance (FSCB)	4,164,787
		(iii)	Prefunding Balance (PFB)	0
		(iv)	Not-at-risk funding liability	69,907,256
		(v)	Non-HCE annuity purchases in last 2 years	0
		(vi)	Preliminary AFTAP prior to benefit restriction waivers: ((i)-(ii)-(iii)+(v))/((iv)+(v))	79.89%
		(vii)	Funded Ratio: (i)/(iv)	85.84%
	(b)	Transition percentage		100.00%
	(c)	Credit balance(s) waived to avoid benefit restrictions, if possible		76,074
	(d)	Preliminary AFTAP after benefit restriction waivers		
		(i)	FSCB after benefit restriction waivers	4,088,713
		(ii)	PFB after benefit restriction waivers	0
		(iii)	Preliminary AFTAP after benefit restriction waivers: if (a)(vii)>=(b), ((a)(i)+(a)(v))/((a)(iv)+(a)(v)), else ((a)(i)-(i)-(ii)+(a)(v))/((a)(iv)+(a)(v))	80.00%
2.	Waived credit balance(s) to avoid At-Risk status			
	(a)	Not-at-Risk Funding Target Attainment Percentage (NAR FTAP) before waivers to avoid At-Risk status: ((1)(a)(i)-(1)(d)(i)-(1)(d)(ii))/(1)(a)(iv)		80.00%
	(b)	At-Risk Funding Target Attainment Percentage (AR FTAP) before waivers to avoid At-Risk status		
		(i)	At-risk funding liability	79,639,598
		(ii)	Preliminary AR FTAP: ((1)(a)(i)-(1)(d)(i)-(1)(d)(ii))/(i)	70.22%
	(c)	Funding Target Benefit percentage for following year		80.00%
	(d)	At-Risk in following year? Yes if (a)<(c), (b)(ii)<70%, and >500 participants		No
	(e)	Credit balance(s) waived to avoid At-Risk status, if possible		0
	(f)	FTAPs after waivers		
		(i)	FSCB after waivers	4,088,713
		(ii)	PFB after waivers	0
		(iii)	NAR FTAP: ((1)(a)(i)-(i)-(ii))/(1)(a)(iv)	80.00%
		(iv)	AR FTAP: ((1)(a)(i)-(i)-(ii))/(b)(i)	70.22%

Funding Target

In accordance with Section 430(d) of the Internal Revenue Code, the Funding Target is the present value of all benefits accrued or earned under the plan as of the beginning of the plan year.

The Funding Target for plans that are "not-at-risk" is determined based on the following:

- Interest discounting is mandated through use of a segmented yield curve based on high-quality (AAA,AA,A) corporate bond yields. The three segments include benefits expected to be paid over the next 5 years, between years 5 and 20 and after year 20. The segmented yield curve is based on a 24-month unweighted average and there is an optional 3-year phase-in from the prior discounting basis beginning in 2008. There is also an optional lookback period up to 4 months prior to the beginning of the plan year. Alternatively, plan sponsors may elect to use the full yield curve in lieu of the segmented rates. The full yield curve, however, represents the rates for one month as opposed to the 24-month average.
- The mortality assumption is mandated by the IRS. The table is based upon the RP-2000 Mortality Table with separate tables for annuitant and non-annuitant mortality. Plan sponsors may use either the table with static projections or a table with generational projections. The static projection table projects non-annuitant mortality rates (i.e., prior to benefit commencement) 15 years beyond the valuation year and annuitant mortality rates (i.e. after benefit commencement) 7 years beyond the valuation year. The generational projection table projects mortality rates (annuitant and non-annuitant) to all future years. All projections are performed using Scale AA.
- Assumed utilization of lump sums, if applicable, is reflected.
- All other assumptions that are individually reasonable and, in combination, offer the enrolled actuary's best estimate of anticipated experience.

A plan is considered to be "at-risk" for the current plan year if it meets all of the following requirements:

- The Funding Target Attainment Percentage for the prior plan year is less than 80%*
- As of the prior plan year, the Actuarial Value of Assets less any Credit Balances is less than 70% of the "at-risk" Funding Target**
- Total participants in all defined benefit plans sponsored by the employer (or any member of the employer's controlled group) is greater than 500.

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* The 80% threshold is phased-in over 4 years. For plan years beginning in 2008, 2009 and 2010, 80% is replaced by 65%, 70% and 75%, respectively. In accordance with IRS Proposed Regulation §1.436-1, Current Liability for the 2007 plan year replaces Funding Target to determine the Funding Target Attainment Percentage for the 2007 plan year.

** Determined without regard to the expense load

Funding Target

The Funding Target for a plan that is "at-risk" is determined using the following additional mandated assumptions:

- Participants who will be eligible to elect benefits in the next 10 years will assume to do so at their earliest eligibility date
- Participants are assumed to elect the most-valuable form of benefit
- If a plan has been in "at-risk" status for at least 2 of the 4 preceding plan years, a loading factor is added equal to $700 per participant plus 4% of the "not-at-risk" Funding Target
- In no event shall the "at-risk" Funding Target be less than the "not-at-risk" Funding Target

If a plan is deemed to be "at-risk", the Funding Target for purposes of determining the contribution requirement will be based upon a 5-year "phase-in" of the "at-risk" Funding Target.

Funding Target

Development of Funding Target

1.	More than 500 participants in controlled group in prior year?			Yes
2.	Prior year funding target attainment percentage			
	(a)	Not-at-risk liability		92.79%
	(b)	At-risk liability		81.51%
3.	Funding target benchmark percentage			80.0%
4.	At-risk status			
	(a)	Current year: If (1) and (2)(a)<(3) and (2)(b)<70%		No
	(b)	Year-1		No
	(c)	Year-2		No
	(d)	Year-3		No
	(e)	Year-4		No
	(f)	At-risk current year and 2 of preceding 4 years? (If yes, loads apply)		No
5.	Not-at-risk funding liability			
	(a)	Funding liability		
		(i)	Retirees and benef. receiving payments	44,177,272
		(ii)	Terminated vested participants	2,279,364
		(iii)	Active participants, vested liability	23,357,460
		(iv)	Active participants, total liability	23,450,620
		(v)	Total liability: (i)+(ii)+(iv)	69,907,256
	(b)	Normal cost before adjustments		1,894,656
	(c)	Expenses included in Normal Cost		40,000
	(d)	Normal cost: (b)+(c)		1,934,656

Funding Target

6. At-risk funding liability	
(a) At-risk funding liability	
(i) Retirees and benef. receiving payments	44,177,272
(ii) Terminated vested participants	2,856,198
(iii) Active participants, vested liability	32,502,340
(iv) Active participants, total liability	32,606,128
(v) Total liability: (i)+(ii)+(iv)	79,639,598
(b) Number of plan participants	748
(c) Per-participant load: $700 x (b)	N/A
(d) Liability load: 4% of (5)(a)(v)	N/A
(e) At-risk funding target: (a)(v)+(c)+(d), not less than (5)(a)(v)	79,639,598
(f) Preliminary at-risk normal cost (adj. for expenses)	2,699,573
(g) Normal cost load: 4% of (5)(b)	N/A
(h) At-risk normal cost: (f)+(g), not less than (5)(d)	2,699,573
7. Funding target	
(a) Number of consecutive years at-risk (max 5)	0
(b) Transition percentage: 20% x (a)	0.0%
(c) Funding target: (5)(a)(v)+[(b)x((6)(e)-(5)(a)(v))]	69,907,256
(d) Target normal cost: (5)(d)+[(b)x((6)(h)-(5)(d)]	$1,934,656

Development of Shortfall Amortization Charge

In accordance with Section 430(c) of the Internal Revenue Code, the Shortfall Amortization Charge for any plan year is the aggregate total (not less than zero) of the shortfall amortization installments for such plan year with respect to the shortfall amortization bases for the current plan year and 6 preceding plan years.

In the initial year of application of PPA, the Shortfall Amortization Base is equal to the initial Funding Shortfall. In subsequent years, a Shortfall Amortization Base is created equal to that year's Funding Shortfall less the present value of remaining Shortfall Amortization Installments.

If the Actuarial Value of Assets reduced by the Prefunding Balance is greater than or equal to the Funding Target for a plan year, the plan is exempt from establishing a Shortfall Amortization Base.

The Worker, Retiree and Employer Recover Act of 2008 provided transition relief for certain eligible plans* with regard to establishing a Shortfall Amortization Charge. For these plans, only the amount by which the assets (as reduced by the Credit Balance) are less than 92% of the Funding Target need be established as a Shortfall Amortization Base in 2008. This percentage increases to 94% in 2009, to 96% in 2010 and is then 100% in 2011 and beyond.

In any year in which the Funding Shortfall is zero, all Shortfall Amortization Bases are considered fully amortized.

* To be eligible for this transition relief, the plan must have been exempt from the Additional Funding Charge rules in the 2007 plan year.

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Development of Shortfall Amortization Charge

1.	1st segment rate			3.78%
	2nd segment rate			6.31%
2.	Funding target			$69,907,256
3.	Adjusted plan assets			
	(a)	Actuarial assets		60,014,518
	(b)	Funding Standard Carryover Balance		4,088,713
	(c)	Prefunding Balance (PFB)		0
	(d)	Adjusted assets: (a)-(b)-(c), not less than 0		55,925,805
4.	Funding shortfall: (2)-(3)(d), not less than 0			13,981,451
5.	Current shortfall amortization installments			
	(a)	Annual installments		
		(i)	Year -1 base (6 years remaining)	0
		(ii)	Year -2 base (5 years remaining)	0
		(iii)	Year -3 base (4 years remaining)	0
		(iv)	Year -4 base (3 years remaining)	0
		(v)	Year -5 base (2 years remaining)	0
		(vi)	Year -6 base (1 years remaining)	0
	(b)	Total annual installments		0
	(c)	Present value of annual installments		
		(i)	Year -1 base (6 years remaining)	0
		(ii)	Year -2 base (5 years remaining)	0
		(iii)	Year -3 base (4 years remaining)	0
		(iv)	Year -4 base (3 years remaining)	0
		(v)	Year -5 base (2 years remaining)	0
		(vi)	Year -6 base (1 years remaining)	0
	(d)	Total present value of annual installments		0
6.	Exemption from new shortfall amortization base			
	(a)	Target liability percentage		100.00%
	(b)	Shortfall funding target: (2)x(a)		69,907,256
	(c)	Prefunding Balance if used to reduce the Minimum Required Contribution, else 0		0
	(d)	Exempt?: [(3)(a)-(c)]>=(b)		No

Development of Shortfall Amortization Charge

7.	Shortfall amortization base	
	(a) Adjusted funding shortfall: (6)(b)-(3)(d), not less than 0	13,981,451
	(b) New current year base: (a)-(5)(d), or 0 if exempt	13,981,451
	(c) New 7-year installment amount	2,300,361
8.	Shortfall amortization charge: (5)(b)+(7)(c), not less than 0	$2,300,361

Minimum Required Contribution

If the Actuarial Value of Assets reduced by the Credit Balances is less than the Funding Target, then the Minimum Required Contribution for such plan year shall be the sum of the Target Normal Cost and the Shortfall Amortization Charge.

If the Actuarial Value of Assets reduced by the Credit Balances is greater than the Funding Target for a year, then the Minimum Required Contribution for such plan year shall be the Target Normal Cost less the excess of adjusted assets over the Funding Target, but not less than $0.

Quarterly contributions are required if the Funding Shortfall was greater than $0 on the prior valuation date. If applicable, the quarterly contribution is due on or before the 15th day following the end of each quarter. If the quarterly contribution is not made on time, late interest is charged at the Effective Interest Rate plus 5%. If applicable, the quarterly contribution amount is 25% of the lesser of 90% of the current year's minimum required contribution or 100% of the prior year's minimum required contribution.

Contributions can be made up to 8½ months after the end of the plan year for such plan year. All contributions will be discounted back to the valuation date with interest at the Effective Interest Rate, including contributions made after the end of the plan year, to determine whether the Minimum Required Contribution has been satisfied.

If the plan sponsor fails to pay the minimum required contribution by 8½ months after the end of the plan year, the plan sponsor will be required to pay a 10% excise tax under IRC Section 4971 on the amount of any unpaid minimum required contributions. This tax can increase to 100% if the unpaid minimum required contribution is not corrected in subsequent plan years.

Minimum Required Contribution

Summary of Minimum Required Contribution:

1.	Effective interest rate		6.25%
2.	Target normal cost		$1,934,656
3.	Shortfall amortization charge		2,300,361
4.	Credit for excess assets		
	(a)	Adjusted Assets	55,925,805
	(b)	Funding Target	69,907,256
	(c)	Excess assets: (a)-(b), not less than 0	0
5.	Preliminary minimum required contribution (MRC): (2)+(3)-(4)(c), not less than 0		4,235,017
6.	Credit balances		
	(a)	Eligible to apply against MRC?: Yes if for prior year, assets minus prefunding balance >= 80% of not-at-risk funding target	Yes
	(b)	Funding Standard Carryover Balance (FSCB)	4,088,713
	(c)	Elected to apply FSCB against MRC?	Yes
	(d)	Prefunding Balance (PFB)	0
	(e)	Elected to apply PFB against MRC?	Yes
	(f)	Balances eligible to apply against MRC: (b)+(d) if eligible and elected	4,088,713
7.	MRC adjusted for credit balances: (5)-(6)(f), not less than 0		146,304
8.	Required quarterly contributions		
	(a)	Quarterlies required?: Yes if prior year funding shortfall	Yes
	(b)	Prior year minimum required contribution	1,820,613
	(c)	Current year MRC: (5)	4,235,017
	(d)	Required annual payment: lesser of (b) and 90% of (c), if applicable	1,820,613
	(e)	Required installment: 25% of (d)	$455,153

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Schedule of Contributions

The plan's "Effective Interest Rate" for any particular plan year is the single rate that, if used to discount the plan's expected benefit payments, would produce the same Funding Target that the Segment Rates produce. The Effective Interest Rate is the rate at which interest is charged on contributions until the date they are actually made.

The Effective Interest Rate for the 2011 Plan Year is:	6.25%
The Minimum Required Contribution as of January 1, 2011 is:	$146,304

The Plan is subject to the quarterly contribution requirement for the 2011 plan year. The following table provides the contribution schedule that meets the quarterly installment requirements, if applicable, as well as satisfies the Minimum Required Contribution requirement when discounted back to January 1, 2011 at the 2011 Effective Interest Rate:

Date	Contribution
September 15, 2012	$162,254
Total	**$162,254**

The above schedule assumes that the Plan Sponsor elects to apply the Plan's Carryover Balance to satisfy the minimum contribution requirement.

Preliminary Contribution Schedule for the 2012 Plan Year

Since there is a Funding Shortfall in 2011, the Plan will be subject to the quarterly contribution requirement for the 2012 plan year. The amount of the 2012 quarterly installments will be no greater than $1,058,754 and each will be due on or before April 15, 2012, July 15, 2012, October 15, 2012 and January 15, 2013.

Maximum Deductible Contribution Limit

Contributions to a qualified pension plan may be deducted for tax purposes, subject to limitations contained in Section 404(a) of the IRC. If the plan sponsor's taxable year and plan year coincide, the limit for a taxable year is the maximum amount for the coinciding plan year. Otherwise, the limit for the taxable year is the maximum amount with respect to either the plan year that commences or the plan year that ends in the taxable year (or a weighted average of the respective maximum amounts). Once the method for matching plan years to taxable years is established, it may not be changed without prior approval from the IRS.

For a contribution to be deductible in a particular taxable year, the contribution must be made during the taxable year or not later than the time for filing a tax return, which is the 15th day of the third month following the end of the taxable year. A later contribution may be deductible if the IRS has granted an approval to extend the deadline for filing the tax return.

Any contribution in excess of the tax-deductible limit for a taxable year may not be deducted in that year, even though the sponsor may have taken deductions in previous years that were less than the applicable tax-deductible limits. Contributions in excess of the tax-deductible limit may be deducted in succeeding taxable years, but may be subject to a 10% excise tax under Section 4972 of the IRC. The amount (if any) of the excess that may be deducted in a later year may not exceed the tax-deductible limit for that year minus the amount contributed in such later year.

For purposes of this report, the following assumptions have been made:

- The tax year begins January 1, 2011 and ends on December 31, 2011; and
- Historically, the deductible limit has been established based upon the plan year beginning in this tax year.

Since the tax-deductible contribution is dependent upon the relationship between the taxable year and the plan year and previous tax deductions, we recommend that you consult with your tax advisor with respect to the tax treatment of contributions to the plan.

In accordance with IRC Sections 404(a) and 404(o), the maximum deductible contribution for a limitation year shall be the greatest of:

a) Target Normal Cost plus 150% of the Funding Target* less the Actuarial Value of Plan Assets
b) Minimum Required Contribution
c) If a plan is not "at-risk", the Target Normal Cost and Funding Target (both determined as if the plan were "at-risk") less the Actuarial Value of Plan Assets.

* The Funding Target for this purpose is determined including compensation increases after the current plan year (if the plan is pay-related) or including schedule benefit increases

Maximum Deductible Contribution Limit

Summary of Maximum Tax Deductible Contribution

1.	Funding target			$69,907,256
2.	Target normal cost			1,934,656
3.	Cushion amount			
	(a)	50% of funding target: 50% of (1)		34,953,628
	(b)	Expected benefit increases		
		(i)	Not-at-risk maximum liability	80,693,553
		(ii)	At-risk maximum liability	86,015,573
		(iii)	Per-participant load	N/A
		(iv)	Liability load: 4% of (i)	N/A
		(v)	At-risk target: (ii)+(iii)+(iv), not less than (i)	86,015,573
		(vi)	Transition percentage	0.00%
		(vii)	Maximum funding target: (i)+[(vi)x((v)-(i))]	80,693,553
	(c)	Cushion amount: (a)+(b)(vii)-(1)		45,739,925
4.	Actuarial value of assets			60,014,518
5.	Preliminary limit: (1)+(2)+(3)(c)-(4), not less than 0			57,567,319
6.	Maximum if not at-risk			
	(a)	At-risk funding liability		79,639,598
	(b)	At-risk normal cost (incl. expenses)		2,699,573
	(c)	Maximum if not at-risk: (a)+(b)-(4), not less than 0		22,324,653
7.	Minimum required contribution			162,254
8.	Maximum tax deductible contribution: max of (5),(6) and (7)			$57,567,319

Supplementary Exhibits

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PBGC Premiums

ERISA established the Pension Benefit Guaranty Corporation (PBGC), under the jurisdiction of the Department of Labor, to guarantee most vested retirement benefits and certain disability and survivor pensions.

PBGC guarantees are limited. For example, the PBGC does not guarantee benefits that had not vested prior to the plan termination or benefits for which all age, service, or other requirements had not been met at the time the plan terminates. Further, benefit increases and new benefits that have been in place for less than a year are not guaranteed, and those that have been in place for less than 5 years are only partly guaranteed. The maximum guaranteed benefit under a plan terminating in 2011 payable as a single life annuity at age 65, is $4,500 per month. Lower guarantees apply if benefits begin before age 65 or if survivor benefits are payable. Benefits other than pension benefits, such as health insurance, life insurance, death benefits, vacation pay, or severance pay are not guaranteed, and the PBGC does not pay lump sums exceeding $5,000 (even if available under the plan prior to termination).

Plans covered by the PBGC insurance program must file an annual premium filing each year with the PBGC via their online myPAA system within 9 1/2 months after the beginning of the plan year. Plans covering more than 500 participants must also file an Estimated Premium Filing through myPAA by the end of the second month of the plan year. All plans must pay a basic premium of $35 times the number of participants as of the end of the previous plan year, and plans with unfunded vested benefits must also pay an additional risk-related premium to the PBGC.

Development of PBGC Premium for 2011:

1.	Flat-rate premium			
	(a)	National Average Wage (NAW), 2 years prior		$40,711.61
	(b)	Flat-rate: $30 x (a)/$35,648.55 (2004 NAW), rounded		35
	(c)	Participant count (excludes 2 Alternate Payees)		746
	(d)	Flat-rate premium: (b)x(c)		$26,110
2.	Variable-rate premium			
	(a)	PBGC funding target		
		(i)	Not-at-risk PBGC liability	69,814,096
		(ii)	At-risk PBGC liability	79,535,810
		(iii)	Per-participant load	N/A
		(iv)	Liability load: 4% x (i)	N/A
		(v)	At-risk PBGC target: (ii)+(iii)+(iv), not less than (i)	79,535,810
		(vi)	Transition percentage	0.00%
		(vii)	PBGC funding target: (i)+[(vi)x((v)-(i))]	69,814,096
	(b)	Market value of plan assets		65,409,443
	(c)	Unfunded vested benefits: (a)(vii)-(b), min zero, rounded up to $1,000		4,405,000
	(d)	Variable-rate premium: 0.009x(c), or zero if exempt		39,645
3.	PBGC Premium: (1)(d)+(2)(d)			$65,755

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ASC 960 Information (previously known as FAS 35)

Transfers based on Accrual Method

The information in this exhibit is intended to satisfy the requirements under Accounting Standards Codification Topic 960 (ASC 960) with regard to the financials of the plan. It is not intended to meet the requirements of Accounting Standards Codification Topic 715 (ASC 715) (previously known as FAS 87) which are the financials of the plan sponsor. If applicable, information for ASC 715 is presented in a separate report.

The Present Value of Accumulated Plan Benefits has been calculated using the Actuarial Assumptions Supplementary Exhibit. No future increases in salaries, Social Security benefits, or benefit service were assumed.

1.	Actuarial present value of accrued plan benefits			
	(a)	Actuarial present value of vested benefits		
		(i)	Participants currently receiving benefits	$38,573,022
		(ii)	Participants entitled to deferred benefits	1,826,107
		(iii)	Other participants	18,672,755
		(iv)	Total	59,071,884
	(b)	Actuarial present value of nonvested benefits		68,212
	(c)	Actuarial present value of accrued plan benefits: (a)(iv)+(b)		59,140,096
2.	Market value of assets (includes receivables)*			65,409,443
3.	Unfunded PVAB (Surplus assets): (1)(c)-(2)			(6,269,347)
4.	Funded percentage: (2)/(1)(c)			111%
5.	Changes in present value			
	(a)	PVAB as of January 1, 2010		55,088,956
	(b)	Changes due to:		
		(i)	Decrease in discount period at 8.00%	4,216,436
		(ii)	Benefits paid	(4,860,506)
		(iii)	Assumption changes**	2,743,153
		(iv)	Plan amendments	0
		(v)	Additional benefits earned, including experience gains and losses	1,959,242
		(vi)	Amount Transferred	(7,185)
		(vii)	Total change	4,051,140
	(c)	PVAB as of January 1, 2011: (a)+(b)(vii)		$59,140,096

**Receivables for ASC 960 purposes are not discounted at the Effective Interest Rate.*
***Discount rate changed from 8.00% to 7.75% and a mortality projection was added.*

ASC 960 Information (previously known as FAS 35)

Transfers based on Cash Method

The information in this exhibit is intended to satisfy the requirements under Accounting Standards Codification Topic 960 (ASC 960) with regard to the financials of the plan. It is not intended to meet the requirements of Accounting Standards Codification Topic 715 (ASC 715) (previously known as FAS 87) which are the financials of the plan sponsor. If applicable, information for ASC 715 is presented in a separate report.

The Present Value of Accumulated Plan Benefits has been calculated using the Actuarial Assumptions Supplementary Exhibit. No future increases in salaries, Social Security benefits, or benefit service were assumed.

1.	Actuarial present value of accrued plan benefits			
	(a)	Actuarial present value of vested benefits		
		(i)	Participants currently receiving benefits	$38,573,022
		(ii)	Participants entitled to deferred benefits	1,826,107
		(iii)	Other participants	18,672,755
		(iv)	Total	59,071,884
	(b)	Actuarial present value of nonvested benefits		68,212
	(c)	Actuarial present value of accrued plan benefits: (a)(iv)+(b)		59,140,096
2.	Market value of assets (includes receivables)*			65,409,443
3.	Unfunded PVAB (Surplus assets): (1)(c)-(2)			(6,269,347)
4.	Funded percentage: (2)/(1)(c)			111%
5.	Changes in present value			
	(a)	PVAB as of January 1, 2010		55,382,812
	(b)	Changes due to:		
		(i)	Decrease in discount period at 8.00%	4,216,436
		(ii)	Benefits paid	(4,860,506)
		(iii)	Assumption changes**	2,743,153
		(iv)	Plan amendments	0
		(v)	Additional benefits earned, including experience gains and losses	1,959,242
		(vi)	Amount Transferred	(301,041)
		(vii)	Total change	3,757,284
	(c)	PVAB as of January 1, 2011: (a)+(b)(vii)		$59,140,096

**Receivables for ASC 960 purposes are not discounted at the Effective Interest Rate.*
***Discount rate changed from 8.00% to 7.75% and a mortality projection was added.*

Participant Data

	January 1, 2011	January 1, 2010
Active Participants		
Number	299	321
Average age	46.04	44.94
Average past service	17.45	16.54
Average future service	14.44	15.44
Covered payroll:		
- Total	$20,690,681	$21,263,502
- Average	$69,200	$66,241
Terminated Vested Participants		
Number	41	37
Average age	49.17	49.46
Annual benefits:		
- Total	$371,263	$291,991
- Average	$9,055	$7,892
Retirees and Beneficiaries		
Number	408	415
Average age	74.07	73.80
Annual benefits:		
- Total	$4,430,612	$4,397,816
- Average	$10,859	$10,597
Total Participant Count	748	773

Participant Data

Reconciliation of Participant Data:

	Active	Terminated Vested	Retirees and Beneficiaries	Total
As of January 1, 2010	321	37	415	773
New Hires	0	0	0	0
Rehires	0	0	0	0
Nonvested termination	(3)	0	0	(3)
Vested termination	(11)	11	0	0
Lump sum cashout	(4)	(3)	0	(7)
Retirement	(4)	(5)	9	0
Disability	0	0	0	0
Deceased	0	0	(22)	(22)
New beneficiaries	0	0	6	6
Miscellaneous	0	1	0	1
As of January 1, 2011*	299	41	408	748

**Includes 2 Alternate Payees under Qualified Domestic Relations Orders*

Distribution of Inactive Benefits Inforce:

Attained Age	Retired, Survivor, and Disabled		Vested	
	No.	Avg. Annuities	No.	Avg. Annuities
Under 30	0	$0	2	$4,077
30 to 34	0	0	4	5,004
35 to 39	0	0	3	6,148
40 to 44	0	0	4	5,309
45 to 49	2	2,806	5	3,596
50 to 54	0	0	14	13,285
55 to 59	13	12,905	4	11,347
60 to 64	59	16,421	3	15,622
65 to 69	68	14,067	0	0
70 to 74	77	11,647	0	0
75 to 79	82	9,240	1	5,857
80 to 84	64	7,568	1	1,333
85 to 89	25	5,668	0	0
90 to 94	12	2,796	0	0
95 & up	6	2,954	0	0
Total	408	$10,859	41	$9,055

Active Participant Data

Age		Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up	Total
		Years of credited service										
Under 25	Count		2									2
	Avg Sal											
25 to 29	Count		7	8								15
	Avg Sal											
30 to 34	Count		3	22	4							29
	Avg Sal			69,205								68,867
35 to 39	Count		3	16	23	4						46
	Avg Sal				69,077							68,797
40 to 44	Count		1	10	11	7	6					35
	Avg Sal											69,490
45 to 49	Count		1	11	11	13	9	6				51
	Avg Sal											69,520
50 to 54	Count			4	15	16	2	12	20			69
	Avg Sal								64,147			67,944
55 to 59	Count			1		5	1	6	14	9		36
	Avg Sal											70,898
60 to 64	Count					2	2	1	4	5	1	15
	Avg Sal											
65 to 69	Count						1					1
	Avg Sal											
70 & up	Count											
	Avg Sal											
Total	Count		17	72	64	47	21	25	38	14	1	299
	Avg Sal			68,107	69,282	70,857	69,495	71,333	67,754			69,200

Actuarial Cost Method

Funding Target / Target Normal Cost

An Actuarial Cost Method is an allocation of the expected cost of a pension plan on a year-by-year basis. The primary objective of an Actuarial Cost Method is to accumulate enough assets prior to each participant's retirement to provide the promised pension benefits.

The Pension Protection Act of 2006 (PPA) mandates the use of the Traditional Unit Credit Actuarial Cost Method. Under this method, the accrued benefit is estimated based upon service and, if applicable, earnings as of the valuation date. The Funding Target is equal to the actuarial present value of all accrued benefits as of the valuation date. The Target Normal Cost is the actuarial present value, as of the valuation date, of the expected increases in projected accrued benefit attributable to service expected to be completed during the plan year (i.e. if applicable, one year's salary growth is reflected in the determination of Target Normal Cost).

For tax deduction purposes, the Funding Target may reflect the value of future pay increases on accrued benefits, if applicable.

PPA Discounting Method

The plan sponsor is responsible for making the following decisions with regard to the discounting method:

- Full yield-curve spot rates or a segmented yield-curve of 24-month average rates of corporate bond rates
- If the segmented yield curve is used, the rates as of the month of the valuation may be used or as of a lookback month up to 4 months prior to the valuation date (the full yield curve must use the rates as of the month of the valuation starting in 2010)

For purposes of this valuation, the following discounting method was used and is assumed to be approved by the plan sponsor:

- Rates through the month of August preceding the valuation date
- Segment Rates

Asset Valuation Method

The Plan Assets for purposes of this Actuarial Valuation are valued under the asset averaging method, including, if applicable, discounted receivable contributions. The value of plan assets is set equal to the average of the fair market value of assets on the valuation date and the adjusted fair market value of assets (including expected earnings) determined for the two earlier annual determination dates. Expected earnings are calculated using the third segment rate of the segmented yield-curve in effect at the beginning of each valuation year. The resulting average value must be constrained so that it falls between 90 and 110 percent of the fair market value of assets on the valuation date.

Actuarial Assumptions

Actuarial Assumptions

Actuarial assumptions are estimates of the occurrence of future events affecting the costs of the plan. The assumptions have been chosen to anticipate the long-term experience of the plan. The enrolled actuary will certify the reasonableness of these assumptions, as required by ERISA.

The actuarial assumptions used to compute this year's plan costs are as follows:

Economic Assumptions

PPA Segment Rates	Funding Target	PBGC
- Segment 1: Up to Year 5	3.78%	3.78%
- Segment 2: Years 5-20	6.31%	6.31%
- Segment 3: Years 20+	6.57%	6.57%

ASC 960 Assumed Investment Return 7.75%

Annual rates of increase:

- Salaries	4.00%
- Future Social Security wage bases	3.25%
- Statutory limits on compensation and benefits	N/A

Demographic Assumptions

Mortality:

- Funding Target / PBGC: IRS 2011 Static Mortality Table
- ASC 960: RP-2000 Mortality Table projected to 2010

Terminations: Rates vary by age and sex. Illustrative annual rates of withdrawal are as follows:

Age	Male	Female
25	7.18%	15.05%
40	1.57%	2.14%
55	0.29%	0.42%

Disability: None

Actuarial Assumptions

Assumed Retirement Age (Actives):	Rates varying by age. Representative rates:

Age	Rate
55	3%
56-58	1%
59	3%
60-61	10%
62	25%
63-64	20%
65	100%

Assumed Retirement Age (Vested Terms): Age 62

Benefit Commencement date:

Preretirement Death Benefit:	Surviving spouse benefits commence at the later of the death of the active participant or the date the participant would have attained age 55.
Deferred Vested Benefit:	Upon termination of employment (if lump sum) or at early retirement date (if annuity)
Retirement Benefit:	Upon termination of employment
Form of Payment	Life annuity. Retirement benefit loaded 6.4% for subsidized option factor. Withdrawal benefits are assumed to be paid as a lump sum for participants hired on or before January 1, 2004, otherwise they are assumed to be paid as a life annuity commencing at the participant's early retirement date.

Miscellaneous Assumptions

Percent Married:	80%
Spouse Age:	Wife three years younger than husband
Covered Pay:	Annualized base salary rate as of valuation date
Administrative Expenses:	$40,000 (Prior year's administrative expenses rounded up to nearest $5,000)

Summary of Plan Provisions

Summary of Plan Provisions

Effective Dates:	Original Plan: January 1, 1955	
Employee:	All bargaining employees of Montana-Dakota Utilities Co.	
Eligibility Requirements:	Age:	21 for employees hired on or after 1/1/85; if hired prior to 1/1/04, no service required.
	Service:	One Year of Service
	Maximum Age:	None
	Plan eligibility is frozen for employees hired after June 30, 2007.	
Plan Entry Date:	An eligible employee will enter the plan on the first day of the month following completion of the eligibility requirements. No employee hired after June 30, 2007 may enter the plan.	
Year of Service:	12-consecutive month computation period in which an employee is credited with 1,000 or more hours of service.	
	Eligibility:	Computation period commences on employee's date of hire.
	Vesting:	One year for each 1,000-hour calendar year of employment by MDU Resources Group, Inc., or a related company.
Credited Service:	Service following age 21 with a maximum of 35 years; full year if 2,080 hours in a year, prorate for less than 2,080 hours. Except for years of hire and termination, exclude years with less than 1,000 hours.	

Summary of Plan Provisions

Normal Retirement Date (NRD):	Last day of the month in which 65th birthday occurs
Basic Monthly Compensation:	Basic rate of regular compensation as of the first day of the first payroll period of the month, including Section 125 and 401(k) deferrals. Special rules for commissioned and part-time employees.
Final Average Monthly Compensation:	The average of the highest 60 consecutive basic monthly compensation rates in the last 120 months of employment.
Normal Retirement Benefit:	Monthly pension benefit determined as of NRD.
Normal Form of Benefit:	Single: Life Annuity Married: 50% Joint and Survivor
Early Retirement Eligibility:	Retire before NRD and on or after both attaining age 55 and completing five years of vesting service.
Early Retirement Benefit:	Monthly pension benefit determined as of early retirement date. For retirements prior to age 60, the benefit is reduced .25% for each month that commencement of payment precedes age 60.
Deferred Vested Eligibility:	Terminate for reason other than death or retirement after completing five years of vesting service.
Deferred Vested Benefit:	-Monthly pension benefit determined as of date of termination payable at NRD -Monthly pension benefit determined as of termination date, reduced .25% for each month that commencement of payments precedes age 62. -Participants hired before January 1, 2004 who are not eligible for early retirement may elect a single sum payment equal to the actuarial

Summary of Plan Provisions

Deferred Vested Benefit:	equivalent of the benefit payable at age 55, based on the interest and mortality assumptions specified under IRC 417(e)(3).
Pre-Retirement Spousal Death Benefit:	If death while active employee after age 45, 50% of monthly pension benefit at date of death reduced for early payment to employee's date of death. If death while active employee before age 45 or after termination, 50% of monthly pension benefit at date of death reduced for the 50% joint and survivor annuity option, payable as early as the employee's 55th birthday.
Monthly Pension Benefit:	The greater of total Pension Credits and the Final Pay Benefit, with a minimum benefit equal to the pension benefit as of December 31 preceding termination. A modified formula is applied for participants who had annualized basic compensation during a plan year prior to 1994 in excess of $150,000.
Pension Credits:	For employees who began participation and attained age 40 on or before February 28, 1990, a pension credit for each year after December 31, 1988 equal to 1.65% of the first $1,100 of basic monthly compensation as of the first day of the first payroll period of the plan year plus 2% of the excess; proportionately reduced for less than 2,080 hours of service. Different formulas applied for service prior to 1989.
Final Pay Benefit:	1.1% of final average monthly compensation up to the integration level plus 1.45% of the final average monthly compensation in excess of the integration level, times years of credited service (maximum of 35 years).
Integration Level:	For plan years after 1989, the integration level equals $1,400 multiplied by a fraction equal to the current year Taxable Wage Base divided by $48,000.

MDU Resources Group, Inc. Pension Plan for Collective Bargaining Unit Employees

Determination of the

Net Periodic Pension Cost

for the Fiscal Year Ending December 31, 2011

Prepared by:

New York Life Retirement Plan Services

690 Canton Street

Westwood, MA 02090

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TABLE OF CONTENTS

I. INTRODUCTION

The purpose of this report is to present certain financial information in accordance with FASB Accounting Standards Codification (ASC) 715-30 (formerly FAS 87).

This report was based on information submitted to our firm in the form of payroll and asset data, as well as ancillary material pertaining to the Plan. In addition, the actuarial assumptions as to weighted-average discount rate, rate of increase in compensation levels, and expected long-term rate of return on plan assets described in Section IV of this report were supported by the plan sponsor and its auditors.

Actuarial computations under FASB ASC 715-30 are for purposes of fulfilling employer accounting requirements. The calculations reported herein have been made on a basis consistent with our understanding of FASB ASC 715-30. Determinations for purposes other than meeting employer financial accounting requirements may be significantly different from the results reported herein. Accordingly, additional determinations are needed for other purposes, such as judging benefit security at termination or adequacy of funding for an ongoing plan.

The Net Periodic Pension cost has been determined to be $3,107,650 for the Fiscal Year Ending December 31, 2011. The assumptions used to determine the Net Periodic Pension Cost include a discount rate of 5.36% and are illustrated in Section IV.

In preparing the results presented in this report, we have relied upon information provided to us regarding plan provisions, plan participants and plan assets. This information is summarized in the 2011 funding valuation for the plan. We have reviewed this information for overall reasonableness, but we have not audited this information. The accuracy of the results presented in this report is dependent upon the accuracy and completeness of the underlying information.

April 28, 2011	Mark B Magnus
Date	Mark B. Magnus, A.S.A., Enrolled Actuary

II. DETERMINATION OF NET PERIODIC PENSION COST FISCAL YEAR ENDING DECEMBER 31, 2011

1. Employer Service Cost	
a) Amount at beginning of year	$2,004,800
b) Interest	107,457
c) Total service cost (a)+(b)	2,112,257
2. Interest Cost	
a) Projected Benefit Obligation (PBO) at beginning of year	89,523,603
b) Expected distributions	4,674,643
c) Average expected PBO	86,991,505
d) Discount rate	5.36%
e) Interest cost (c)x(d)	4,662,745
3. Expected return on assets	
a) Market-related value at beginning of year	70,038,839
b) Expected distributions	4,674,643
c) Total expected contributions	0
d) Expected expenses	0
e) Average market-related value of assets	67,506,741
f) Long term rate of return	7.75%
g) Expected return (e)x(f)	5,231,772
4. Amortization of Transition (Asset) or Obligation	0
- Attachment A	
5. Amortization of Prior Service Cost	259,036
- Attachment B	
6. Amortization of (Gain) or Loss	1,305,384
-Attachment C-2, end of year	
7. Net Periodic Pension Cost	**$3,107,650**
(1c)+(2e)-(3g)+(4)+(5)+(6)	

III. ATTACHMENTS - Attachment A

AMORTIZATION OF TRANSITION OBLIGATION (ASSET)

Fiscal Year Ending	Unrecognized Amount - Beginning of year	Amount Recognized	Unrecognized Amount - End of year
2011	0	0	0
2012	0	0	0
2013	0	0	0
2014	0	0	0
2015	0	0	0
2016	0	0	0
2017	0	0	0
2018	0	0	0
2019	0	0	0
2020	0	0	0
2021	0	0	0
2022	0	0	0
2023	0	0	0
2024	0	0	0
2025	0	0	0
2026	0	0	0
2027	0	0	0
2028	0	0	0
2029	0	0	0
2030	0	0	0
2031	0	0	0
2032	0	0	0
2033	0	0	0
2034	0	0	0
2035	0	0	0
2036	0	0	0
2037	0	0	0
2038	0	0	0
2039	0	0	0

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III. ATTACHMENTS - Attachment B

AMORTIZATION OF PRIOR SERVICE COST

Summary for Fiscal Year Ending 12/31/11

	Date Established	Beginning of Year Balance	Amount Recognized	End of Year Balance
1. Amendment #1	1/1/1995	$36,040	36,040	0
2. Amendment #2	1/1/2000	$556,765	105,108	$451,657
3. Amendment #3	1/1/2001	483,593	75,846	$407,747
4. Amendment #4	1/1/2001	259,501	40,700	$218,801
5. Amendment #5	1/1/2003	11,741	1,342	$10,399
Total		$1,347,640	$259,036	$1,088,604

III. ATTACHMENTS - Attachment C-1

CALCULATION OF (GAIN) OR LOSS

1. Net actuarial (gain) or loss from December 31, 2010 disclosure	$32,557,383
2. PBO from December 31, 2010 disclosure	89,649,478
3. Fair value of plan assets from December 31, 2010 disclosure	65,409,443
4. PBO as of January 1, 2011	89,523,603
5. Fair value of plan assets as of January 1, 2011	65,409,443
6. (Gain)/Loss (1)-(2)+(3)+(4)-(5)	$32,431,508

III. ATTACHMENTS - Attachment C-2

(GAIN) OR LOSS SUBJECT TO AMORTIZATION

	Fiscal Year Ending
	December 31, 2011
1.(Gain)/loss-Attachment C-1,line 6	$32,431,508
2.PBO - Attachment C-1,line 4	89,523,603
3.(Gain) or loss not reflected in market-related value	
a) Fair value	65,409,443
b) Market-related value	70,038,839
c) Amount not reflected in (b) (a)-(b)	(4,629,396)
4. (Gain) or loss subject to amortization (1)+(3c)	27,802,112
5. Greater of (2) or (3b)	89,523,603
6. 10% of (5)	8,952,360
7. (Gain) or loss subject to amortization excess of (4) over (6)	18,849,752
8. Average future service of participants expected to receive benefits	14.44
9. Amortization amount (7)/(8)	$1,305,384

IV. ACTUARIAL ASSUMPTIONS

For determining the Net Periodic Pension Cost for the Fiscal Year Ending December 31, 2011

Measurement Date:	December 31, 2010
Discount Rate:	5.36%
Annual Rate of Increase in Compensation:	4.00%
Expected Long Term Rate of Return on Plan Assets:	7.75%
Mortality:	RP2000 Combined Healthy Mortality Table projected to 2010

Turnover:

Rates vary by age and sex.
Representative rates:

Age	Male	Female
25	7.2%	15.1%
40	1.6%	2.1%
55	0.3%	0.4%

Taxable Wage Base Increase:	3.25%
Cost of Living Increase:	3.25%
Expenses:	None

V. DEFINITIONS

Discount Rate. This Discount Rate reflects the rate used to adjust for the time value of money. It should reflect the rates at which the pension benefits could effectively be settled.

Expected Long Term Rate of Return on Plan Assets. This is an assumption concerning the rate of return on plan assets. The product of the Expected Long Term Rate of Return on Plan Assets and the plan's assets is applied as a credit towards the current year's net periodic pension cost.

Gain or Loss. Gains and Losses measure the difference between actual experience and that assumed. Under US GAAP the impact of changes in actuarial assumptions is also measured as a Gain or Loss.

Fair Value of Plan Assets. The market value of assets.

Measurement Date. The date at which plan assets and obligations are measured.

Net Transition (Asset) Obligation. The excess(deficit) of the PBO over the Fair Value of assets (adjusted for previously recognized accrued or prepaid pension costs) as of the date of initial compliance with US GAAP.

Prior Service Cost. This is the amount of change in the Projected Benefit Obligation due to amendments to the plan.

Projected Benefit Obligation (PBO). This represents the present value of pension benefits based on service earned to date and expected future increases in salary.

V. DEFINITIONS

Net Periodic Pension Cost. This represents the pension expense for the fiscal year. The Net Periodic Pension Cost consists of the following:

(1) **Service Cost**. The Service Cost represents the value of benefits earned each year. This is comparable to the normal cost used in determining funding levels under ERISA.

(2) **Interest Cost**. The Interest Cost equals the product of the Discount Rate and the Projected Benefit Obligation adjusted for benefit payments expected during the year.

(3) **Return on Plan Assets**. The Return on Plan Assets is the product of the Expected Long Term Rate of Return on Plan Assets and the Fair Value of Plan Assets adjusted for contributions and benefit payments expected during the year. This component represents a credit which reduces the Net Periodic Pension Cost for the year.

(4) **Amortization of Unrecognized Gain or Loss**. Amortization payments are included in the Net Periodic Pension Cost to systematically recognize cumulative Gains and Losses that are unrecognized as they occur.

(5) **Amortization of Unrecognized Prior Service Cost**. This is the amortization of increases or decreases in the Projected Benefit Obligation due to amendments to the plan.

(6) **Amortization of Unrecognized Net Obligation or Asset at Transition**. This represents the amortization of the Net Obligation(Asset) that existed at transition in the initial year of US GAAP compliance.

Projected Unit Credit Cost Method. Under this method, the benefit for each participant is projected to retirement and a pro-rata part of this benefit is then assigned to each year of service from hire date to the participant's retirement date. The Service Cost for each participant is the present value of the pro-rata benefit assigned to the current year. The Service Cost for the Fiscal Year is equal to the sum of the individual Service Costs for all participants. This method is required to be used in all calculations under US GAAP.

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MDU Resources Group, Inc. Pension Plan for Non-Bargaining Unit Employees

Actuarial Valuation as of January 1, 2012

Prepared by New York Life Retirement Plan Services, 690 Canton Street Westwood, MA 02090.

Executive Summary

	January 1, 2012	January 1, 2011
	Contribution Range	
Minimum Required Contribution *	$2,305,343 (as of 1/1/2012)	$4,785,451 (as of 1/1/2011)
Maximum Deductible Contribution	$94,798,113	$89,940,417
	Credit Balances	
Carryover Balance	$0	$0
PreFunding Balance	$3,494,166	$0
Total	$3,494,166	$0
	Assets and Liabilities	
Target Normal Cost	$290,000	$85,000
Funding Target	$140,003,256	$128,364,882
Actuarial Value of Assets	$115,496,771	$102,691,906
Funding Target Attainment Percentage	80.00%	80.00%
Market Value of Assets	$112,074,073	$110,469,284
Estimated Rate of Return on Market Value of Assets	(1.52%)	14.30%
	Census Information	
Active Participants	385	416
Terminated Vested Participants	60	56
Retirees and Beneficiaries	556	546
Total	1,001	1,018
	Assumptions	
Interest Discounting	August 2011 Segment Rates	August 2010 Segment Rates
Effective Interest Rate	5.43%	6.24%

* Minimum contributions shown are net of any Credit Balances.

Executive Summary

Changes in Plan Provisions Since Prior Valuation

There have been no changes in plan provisions since the prior valuation.

Changes in Actuarial Assumptions and Methods

The interest rates and mortality were updated to comply with the plan's funding method.

In addition, the ASC 960 mortality table was changed to the IRS 2012 Static Mortality Table (from RP 2000 Mortality Table projected to 2010).

Summary of Other Significant Changes

We are not aware of the occurrence of any other significant event that would have a material effect on this valuation.

Quarterly Contribution Requirement and Recommended Contribution Schedule for 2012

The plan is subject to the quarterly contribution requirement for the 2012 plan year. The following table provides the contribution schedule that meets the quarterly installment requirements, if applicable, as well as satisfies the Minimum Required Contribution requirement when discounted back to January 1, 2012 at the 2012 Effective Interest Rate:

Date	Contribution
January 15, 2013	$1,200,127
September 15, 2013	$1,279,456
Total:	**$2,479,583**

The contribution schedule shown above is based on the plan sponsor's signed election to establish a PreFunding Balance from the April 13, 2012, July 15, 2012 and August 31, 2012 contributions and to apply this PreFunding Balance to satisfy the 2012 plan year minimum requirement.

Estimated Quarterly Contribution Requirement for 2013

The plan will be subject to the quarterly contribution requirement for the 2013 plan year. Based upon 2012 actuarial valuation results, the estimated quarterly contribution required for the 2013 plan year will be $1,449,877. A contribution in this amount must be made on or before April 15, 2013, July 15, 2013, October 15, 2013 and January 15, 2014. Once the 2013 actuarial valuation is complete, we will communicate the final contribution requirements for the 2013 plan year.

Executive Summary

Funding Policy Contribution

The plan sponsor's funding policy is to contribute the amount to meet the minimum funding requirements of Internal Revenue Code Sections 412 and 430. From time to time, and with regard to their cash and tax position, the plan sponsor may contribute an amount above the minimum required contribution.

Actuary's Commentary

<u>At-Risk Status</u>

The plan is not "at-risk" for the 2012 plan year since the 2011 Funding Target Attainment Percentage (FTAP) of 80.00% is at least 80%. The plan will not be "at-risk" in 2013 since the 2012 FTAP of 80.00% is at least 80%.

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Actuarial Certification

This report presents the results of the actuarial valuation as of January 1, 2012 for the MDU Resources Group, Inc. Pension Plan for Non-Bargaining Unit Employees. The purpose of this report is to review the plan's experience for the prior year and to provide the plan sponsor with an acceptable range of contributions for the plan year in accordance with ERISA and the Internal Revenue Code.

This report is not an AFTAP certification, nor should it be relied upon for any other purpose by any party other than the plan sponsor.

This valuation has been conducted in accordance with generally accepted actuarial principles and practices. In preparing the results presented in this report, we have relied upon information provided to us regarding plan provisions, plan participants and plan assets. We have reviewed this information for overall reasonableness, but we have not audited this information. The accuracy of the results presented in this report is dependent upon the accuracy and completeness of the underlying information.

The assumptions for interest and mortality are mandated by the Internal Revenue Service. All other assumptions have been selected by New York Life Retirement Plan Services, with concurrence of the plan sponsor, and are considered to be reasonable and within the "best-estimate range" as described by the Actuarial Standards of Practice.

The information contained in this report was prepared for the internal use of MDU Resources Group, Inc. and its auditors in connection with our actuarial valuation of the MDU Resources Group, Inc. Pension Plan for Non-Bargaining Unit Employees. It is neither intended nor necessarily suitable for other purposes.

The Consulting Actuary meets the "General Qualifications Standard for Prescribed Statements of Actuarial Opinion" of the American Academy of Actuaries relating to pension plans.

May 18, 2012 — Mark B Magnus

Date

Mark B. Magnus, ASA, MAAA, Enrolled Actuary
Enrolled Actuary No. 11-02866

Plan Assets

I. Asset Valuation Method

IRC Section 430(g) provides that plan assets be valued at either their fair market value on the valuation date or at the "average" value of assets on the valuation date. Under this average value, the value of plan assets is set equal to the average of the fair market value of assets on the valuation date and the adjusted fair market value of assets (including expected earnings) determined for one or more earlier determination dates (up to a 2-year limit). The resulting average value must be constrained so that it falls between 90 and 110 percent of the fair market value of plan assets on the valuation date.

Contributions for a prior plan year that are made after the beginning of this plan year must be adjusted for interest at the effective interest rate under Section 430(h)(2).

The Plan Assets for purposes of this Actuarial Valuation are valued under the asset averaging method.

II. Contributions for Plan Year Beginning January 1, 2011

Date	Amount
April 15, 2011	855,359
July 15, 2011	855,359
October 14, 2011	855,359
January 11, 2012	855,359
March 30, 2012	5,391,821
April 13, 2012	1,200,127
July 15, 2012*	1,200,127
August 31, 2012*	1,200,127
Total:	**$12,413,638**

**Anticipated*

III. Reconciliation of Market Value of Assets

1. Market Value of Assets as of January 1, 2011	$99,442,314
2. Contributions Made During Calendar Year	13,757,133
3. Investment Income	(1,590,517)
4. Benefit Payments	(8,906,464)
5. Administrative Expenses	(288,101)
6. Market Value of Assets as of January 1, 2012 (1+2+3+4+5)	$102,414,365
7. Discounted Receivable Contributions*	$9,659,708
8. Market Value of Assets as of January 1, 2012 (including discounted receivable contributions)	$112,074,073

Estimated Gross Rate of Return on Assets: (1.52%)

The estimated rate of return is based on the time weighting of contributions, benefit payments and expenses

**Contributions for the 2011 Plan Year that are made after December 31, 2011 are discounted back to January 1, 2012 at the 2011 Effective Interest Rate of 6.24%*

Plan Assets

IV. Development of Asset Gain/(Loss)*

1. Development of 2010 Gain/(Loss)

(a)	Expected Return on Assets		6.82%
(b)	Market Value at January 1, 2010		$93,126,880
(c)	Benefit Payments and Expenses		(8,812,757)
(d)	Expected Return at 6.82% Interest		
	(i) Market Value	6,351,253	
	(ii) Benefit Payments	(295,559)	
	(iii) Contributions	71,710	
	(iv) Total		6,127,404
(e)	Actual Return on Market Value		12,786,963
(f)	Gain/(Loss): (e)-(d)(iv)		$6,659,559

2. Development of 2011 Gain/(Loss)

(a)	Expected Return on Assets		6.57%
(b)	Market Value at January 1, 2011		$110,469,285
(c)	Benefit Payments and Expenses		(9,194,565)
(d)	Expected Return at 6.57% Interest		
	(i) Market Value	7,257,832	
	(ii) Benefit Payments	(297,237)	
	(iii) Contributions	76,799	
	(iv) Total		7,037,394
(e)	Actual Return on Market Value		(1,426,432)
(f)	Gain/(Loss): (e)-(d)(iv)		($8,463,826)

* For purposes of determining Asset Gain/(Loss), discounted receivable contributions are included in the Market Value of Assets.

Plan Assets

V. Actuarial Value of Assets

1.	Market value of assets, January 1, 2012	$112,074,073
2.	Prior year gains/(losses):	
	(a) Asset gain/(loss) for year-2	
	(i) Initial asset gain/(loss)	6,659,559
	(ii) Weight	0.333
	(iii) Unrecognized amount: (i)x(ii)	2,219,853
	(b) Asset gain/(loss) for year-1	
	(i) Initial asset gain/(loss)	(8,463,826)
	(ii) Weight	0.667
	(iii) Unrecognized amount: (i)x(ii)	(5,642,551)
3.	Total amount unrecognized: sum of (2)(iii)	(3,422,698)
4.	Preliminary actuarial value: (1)-(3)	115,496,771
5.	Market value corridor override	
	(a) Lower bound: 0.9 x(1)	100,866,666
	(b) Upper bound: 1.1 x(1)	123,281,480
	(c) Adjustment to corridor	0
6.	Actuarial assets, January 1, 2012: (4)+(5)(c)	$115,496,771

Credit Balances

With the enactment of the Pension Protection Act of 2006, credit balances were maintained; however, they were bifurcated into the following two categories:

1. The credit balance, if any, as of the end of the 2007 plan year establishes the Carryover Balance; and
2. Contributions made on or after the 2008 plan year in excess of minimum funding requirements will be credited to the Prefunding Balance.

Maintaining credit balances is elective. Plan sponsors may "waive" some or all of the Carryover Balance or Prefunding Balance in order to avoid asset reductions for purposes of determining:

1. whether the plan is "at-risk",
2. the Funding Target Attainment Percentage,
3. the Shortfall Amortization Base, and
4. whether benefit restrictions apply

If the credit balances are to be waived, the Carryover Balance must be waived first prior to any waiver of the Prefunding Balance.

After 2007, interest on the Carryover and Prefunding Balance will be credited at the rate determined on the actual return on the market value of plan assets.

Credit balances may be used toward the current year's minimum funding requirement only if, for the prior year, the Actuarial Value of Assets less the Prefunding Balance is greater than 80% of the "not-at-risk" Funding Target. If the Credit Balances are going to be used as an offset to the Minimum Funding Requirement, the Carryover Balance must be used first prior to the use of the Prefunding Balance.

Credit Balances

Detailed below is the development of the Credit Balances as of the beginning of the 2012 plan year:

1.	Funding Standard Carryover Balance (FSCB)		
	(a)	FSCB as of January 1, 2011 after waivers	$0
	(b)	FSCB applied to minimum required contribution	0
	(c)	Remaining FSCB as of January 1, 2011: (a)–(b)	0
	(d)	Rate of return on plan assets during plan year 2011	(1.52%)
	(e)	Interest on (c) : (c)x(d)	0
	(f)	FSCB as of January 1, 2012: (c)+(e)	0
	(g)	Waived FSCB	0
	(h)	FSCB as of January 1, 2012 after waivers: (f)-(g)	$0
2.	Prefunding Balance (PFB)		
	(a)	PFB as of January 1, 2011 after waivers	0
	(b)	PFB applied to minimum required contributions	0
	(c)	Remaining PFB as of January 1, 2011: (a)–(b)	0
	(d)	Rate of return on plan assets during plan year 2011	(1.52%)
	(e)	Interest on (c) : (c)x(d)	0
	(f)	Excess contributions	
		(i) Employer contributions discounted to BOY	11,576,821
		(ii) Preliminary minimum required contribution (MRC)	4,785,451
		(iii) Credit balances applied to MRC	0
		(iv) Excess: (i)-(ii)+(iii), min zero	6,791,370
		(v) Excess above MRC: (i)-(ii), min zero	6,791,370
		(vi) Excess due to use of credit balances: (iv)-(v)	0
		(vii) Effective rate	6.24%
		(viii) Interest on excess contributions: (v)x(vii)+(vi)x(d)	423,781
		(ix) Total available to add to PFB: (iv)+(viii)	7,215,151
		(x) Portion of (ix) added to PFB	3,494,166
	(g)	PFB as of January 1, 2012: (c)+(e)+(f)(x)	3,494,166
	(h)	Waived PFB	0
	(i)	PFB as of January 1, 2012 after waivers: (g)-(h)	$3,494,166

Credit Balances

The following chart details what, if any, portion of the Credit Balances will be waived for 2012:

1.	Waived credit balance(s) to avoid benefit restrictions			
	(a)	Preliminary Adjusted Funding Target Attainment Percentage (AFTAP) before waivers		
		(i)	Actuarial assets	$115,496,771
		(ii)	Funding Standard Carryover Balance (FSCB)	0
		(iii)	Prefunding Balance (PFB)	3,494,166
		(iv)	Not-at-risk funding liability	140,003,256
		(v)	Non-HCE annuity purchases in last 2 years	0
		(vi)	Preliminary AFTAP prior to benefit restriction waivers: ((i)-(ii)-(iii)+(v))/((iv)+(v))	80.00%
		(vii)	Funded Ratio: (i)/(iv)	82.49%
	(b)	Transition percentage		100%
	(c)	Credit balance(s) waived to avoid benefit restrictions, if possible		0
	(d)	Preliminary AFTAP after benefit restriction waivers		
		(i)	FSCB after benefit restriction waivers	0
		(ii)	PFB after benefit restriction waivers	3,494,166
		(iii)	Preliminary AFTAP after benefit restriction waivers: if (a)(vii)>=(b), ((a)(i)+(a)(v))/((a)(iv)+(a)(v)), else ((a)(i)-(i)-(ii)+(a)(v))/((a)(iv)+(a)(v))	80.00%
2.	Waived credit balance(s) to avoid At-Risk status			
	(a)	Not-at-Risk Funding Target Attainment Percentage (NAR FTAP) before waivers to avoid At-Risk status: ((1)(a)(i)-(1)(d)(i)-(1)(d)(ii))/(1)(a)(iv)		80.00%
	(b)	At-Risk Funding Target Attainment Percentage (AR FTAP) before waivers to avoid At-Risk status		
		(i)	At-risk funding liability	158,421,084
		(ii)	Preliminary AR FTAP: ((1)(a)(i)-(1)(d)(i)-(1)(d)(ii))/(i)	70.69%
	(c)	Funding Target Benefit percentage for following year		80%
	(d)	At-Risk in following year? Yes if (a)<(c), (b)(ii)<70%, and >500 participants		No
	(e)	Credit balance(s) waived to avoid At-Risk status, if possible		0
	(f)	FTAPs after waivers		
		(i)	FSCB after waivers	0
		(ii)	PFB after waivers	3,494,166
		(iii)	NAR FTAP: ((1)(a)(i)-(i)-(ii))/(1)(a)(iv)	80.00%
		(iv)	AR FTAP: ((1)(a)(i)-(i)-(ii))/(b)(i)	70.69%

Funding Target

In accordance with Section 430(d) of the Internal Revenue Code, the Funding Target is the present value of all benefits accrued or earned under the plan as of the beginning of the plan year.

The Funding Target for plans that are "not-at-risk" is determined based on the following:

- Interest discounting is mandated through use of a segmented yield curve based on high-quality (AAA,AA,A) corporate bond yields. The three segments include benefits expected to be paid over the next 5 years, between years 5 and 20 and after year 20. The segmented yield curve is based on a 24-month unweighted average and there is an optional 3-year phase-in from the prior discounting basis beginning in 2008. There is also an optional lookback period up to 4 months prior to the beginning of the plan year. Alternatively, plan sponsors may elect to use the full yield curve in lieu of the segmented rates. The full yield curve, however, represents the rates for one month as opposed to the 24-month average.
- The mortality assumption is mandated by the IRS. The table is based upon the RP-2000 Mortality Table with separate tables for annuitant and non-annuitant mortality. Plan sponsors may use either the table with static projections or a table with generational projections. The static projection table projects non-annuitant mortality rates (i.e., prior to benefit commencement) 15 years beyond the valuation year and annuitant mortality rates (i.e. after benefit commencement) 7 years beyond the valuation year. The generational projection table projects mortality rates (annuitant and non-annuitant) to all future years. All projections are performed using Scale AA.
- Assumed utilization of lump sums, if applicable, is reflected.
- All other assumptions that are individually reasonable and, in combination, offer the enrolled actuary's best estimate of anticipated experience.

A plan is considered to be "at-risk" for the current plan year if it meets all of the following requirements:

- The Funding Target Attainment Percentage for the prior plan year is less than 80%
- As of the prior plan year, the Actuarial Value of Assets less any Credit Balances is less than 70% of the "at-risk" Funding Target*
- Total participants in all defined benefit plans sponsored by the employer (or any member of the employer's controlled group) is greater than 500.

*Determined without regard to the loading factor

Funding Target

The Funding Target for a plan that is "at-risk" is determined using the following additional mandated assumptions:

- Participants who will be eligible to elect benefits in the next 10 years will assume to do so at their earliest eligibility date
- Participants are assumed to elect the most-valuable form of benefit
- If a plan has been in "at-risk" status for at least 2 of the 4 preceding plan years, a loading factor is added equal to $700 per participant plus 4% of the "not-at-risk" Funding Target
- In no event shall the "at-risk" Funding Target be less than the "not-at-risk" Funding Target

If a plan is deemed to be "at-risk", the Funding Target for purposes of determining the contribution requirement will be based upon a 5-year "phase-in" of the "at-risk" Funding Target.

Funding Target

Development of Funding Target

1.	More than 500 participants in controlled group in prior year?	Yes
2.	Prior year funding target attainment percentage	
	(a) Not-at-risk liability	80.00%
	(b) At-risk liability	69.83%
3.	Funding target benchmark percentage	80%
4.	At-risk status	
	(a) Current year: If (1) and (2)(a)<(3) and (2)(b)<70%	No
	(b) Year-1	No
	(c) Year-2	No
	(d) Year-3	No
	(e) Year-4	No
	(f) At-risk current year and 2 of preceding 4 years? (If yes, loads apply)	No
5.	Not-at-risk funding liability	
	(a) Funding liability	
	(i) Retirees and benef. receiving payments	85,939,964
	(ii) Terminated vested participants	2,197,712
	(iii) Active participants, vested liability	51,865,580
	(iv) Active participants, total liability	51,865,580
	(v) Total liability: (i)+(ii)+(iv)	140,003,256
	(b) Normal cost before adjustments	0
	(c) Expenses included in Normal Cost	290,000
	(d) Normal cost: (b)+(c)	290,000

Funding Target

6.	At-risk funding liability			
	(a)	At-risk funding liability		
		(i)	Retirees and benef. receiving payments	85,939,964
		(ii)	Terminated vested participants	2,793,200
		(iii)	Active participants, vested liability	69,687,920
		(iv)	Active participants, total liability	69,687,920
		(v)	Total liability: (i)+(ii)+(iv)	158,421,084
	(b)	Number of plan participants		1,001
	(c)	Per-participant load: $700 x (b)		N/A
	(d)	Liability load: 4% of (5)(a)(v)		N/A
	(e)	At-risk funding target: (a)(v)+(c)+(d), not less than (5)(a)(v)		158,421,084
	(f)	Preliminary at-risk normal cost (adj. for expenses)		290,000
	(g)	Normal cost load: 4% of (5)(b)		N/A
	(h)	At-risk normal cost: (f)+(g), not less than (5)(d)		290,000
7.	Funding target			
	(a)	Number of consecutive years at-risk (max 5)		0
	(b)	Transition percentage: 20% x (a)		0%
	(c)	Funding target: (5)(a)(v)+[(b)x((6)(e)-(5)(a)(v))]		140,003,256
	(d)	Target normal cost: (5)(d)+[(b)x((6)(h)-(5)(d)]		$290,000

Development of Shortfall Amortization Charge

In accordance with Section 430(c) of the Internal Revenue Code, the Shortfall Amortization Charge for any plan year is the aggregate total (not less than zero) of the shortfall amortization installments for such plan year with respect to the shortfall amortization bases for the current plan year and 6 preceding plan years.

In the initial year of application of PPA, the Shortfall Amortization Base is equal to the initial Funding Shortfall. In subsequent years, a Shortfall Amortization Base is created equal to that year's Funding Shortfall less the present value of remaining Shortfall Amortization Installments.

If the Actuarial Value of Assets reduced by the Prefunding Balance is greater than or equal to the Funding Target for a plan year, the plan is exempt from establishing a Shortfall Amortization Base.

In any year in which the Funding Shortfall is zero, all Shortfall Amortization Bases are considered fully amortized.

Development of Shortfall Amortization Charge

1.	1st segment rate			2.06%
	2nd segment rate			5.25%
2.	Funding target			$140,003,256
3.	Adjusted plan assets			
	(a)	Actuarial assets		115,496,771
	(b)	Funding Standard Carryover Balance		0
	(c)	Prefunding Balance (PFB)		3,494,166
	(d)	Adjusted assets: (a)-(b)-(c), not less than 0		112,002,605
4.	Funding shortfall: (2)-(3)(d), not less than 0			28,000,651
5.	Current shortfall amortization installments			
	(a)	Annual installments		
		(i)	Year -1 base (6 years remaining)	1,394,016
		(ii)	Year -2 base (5 years remaining)	2,484,016
		(iii)	Year -3 base (4 years remaining)	822,419
		(iv)	Year -4 base (3 years remaining)	0
		(v)	Year -5 base (2 years remaining)	0
		(vi)	Year -6 base (1 year remaining)	0
	(b)	Total annual installments		4,700,451
	(c)	Present value of annual installments		
		(i)	Year -1 base (6 years remaining)	7,773,669
		(ii)	Year -2 base (5 years remaining)	11,928,719
		(iii)	Year -3 base (4 years remaining)	3,191,410
		(iv)	Year -4 base (3 years remaining)	0
		(v)	Year -5 base (2 years remaining)	0
		(vi)	Year -6 base (1 year remaining)	0
	(d)	Total present value of annual installments		22,893,798
6.	Exemption from new shortfall amortization base			
	(a)	Target liability percentage		100%
	(b)	Shortfall funding target: (2)x(a)		140,003,256
	(c)	Prefunding Balance if used to reduce the Minimum Required Contribution, else 0		3,494,166
	(d)	Exempt?: [(3)(a)-(c)]>=(b)		No

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Development of Shortfall Amortization Charge

7.	Shortfall amortization base		
	(a)	Adjusted funding shortfall: (6)(b)-(3)(d), not less than 0	28,000,651
	(b)	New current year base: (a)-(5)(d), or 0 if exempt	5,106,853
	(c)	New 7-year installment amount	809,058
8.	Shortfall amortization charge: (5)(b)+(7)(c), not less than 0		$5,509,509

Minimum Required Contribution

If the Actuarial Value of Assets reduced by the Credit Balances is less than the Funding Target, then the Minimum Required Contribution for such plan year shall be the sum of the Target Normal Cost and the Shortfall Amortization Charge.

If the Actuarial Value of Assets reduced by the Credit Balances is greater than the Funding Target for a year, then the Minimum Required Contribution for such plan year shall be the Target Normal Cost less the excess of adjusted assets over the Funding Target, but not less than $0.

Quarterly contributions are required if the Funding Shortfall was greater than $0 on the prior valuation date. If applicable, the quarterly contribution is due on or before the 15th day following the end of each quarter. If the quarterly contribution is not made on time, late interest is charged at the Effective Interest Rate plus 5%. If applicable, the quarterly contribution amount is 25% of the lesser of 90% of the current year's minimum required contribution or 100% of the prior year's minimum required contribution.

Contributions can be made up to 8½ months after the end of the plan year for such plan year. All contributions will be discounted back to the valuation date with interest at the Effective Interest Rate, including contributions made after the end of the plan year, to determine whether the Minimum Required Contribution has been satisfied.

The plan's "Effective Interest Rate" for any particular plan year is the single rate that, if used to discount the plan's expected benefit payments, would produce the same Funding Target that the Segment Rates produce. The Effective Interest Rate is the rate at which interest is charged on contributions until the date they are actually made.

If the plan sponsor fails to pay the minimum required contribution by 8½ months after the end of the plan year, the plan sponsor will be required to pay a 10% excise tax under IRC Section 4971 on the amount of any unpaid minimum required contributions. This tax can increase to 100% if the unpaid minimum required contribution is not corrected in subsequent plan years.

Minimum Required Contribution

Summary of Minimum Required Contribution:

1.	Effective interest rate		5.43%
2.	Target normal cost		$290,000
3.	Shortfall amortization charge		5,509,509
4.	Credit for excess assets		
	(a)	Adjusted Assets	112,002,605
	(b)	Funding Target	140,003,256
	(c)	Excess assets: (a)-(b), not less than 0	0
5.	Preliminary minimum required contribution (MRC): (2)+(3)-(4)(c), not less than 0		5,799,509
6.	Credit balances		
	(a)	Eligible to apply against MRC?: Yes if for prior year, assets minus prefunding balance >= 80% of not-at-risk funding target	Yes
	(b)	Funding Standard Carryover Balance (FSCB)	0
	(c)	Elected to apply FSCB against MRC?	Yes
	(d)	Prefunding Balance (PFB)	3,494,166
	(e)	Elected to apply PFB against MRC?	Yes
	(f)	Balances eligible to apply against MRC: (b)+(d) if eligible and elected	3,494,166
7.	MRC adjusted for credit balances: (5)-(6)(f), not less than 0		2,305,343
8.	Required quarterly contributions		
	(a)	Quarterlies required?: Yes if prior year funding shortfall	Yes
	(b)	Prior year minimum required contribution	4,785,451
	(c)	Current year MRC: (5)	5,799,509
	(d)	Required annual payment: lesser of (b) and 90% of (c), if applicable	4,785,451
	(e)	Required installment: 25% of (d)	$1,196,363

Maximum Deductible Contribution Limit

Contributions to a qualified pension plan may be deducted for tax purposes, subject to limitations contained in Section 404(a) of the IRC. If the plan sponsor's taxable year and plan year coincide, the limit for a taxable year is the maximum amount for the coinciding plan year. Otherwise, the limit for the taxable year is the maximum amount with respect to either the plan year that commences or the plan year that ends in the taxable year (or a weighted average of the respective maximum amounts). Once the method for matching plan years to taxable years is established, it may not be changed without prior approval from the IRS.

For a contribution to be deductible in a particular taxable year, the contribution must be made during the taxable year or not later than the time for filing a tax return, which is the 15th day of the third month following the end of the taxable year. A later contribution may be deductible if the IRS has granted an approval to extend the deadline for filing the tax return.

Any contribution in excess of the tax-deductible limit for a taxable year may not be deducted in that year, even though the sponsor may have taken deductions in previous years that were less than the applicable tax-deductible limits. Contributions in excess of the tax-deductible limit may be deducted in succeeding taxable years, but may be subject to a 10% excise tax under Section 4972 of the IRC. The amount (if any) of the excess that may be deducted in a later year may not exceed the tax-deductible limit for that year minus the amount contributed in such later year.

For purposes of this report, the following assumptions have been made:

- The tax year begins January 1, 2012 and ends on December 31, 2012; and
- Historically, the deductible limit has been established based upon the plan year beginning in this tax year.

Since the tax-deductible contribution is dependent upon the relationship between the taxable year and the plan year and previous tax deductions, we recommend that you consult with your tax advisor with respect to the tax treatment of contributions to the plan.

In accordance with IRC Sections 404(a) and 404(o), the maximum deductible contribution for a limitation year shall be the greatest of:

a) Target Normal Cost plus 150% of the Funding Target plus expected benefit increases* less the Actuarial Value of Plan Assets
b) Minimum Required Contribution
c) If a plan is not "at-risk", the Target Normal Cost and Funding Target (both determined as if the plan were "at-risk") less the Actuarial Value of Plan Assets.

* Increase in the Funding Target determined including compensation increases after the current plan year (if the plan is pay-related) or including scheduled benefit increases

Maximum Deductible Contribution Limit

Summary of Maximum Tax Deductible Contribution

1.	Funding target			$140,003,256
2.	Target normal cost			290,000
3.	Cushion amount			
	(a)	50% of funding target: 50% of (1)		70,001,628
	(b)	Expected benefit increases		
		(i)	Not-at-risk maximum liability	140,003,256
		(ii)	At-risk maximum liability	158,421,084
		(iii)	Per-participant load	N/A
		(iv)	Liability load: 4% of (i)	N/A
		(v)	At-risk target: (ii)+(iii)+(iv), not less than (i)	158,421,084
		(vi)	Transition percentage	0%
		(vii)	Maximum funding target: (i)+[(vi)x((v)-(i))]	140,003,256
	(c)	Cushion amount: (a)+(b)(vii)-(1)		70,001,628
4.	Actuarial value of assets			115,496,771
5.	Preliminary limit: (1)+(2)+(3)(c)-(4), not less than 0			94,798,113
6.	Maximum if not at-risk			
	(a)	At-risk funding liability		158,421,084
	(b)	At-risk normal cost (incl. expenses)		290,000
	(c)	Maximum if not at-risk: (a)+(b)-(4), not less than 0		43,214,313
7.	Minimum required contribution			2,479,583
8.	Maximum tax deductible contribution: max of (5),(6) and (7)			$94,798,113

Supplementary Exhibits

PBGC Premiums

ERISA established the Pension Benefit Guaranty Corporation (PBGC), under the jurisdiction of the Department of Labor, to guarantee most vested retirement benefits and certain disability and survivor pensions.

PBGC guarantees are limited. For example, the PBGC does not guarantee benefits that had not vested prior to the plan termination or benefits for which all age, service, or other requirements had not been met at the time the plan terminates. Further, benefit increases and new benefits that have been in place for less than a year are not guaranteed, and those that have been in place for less than 5 years are only partly guaranteed. The maximum guaranteed benefit under a plan terminating in 2012 payable as a single life annuity at age 65, is $4,653 per month. Lower guarantees apply if benefits begin before age 65 or if survivor benefits are payable. Benefits other than pension benefits, such as health insurance, life insurance, death benefits, vacation pay, or severance pay are not guaranteed, and the PBGC does not pay lump sums exceeding $5,000 (even if available under the plan prior to termination).

Plans covered by the PBGC insurance program must file an annual premium filing each year with the PBGC via their online myPAA system within 9 1/2 months after the beginning of the plan year. Plans covering more than 500 participants must also file an Estimated Premium Filing through myPAA by the end of the second month of the plan year. All plans must pay a basic premium of $35 times the number of participants as of the end of the previous plan year, and plans with unfunded vested benefits must also pay an additional risk-related premium to the PBGC.

Development of PBGC Premium for 2012:

1.	Flat-rate premium			
	(a)	National Average Wage (NAW), 2 years prior		$41,673.83
	(b)	Flat-rate: $30 x (a)/$35,648.55 (2004 NAW), rounded		35
	(c)	Prior year applicable flat premium rate		35
	(d)	Participant count (excludes 4 Alternate payees)		997
	(e)	Flat-rate premium: [max of (b) and (c)] x (d)		$34,895
2.	Variable-rate premium			
	(a)	PBGC funding target		
		(i)	Not-at-risk PBGC liability	140,003,256
		(ii)	At-risk PBGC liability	158,421,084
		(iii)	Per-participant load	N/A
		(iv)	Liability load: 4% x (i)	N/A
		(v)	At-risk PBGC target: (ii)+(iii)+(iv), not less than (i)	158,421,084
		(vi)	Transition percentage	0%
		(vii)	PBGC funding target: (i)+[(vi)x((v)-(i))]	140,003,256
	(b)	Market value of plan assets		112,074,073
	(c)	Unfunded vested benefits: (a)(vii)-(b), min zero, rounded up to $1,000		27,930,000
	(d)	Variable-rate premium: 0.009x(c), or zero if exempt		251,370
3.	PBGC Premium: (1)(e)+(2)(d)			$286,265

ASC 960 Information (previously known as FAS 35)

The information in this exhibit is intended to satisfy the requirements under Accounting Standards Codification Topic 960 (ASC 960) with regard to the financials of the plan. It is not intended to meet the requirements of Accounting Standards Codification Topic 715 (ASC 715) (previously known as FAS 87) which are the financials of the plan sponsor. If applicable, information for ASC 715 is presented in a separate report.

The Present Value of Accumulated Plan Benefits has been calculated using the Actuarial Assumptions Supplementary Exhibit. No future increases in salaries, Social Security benefits, or benefit service were assumed.

1.	Actuarial present value of accrued plan benefits			
	(a)	Actuarial present value of vested benefits		
		(i)	Participants currently receiving benefits	$70,701,733
		(ii)	Participants entitled to deferred benefits	1,569,407
		(iii)	Other participants	38,882,249
		(iv)	Total	111,153,389
	(b)	Actuarial present value of nonvested benefits		0
	(c)	Actuarial present value of accrued plan benefits: (a)(iv)+(b)		111,153,389
2.	Market value of assets (includes receivables)*			112,261,926
3.	Unfunded PVAB (Surplus assets): (1)(c)-(2)			(1,108,537)
4.	Funded percentage: (2)/(1)(c)			101.00%
5.	Changes in present value			
	(a)	PVAB as of January 1, 2011		108,976,520
	(b)	Changes due to:		
		(i)	Decrease in discount period at 7.75%	8,106,994
		(ii)	Benefits paid	(8,906,464)
		(iii)	Assumption changes**	1,781,531
		(iv)	Plan amendments	0
		(v)	Additional benefits earned, including experience gains and losses	1,194,808
		(vi)	Total change	2,176,869
	(c)	PVAB as of January 1, 2012: (a)+(b)(vi)		$111,153,389

**Receivables under ASC 960 are not discounted back to the valuation date with interest.*
*** Mortality table was changed to IRS 2012 Static Mortality Table (from RP 2000 Mortality Table projected to 2010).*

Participant Data

	January 1, 2012	January 1, 2011
Active Participants		
Number	385	416
Average age	50.51	49.61
Average past service	21.68	20.75
Average future service	11.17	11.74
Terminated Vested Participants		
Number	60	56
Average age	45.94	47.00
Annual benefits:		
- Total	$383,992	$390,165
- Average	$6,400	$6,967
Retirees and Beneficiaries		
Number	556	546
Average age	74.99	74.69
Annual benefits:		
- Total	$8,264,240	$7,946,923
- Average	$14,864	$14,555
Total Participant Count	1,001	1,018

Participant Data

Reconciliation of Participant Data:

	Active	Terminated Vested	Retirees and Beneficiaries	Total
As of January 1, 2011	416	56	546	1,018
New Hires	0	0	0	0
Rehires	0	0	0	0
Nonvested termination	0	0	0	0
Vested termination	(9)	9	0	0
Lump sum cashout	(6)	(3)	0	(9)
Retirement	(16)	(4)	20	0
Disability	0	0	0	0
Deceased	0	0	(17)	(17)
New beneficiaries	0	2	7	9
Miscellaneous	0	0	0	0
As of January 1, 2012*	385	60	556	1,001

**Includes 4 Alternate Payees under Qualified Domestic Relations Orders*

Distribution of Inactive Benefits Inforce:

	Retired, Survivor, and Disabled		Vested	
Attained Age	No.	Avg. Annuities	No.	Avg. Annuities
Under 30	0	$0	0	$0
30 to 34	0	0	10	4,061
35 to 39	0	0	9	3,272
40 to 44	1	3,963	8	6,432
45 to 49	0	0	9	4,911
50 to 54	2	5,982	16	10,784
55 to 59	15	11,435	6	4,835
60 to 64	80	22,697	0	0
65 to 69	105	20,413	2	8,368
70 to 74	79	14,785	0	0
75 to 79	86	13,172	0	0
80 to 84	91	10,679	0	0
85 to 89	66	9,913	0	0
90 to 94	22	6,733	0	0
95 & up	9	4,745	0	0
Total	556	$14,864	60	$6,400

Active Participant Data

	Years of service										
	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up	Total
Attained Age	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Under 25											
25 to 29			2								2
30 to 34			24	3							27
35 to 39			17	15	1						33
40 to 44			8	10	11	1					30
45 to 49			13	11	12	14	8				58
50 to 54			7	15	7	8	36	34			107
55 to 59			10	4	3	4	13	33	17		84
60 to 64			1	4	1	1	5	9	11	6	38
65 to 69				1					1	2	4
70 & up			1				1				2
Total			83	63	35	28	63	76	29	8	385

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Actuarial Cost Method

Funding Target / Target Normal Cost

An Actuarial Cost Method is an allocation of the expected cost of a pension plan on a year-by-year basis. The primary objective of an Actuarial Cost Method is to accumulate enough assets prior to each participant's retirement to provide the promised pension benefits.

The Pension Protection Act of 2006 (PPA) mandates the use of the Traditional Unit Credit Actuarial Cost Method. Under this method, the accrued benefit is estimated based upon service and, if applicable, earnings as of the valuation date. The Funding Target is equal to the actuarial present value of all accrued benefits as of the valuation date. The Target Normal Cost is the actuarial present value, as of the valuation date, of the expected increases in projected accrued benefit attributable to service expected to be completed during the plan year (i.e. if applicable, one year's salary growth is reflected in the determination of Target Normal Cost).

For tax deduction purposes, the Funding Target may reflect the value of future pay increases on accrued benefits, if applicable.

PPA Discounting Method

The plan sponsor is responsible for making the following decisions with regard to the discounting method:

- Full yield-curve spot rates or a segmented yield-curve of 24-month average rates of corporate bond rates
- If the segmented yield curve is used, the rates as of the month of the valuation may be used or as of a lookback month up to 4 months prior to the valuation date (the full yield curve must use the rates as of the month of the valuation starting in 2010)

For purposes of this valuation, the following discounting method was used and is assumed to be approved by the plan sponsor:

- Rates through the month of August preceding the valuation date
- Segment Rates

Asset Valuation Method

The Plan Assets for purposes of this Actuarial Valuation are valued under the asset averaging method, including, if applicable, discounted receivable contributions. The value of plan assets is set equal to the average of the fair market value of assets on the valuation date and the adjusted fair market value of assets (including expected earnings) determined for the two earlier annual determination dates. Expected earnings are calculated using the third segment rate of the segmented yield-curve in effect at the beginning of each valuation year. The resulting average value must be constrained so that it falls between 90 and 110 percent of the fair market value of assets on the valuation date.

Actuarial Assumptions

Actuarial Assumptions

Actuarial assumptions are estimates of the occurrence of future events affecting the costs of the plan. The assumptions have been chosen to anticipate the long-term experience of the plan. The enrolled actuary will certify the reasonableness of these assumptions, as required by ERISA.

The actuarial assumptions used to compute this year's plan costs are as follows:

Economic Assumptions

PPA Segment Rates	Funding Target	PBGC
- Segment 1: Up to Year 5	2.06%	2.06%
- Segment 2: Years 5-20	5.25%	5.25%
- Segment 3: Years 20+	6.32%	6.32%

ASC 960 Assumed Investment Return 7.75%

Annual rates of increase:

- Salaries	N/A
- Future Social Security wage bases	N/A
- Statutory limits on compensation and benefits	N/A

Demographic Assumptions

Mortality:

- Funding Target / PBGC	IRS 2012 Static Mortality Table
- ASC 960	IRS 2012 Static Mortality Table

Terminations: Rates vary by age and sex. Illustrative annual rates of withdrawal are as follows:

Age	Male	Female
25	7.18%	15.05%
40	1.57%	2.14%
55	0.29%	0.42%

Disability: None

Actuarial Assumptions

Assumed Retirement Age (Actives):	Rates varying by age. Representative rates:

Age	Rate
55	3%
56-58	1%
59	3%
60-61	10%
62	25%
63-64	20%
65	100%

Assumed Retirement Age (Vested Terms): Age 62

Benefit Commencement date:

Preretirement Death Benefit:	Surviving spouse benefits commence at the later of the death of the active participant or the date the participant would have attained age 55.
Deferred Vested Benefit:	Upon termination of employment (if lump sum) or at early retirement date (if annuity)
Retirement Benefit:	Upon termination of employment
Form of Payment	Life annuity. Retirement benefit loaded 6.4% for subsidized option factor. Withdrawal benefits are assumed to be paid as a lump sum for participants hired on or before January 1, 2004, otherwise they are assumed to be paid as a life annuity commencing at the participant's early retirement date.

Miscellaneous Assumptions

Percent Married:	80%
Spouse Age:	Wife three years younger than husband
Administrative Expense:	$290,000 (Prior year's administrative expenses rounded up to nearest $5,000)

Summary of Plan Provisions

Summary of Plan Provisions

Effective Dates:	Original Plan: January 1, 1955
Employee:	All non-union employees of MDU Resources Group, Inc., Montana-Dakota Utilities Co. and other designated subsidiaries.
Eligibility Requirements:	Age: 21 for employees hired on or after 1/1/85; if hired prior to 1/1/04, no service required. Service: One Year of Service Maximum Age: None Plan eligibility is frozen for employees hired after December 31, 2005.
Plan Entry Date:	An eligible employee will enter the plan on the first day of the month following completion of the eligibility requirements. No employee hired after December 31, 2005 may enter the plan.
Year of Service:	12-consecutive month computation period in which an employee is credited with 1,000 or more hours of service. Eligibility: Computation period commences on employee's date of hire. Vesting: One year for each 1,000-hour calendar year of employment by MDU Resources Group, Inc., or a related company.
Credited Service:	Service following age 21 with a maximum of 35 years; full year if 2,080 hours in a year, prorate for less than 2,080 hours. Except for years of hire and termination, exclude years with less than 1,000 hours. Credited Service is frozen as of December 31, 2009.

Summary of Plan Provisions

Normal Retirement Date (NRD):	Last day of the month in which 65^{th} birthday occurs.
Basic Monthly Compensation:	Basic rate of regular compensation as of the first day of the first payroll period of the month, including Section 125 and 401(k) deferrals. Special rules for commissioned and part-time employees.
Final Average Monthly Compensation:	The average of the highest 60 consecutive basic monthly compensation rates in the last 120 months of employment. Compensation earned after December 31, 2009 is not taken into consideration.
Normal Retirement Benefit:	Monthly pension benefit determined as of NRD. Effective December 31, 2009, benefit accruals are frozen.
Normal Form of Benefit:	Single: Life Annuity Married: 50% Joint and Survivor
Early Retirement Eligibility:	Retire before NRD and on or after both attaining age 55 and completing five years of vesting service.
Early Retirement Benefit:	Monthly pension benefit determined as of early retirement date. For retirements prior to age 60, the benefit is reduced .25% for each month that commencement of payment precedes age 60.
Deferred Vested Eligibility:	Terminate for reasons other than death or retirement after completing five years of vesting service.
Deferred Vested Benefit:	-Monthly pension benefit determined as of date of termination payable at NRD -Monthly pension benefit determined as of termination date, reduced .25% for each month that commencement of payments precedes age 62. -Participants hired before January 1, 2004 who are not eligible for early retirement may elect a single sum payment equal to the actuarial

Deferred Vested Benefit (cont):	equivalent of the benefit payable at age 55, based on the interest and mortality assumptions specified under IRC 417(e)(3).
Pre-Retirement Spousal Death Benefit:	If death while active employee after age 45, 50% of monthly pension benefit at date of death reduced for early payment to employee's date of death. If death while active employee before age 45 or after termination, 50% of monthly pension benefit at date of death reduced for the 50% joint and survivor annuity for payment as early as the employee's 55^{th} birthday.
Monthly Pension Benefit:	The greater of total Pension Credits and the Final Pay Benefit, with a minimum benefit equal to the pension benefit as of December 31 preceding termination. A modified formula is applied for participants who had annualized basic compensation during a plan year prior to 1994 in excess of $150,000.
Pension Credits:	For employees who began participation and attained age 40 on or before February 28, 1990, a pension credit for each year after December 31, 1988 equal to 1.65% of the first $1,100 of basic monthly compensation as of the first day of the first payroll period of the plan year plus 2% of the excess; proportionately reduced for less than 2,080 hours of service. Different formulas applied for service prior to 1989.
Final Pay Benefit:	1.1% of final average monthly compensation up to the integration level plus 1.45% of the final average monthly compensation in excess of the integration level, times years of credited service (maximum of 35 years).

Summary of Plan Provisions

Integration Level:	For plan years after 1989, the integration level equals $1,400 multiplied by a fraction equal to the current year Taxable Wage Base divided by $48,000. Integration Level is frozen as of December 31, 2009.

MDU Resources Group, Inc., Pension Plan for Non-Bargaining Unit Employees

Determination of the

Net Periodic Pension Cost

for the Fiscal Year Ending December 31, 2012

Prepared by:

New York Life Retirement Plan Services

690 Canton Street

Westwood, MA 02090

TABLE OF CONTENTS

I. INTRODUCTION

The purpose of this report is to present certain financial information in accordance with FASB Accounting Standards Codification (ASC) 715-30.

Actuarial computations under ASC 715-30 are for purposes of fulfilling employer accounting requirements. The calculations reported herein have been made on a basis consistent with our understanding of the applicable accounting standards. Determinations for purposes other than meeting employer financial accounting requirements may be significantly different from the results reported herein. Accordingly, additional determinations are needed for other purposes, such as judging benefit security at termination or adequacy of funding for an ongoing plan.

In preparing the results presented in this report, we have relied upon information provided to us regarding plan provisions, participant data and plan assets. We have reviewed this information for overall reasonableness, but we have not audited this information. Plan provisions and participant data are summarized in the January 1, 2012 actuarial valuation report. In addition, the actuarial assumptions as to weighted-average discount rate, rate of increase in compensation levels, and expected long-term rate of return on plan assets described in Section IV of this report were supported by the plan sponsor and its auditors. In the actuary's professional opinion, the assumptions reflected in this report are reasonable.

The Net Periodic Pension Cost has been determined to be ($422,709) for the Fiscal Year Ending December 31, 2012. The assumptions used to determine the Net Periodic Pension Cost include a discount rate of 4.11% and are illustrated in Section IV.

The undersigned meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

May 7, 2012 — Mark B Magnus

Date — Mark B. Magnus, A.S.A., Enrolled Actuary

II. DETERMINATION OF NET PERIODIC PENSION COST
FISCAL YEAR ENDING DECEMBER 31, 2012

1. Employer Service Cost	
a) Amount at beginning of year	$0
b) Interest	0
c) Total service cost (a)+(b)	0
2. Interest Cost	
a) Projected Benefit Obligation (PBO) at beginning of year	162,958,642
b) Expected distributions	8,861,460
c) Average expected PBO	158,158,685
d) Discount rate	4.11%
e) Interest cost (c)x(d)	6,500,322
3. Expected return on assets	
a) Market-related value at beginning of year	111,428,961
b) Expected distributions	8,861,460
c) Total expected contributions	9,847,561
d) Expected expenses	0
e) Average market-related value of assets	113,292,778
f) Long term rate of return	7.75%
g) Expected return (e)x(f)	8,780,190
4. Amortization of Transition (Asset) or Obligation	0
- Attachment A	
5. Amortization of Prior Service Cost	0
- Attachment A	
6. Amortization of (Gain) or Loss	1,857,159
-Attachment B-2, end of year	
7. Net Periodic Pension Cost	**($422,709)**
(1c)+(2e)-(3g)+(4)+(5)+(6)	

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III. ATTACHMENTS - Attachment A

AMORTIZATION OF TRANSITION OBLIGATION (ASSET) AND PRIOR SERVICE COST

Summary for Fiscal Year Ending 12/31/12

	Date Established	Beginning of Year Balance	Amount Recognized	End of Year Balance
Transition Obligation/(Asset)	N/A	N/A	N/A	N/A
Prior Service Cost		0	0	0
Total		$0	$0	$0

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III. ATTACHMENTS - Attachment B-1

CALCULATION OF (GAIN) OR LOSS

1. Net actuarial (gain) or loss from December 31, 2011 disclosure	$65,974,769
2. PBO from December 31, 2011 disclosure	161,948,297
3. Fair value of plan assets from December 31, 2011 disclosure	102,414,365
4. PBO as of January 1, 2012	162,958,642
5. Fair value of plan assets as of January 1, 2012	102,414,365
6. (Gain)/Loss (1)-(2)+(3)+(4)-(5)	$66,985,114

III. ATTACHMENTS - Attachment B-2

(GAIN) OR LOSS SUBJECT TO AMORTIZATION

	Fiscal Year Ending December 31, 2012
1. (Gain)/loss-Attachment B-1,line 6	$66,985,114
2. PBO - Attachment B-1,line 4	162,958,642
3. (Gain) or loss not reflected in market-related value	
a) Fair value	102,414,365
b) Market-related value	111,428,961
c) Amount not reflected in b) (a)-(b)	(9,014,596)
4. (Gain) or loss subject to amortization (1)+(3c)	57,970,518
5. Greater of (2) or (3b)	162,958,642
6. 10% of (5)	16,295,864
7. (Gain) or loss subject to amortization [excess of (4) over (6)]	41,674,654
8. Average future life expectancy of plan participants	22.44
9. Amortization amount (7)/(8)	$1,857,159

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IV. ACTUARIAL ASSUMPTIONS

For determining the Net Periodic Pension Cost
for the Fiscal Year Ending December 31, 2012

Measurement Date:	December 31, 2011
Discount Rate:	4.11%
Annual Rate of Increase in Compensation:	N/A
Expected Long Term Rate of Return on Plan Assets:	7.75%
Mortality:	2012 IRS Static Mortality Table

Turnover:

Rates vary by age and sex.
Representative rates:

Age	Male	Female
25	7.2%	15.1%
40	1.6%	2.1%
55	0.3%	0.4%

Taxable Wage Base Increase:	N/A
Cost of Living Increase:	3.25%
Expenses:	None

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V. DEFINITIONS

Discount Rate. This Discount Rate reflects the rate used to adjust for the time value of money. It should reflect the rates at which the pension benefits could effectively be settled.

Expected Long Term Rate of Return on Plan Assets. This is an assumption concerning the rate of return on plan assets. The product of the Expected Long Term Rate of Return on Plan Assets and the plan's assets is applied as a credit towards the current year's net periodic pension cost.

Gain or Loss. Gains and Losses measure the difference between actual experience and that assumed. Under US GAAP the impact of changes in actuarial assumptions is also measured as a Gain or Loss.

Fair Value of Plan Assets. The market value of assets.

Measurement Date. The date at which plan assets and obligations are measured.

Net Transition (Asset) Obligation. The excess(deficit) of the PBO over the Fair Value of ets (adjusted for previously recognized accrued or prepaid pension costs) as of the date of initial compliance with US GAAP.

Prior Service Cost. This is the amount of change in the Projected Benefit Obligation due to amendments to the plan.

Projected Benefit Obligation (PBO). This represents the present value of pension benefits based on service earned to date and expected future increases in salary.

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V. DEFINITIONS

Net Periodic Pension Cost. This represents the pension expense for the fiscal year. The Net Periodic Pension Cost consists of the following:

(1) **Service Cost**. The Service Cost represents the value of benefits earned each year. This is comparable to the normal cost used in determining funding levels under ERISA.

(2) **Interest Cost**. The Interest Cost equals the product of the Discount Rate and the Projected Benefit Obligation adjusted for benefit payments expected during the year.

(3) **Return on Plan Assets**. The Return on Plan Assets is the product of the Expected Long Term Rate of Return on Plan Assets and the Fair Value of Plan Assets adjusted for contributions and benefit payments expected during the year. This component represents a credit which reduces the Net Periodic Pension Cost for the year.

(4) **Amortization of Unrecognized Gain or Loss**. Amortization payments are included in the Net Periodic Pension Cost to systematically recognize cumulative Gains and Losses that are unrecognized as they occur.

(5) **Amortization of Unrecognized Prior Service Cost**. This is the amortization of increases or decreases in the Projected Benefit Obligation due to amendments to the plan.

(6) **Amortization of Unrecognized Net Obligation or Asset at Transition**. This represents the amortization of the Net Obligation(Asset) that existed at transition in the initial year of US GAAP compliance.

Projected Unit Credit Cost Method. Under this method, the benefit for each participant is projected to retirement and a pro-rata part of this benefit is then assigned to each year of service from hire date to the participant's retirement date. The Service Cost for each participant is the present value of the pro-rata benefit assigned to the current year. The Service Cost for the Fiscal Year is equal to the sum of the individual Service Costs for all participants. This method is required to be used in all calculations under US GAAP.

MDU Resources Group, Inc. Pension Plan for Collective Bargaining Unit Employees

Actuarial Valuation as of January 1, 2012

Prepared by New York Life Retirement Plan Services, 690 Canton Street Westwood, MA 02090.

Executive Summary

	January 1, 2012	January 1, 2011
	Contribution Range	
Minimum Required Contribution *	$920,993 (as of 1/1/2012)	$146,304 (as of 1/1/2011)
Maximum Deductible Contribution	$51,033,542	$57,567,319
	Credit Balances	
Carryover Balance	$0	$4,088,713
PreFunding Balance	$1,839,692	$0
Total	$1,839,692	$4,088,713
	Assets and Liabilities	
Target Normal Cost	$135,000	$1,934,656
Funding Target	$75,713,785	$69,907,256
Actuarial Value of Assets	$62,672,136	$60,014,518
Funding Target Attainment Percentage	80.34%	80.00%
Market Value of Assets	$60,998,166	$65,409,443
Estimated Rate of Return on Market Value of Assets	(0.93%)	14.13%
	Census Information	
Active Participants	270	299
Terminated Vested Participants	49	41
Retirees and Beneficiaries	406	408
Total	725	748
	Assumptions	
Interest Discounting	August 2011 Segment Rates	August 2010 Segment Rates
Effective Interest Rate	5.48%	6.25%

* Minimum contributions shown are net of any Credit Balances.

Executive Summary

Changes in Plan Provisions Since Prior Valuation

Effective June 30, 2011, benefit accruals are frozen.

Changes in Actuarial Assumptions and Methods

The interest rates and mortality were updated to comply with the plan's funding method.

In addition, the ASC 960 mortality table was changed to the IRS 2012 Static Mortality Table (from RP 2000 Mortality Table projected to 2010).

Summary of Other Significant Changes

We are not aware of the occurrence of any other significant event that would have a material effect on this valuation.

Quarterly Contribution Requirement and Recommended Contribution Schedule for 2012

The plan is subject to the quarterly contribution requirement for the 2012 plan year. The following table provides the contribution schedule that meets the quarterly installment requirements, if applicable, as well as satisfies the Minimum Required Contribution requirement when discounted back to January 1, 2012 at the 2012 Effective Interest Rate:

Date	Contribution
January 15, 2013	$627,779
September 15, 2013	$358,283
Total:	**$986,062**

The contribution schedule shown above is based on the plan sponsor's signed election to establish a PreFunding Balance from the April 13, 2012, July 15, 2012 and August 31, 2012 contributions and to apply this PreFunding Balance to satisfy the 2012 plan year minimum requirement.

Estimated Quarterly Contribution Requirement for 2013

The plan will be subject to the quarterly contribution requirement for the 2013 plan year. Based upon 2012 actuarial valuation results, the estimated quarterly contribution required for the 2013 plan year will be $690,171. A contribution in this amount must be made on or before April 15, 2013, July 15, 2013, October 15, 2013 and January 15, 2014. Once the 2013 actuarial valuation is complete, we will communicate the final contribution requirements for the 2013 plan year.

Executive Summary

Funding Policy Contribution

The plan sponsor's funding policy is to contribute the amount to meet the minimum funding requirements of Internal Revenue Code Sections 412 and 430. From time to time, and with regard to their cash and tax position, the plan sponsor may contribute an amount above the minimum required contribution.

Actuary's Commentary

<u>At-Risk Status</u>

The plan is not "at-risk" for the 2012 plan year since the 2011 Funding Target Attainment Percentage (FTAP) of 80.00% is at least 80%. The plan will not be "at-risk" in 2013 since the 2012 FTAP of 80.16% is at least 80%.

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Actuarial Certification

This report presents the results of the actuarial valuation as of January 1, 2012 for the MDU Resources Group, Inc. Pension Plan for Collective Bargaining Unit Employees. The purpose of this report is to review the plan's experience for the prior year and to provide the plan sponsor with an acceptable range of contributions for the plan year in accordance with ERISA and the Internal Revenue Code.

This report is not an AFTAP certification, nor should it be relied upon for any other purpose by any party other than the plan sponsor.

This valuation has been conducted in accordance with generally accepted actuarial principles and practices. In preparing the results presented in this report, we have relied upon information provided to us regarding plan provisions, plan participants and plan assets. We have reviewed this information for overall reasonableness, but we have not audited this information. The accuracy of the results presented in this report is dependent upon the accuracy and completeness of the underlying information.

The assumptions for interest and mortality are mandated by the Internal Revenue Service. All other assumptions have been selected by New York Life Retirement Plan Services, with concurrence of the plan sponsor, and are considered to be reasonable and within the "best-estimate range" as described by the Actuarial Standards of Practice.

The information contained in this report was prepared for the internal use of MDU Resources Group, Inc. and its auditors in connection with our actuarial valuation of the MDU Resources Group, Inc. Pension Plan for Collective Bargaining Unit Employees. It is neither intended nor necessarily suitable for other purposes.

The Consulting Actuary meets the "General Qualifications Standard for Prescribed Statements of Actuarial Opinion" of the American Academy of Actuaries relating to pension plans.

May 18, 2012	Mark B Magnus
Date	Mark B. Magnus, ASA, MAAA, Enrolled Actuary Enrolled Actuary No. 11-02866

Plan Assets

I. Asset Valuation Method

IRC Section 430(g) provides that plan assets be valued at either their fair market value on the valuation date or at the "average" value of assets on the valuation date. Under this average value, the value of plan assets is set equal to the average of the fair market value of assets on the valuation date and the adjusted fair market value of assets (including expected earnings) determined for one or more earlier determination dates (up to a 2-year limit). The resulting average value must be constrained so that it falls between 90 and 110 percent of the fair market value of plan assets on the valuation date.

Contributions for a prior plan year that are made after the beginning of this plan year must be adjusted for interest at the effective interest rate under Section 430(h)(2).

The Plan Assets for purposes of this Actuarial Valuation are valued under the asset averaging method.

II. Contributions for Plan Year Beginning January 1, 2011

Date	Amount
March 30, 2012	157,789
April 13, 2012	627,779
May 15, 2012*	50,000
July 15, 2012*	677,779
August 31, 2012*	677,779
Total:	**$2,191,126**

**Anticipated*

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III. Reconciliation of Market Value of Assets

1. Market Value of Assets as of January 1, 2011	$65,409,443
2. Contributions Made During Calendar Year	0
3. Investment Income	(582,915)
4. Benefit Payments	(5,823,366)
5. Administrative Expenses	(133,467)
6. Market Value of Assets as of January 1, 2012 (1+2+3+4+5)	$58,869,695
7. Discounted Receivable Contributions*	$2,128,471
8. Market Value of Assets as of January 1, 2012 (including discounted receivable contributions)	$60,998,166

Estimated Gross Rate of Return on Assets: (0.93%)

The estimated rate of return is based on the time weighting of contributions, benefit payments and expenses

**Contributions for the 2011 Plan Year that are made after December 31, 2011 are discounted back to January 1, 2012 at the 2011 Effective Interest Rate of 6.25%*

Plan Assets

IV. Development of Asset Gain/(Loss)*

1. Development of 2010 Gain/(Loss)

(a)	Expected Return on Assets		6.82%
(b)	Market Value at January 1, 2010		$62,185,854
(c)	Benefit Payments and Expenses		(5,196,780)
(d)	Expected Return at 6.82% Interest		
	(i) Market Value	4,241,075	
	(ii) Benefit Payments	(174,288)	
	(iii) Contributions	0	
	(iv) Total		4,066,787
(e)	Actual Return on Market Value		8,420,369
(f)	Gain/(Loss): (e)-(d)(iv)		$4,353,582

2. Development of 2011 Gain/(Loss)

(a)	Expected Return on Assets		6.57%
(b)	Market Value at January 1, 2011		$65,409,443
(c)	Benefit Payments and Expenses		(5,956,833)
(d)	Expected Return at 6.57% Interest		
	(i) Market Value	4,297,400	
	(ii) Benefit Payments	(192,569)	
	(iii) Contributions	0	
	(iv) Total		4,104,831
(e)	Actual Return on Market Value		(582,915)
(f)	Gain/(Loss): (e)-(d)(iv)		($4,687,746)

* For purposes of determining Asset Gain/(Loss), discounted receivable contributions are included in the Market Value of Assets.

V. Actuarial Value of Assets

1. Market value of assets, January 1, 2012	$60,998,166
2. Prior year gains/(losses):	
(a) Asset gain/(loss) for year-2	
(i) Initial asset gain/(loss)	4,353,582
(ii) Weight	0.333
(iii) Unrecognized amount: (i)x(ii)	1,451,194
(b) Asset gain/(loss) for year-1	
(i) Initial asset gain/(loss)	(4,687,746)
(ii) Weight	0.667
(iii) Unrecognized amount: (i)x(ii)	(3,125,164)
3. Total amount unrecognized: sum of (2)(iii)	(1,673,970)
4. Preliminary actuarial value: (1)-(3)	62,672,136
5. Market value corridor override	
(a) Lower bound: 0.9 x(1)	54,898,350
(b) Upper bound: 1.1 x(1)	67,097,982
(c) Adjustment to corridor	0
6. Actuarial assets, January 1, 2012: (4)+(5)(c)	$62,672,136

Credit Balances

With the enactment of the Pension Protection Act of 2006, credit balances were maintained; however, they were bifurcated into the following two categories:

1. The credit balance, if any, as of the end of the 2007 plan year establishes the Carryover Balance; and
2. Contributions made on or after the 2008 plan year in excess of minimum funding requirements will be credited to the Prefunding Balance.

Maintaining credit balances is elective. Plan sponsors may "waive" some or all of the Carryover Balance or Prefunding Balance in order to avoid asset reductions for purposes of determining:

1. whether the plan is "at-risk",
2. the Funding Target Attainment Percentage,
3. the Shortfall Amortization Base, and
4. whether benefit restrictions apply

If the credit balances are to be waived, the Carryover Balance must be waived first prior to any waiver of the Prefunding Balance.

After 2007, interest on the Carryover and Prefunding Balance will be credited at the rate determined on the actual return on the market value of plan assets.

Credit balances may be used toward the current year's minimum funding requirement only if, for the prior year, the Actuarial Value of Assets less the Prefunding Balance is greater than 80% of the "not-at-risk" Funding Target. If the Credit Balances are going to be used as an offset to the Minimum Funding Requirement, the Carryover Balance must be used first prior to the use of the Prefunding Balance.

Credit Balances

Detailed below is the development of the Credit Balances as of the beginning of the 2012 plan year:

1.	Funding Standard Carryover Balance (FSCB)		
	(a)	FSCB as of January 1, 2011 after waivers	$4,088,713
	(b)	FSCB applied to minimum required contribution	4,088,713
	(c)	Remaining FSCB as of January 1, 2011: (a)–(b)	0
	(d)	Rate of return on plan assets during plan year 2011	(0.93%)
	(e)	Interest on (c) : (c)x(d)	0
	(f)	FSCB as of January 1, 2012: (c)+(e)	0
	(g)	Waived FSCB	0
	(h)	FSCB as of January 1, 2012 after waivers: (f)-(g)	$0
2.	Prefunding Balance (PFB)		
	(a)	PFB as of January 1, 2011 after waivers	0
	(b)	PFB applied to minimum required contributions	0
	(c)	Remaining PFB as of January 1, 2011: (a)–(b)	0
	(d)	Rate of return on plan assets during plan year 2011	(0.93%)
	(e)	Interest on (c) : (c)x(d)	0
	(f)	Excess contributions	
		(i) Employer contributions discounted to BOY	2,003,266
		(ii) Preliminary minimum required contribution (MRC)	4,235,017
		(iii) Credit balances applied to MRC	4,088,713
		(iv) Excess: (i)-(ii)+(iii), min zero	1,856,962
		(v) Excess above MRC: (i)-(ii), min zero	0
		(vi) Excess due to use of credit balances: (iv)-(v)	1,856,962
		(vii) Effective rate	6.25%
		(viii) Interest on excess contributions: (v)x(vii)+(vi)x(d)	(17,270)
		(ix) Total available to add to PFB: (iv)+(viii)	1,839,692
		(x) Portion of (ix) added to PFB	1,839,692
	(g)	PFB as of January 1, 2012: (c)+(e)+(f)(x)	1,839,692
	(h)	Waived PFB	0
	(i)	PFB as of January 1, 2012 after waivers: (g)-(h)	$1,839,692

Credit Balances

The following chart details what, if any, portion of the Credit Balances will be waived for 2012:

1. Waived credit balance(s) to avoid benefit restrictions	
(a) Preliminary Adjusted Funding Target Attainment Percentage (AFTAP) before waivers	
(i) Actuarial assets	$62,672,136
(ii) Funding Standard Carryover Balance (FSCB)	0
(iii) Prefunding Balance (PFB)	1,839,692
(iv) Not-at-risk funding liability	75,713,785
(v) Non-HCE annuity purchases in last 2 years	0
(vi) Preliminary AFTAP prior to benefit restriction waivers: ((i)-(ii)-(iii)+(v))/((iv)+(v))	80.34%
(vii) Funded Ratio: (i)/(iv)	82.77%
(b) Transition percentage	100%
(c) Credit balance(s) waived to avoid benefit restrictions, if possible	0
(d) Preliminary AFTAP after benefit restriction waivers	
(i) FSCB after benefit restriction waivers	0
(ii) PFB after benefit restriction waivers	1,839,692
(iii) Preliminary AFTAP after benefit restriction waivers: if (a)(vii)>=(b), ((a)(i)+(a)(v))/((a)(iv)+(a)(v)), else ((a)(i)-(i)-(ii)+(a)(v))/((a)(iv)+(a)(v))	80.34%
2. Waived credit balance(s) to avoid At-Risk status	
(a) Not-at-Risk Funding Target Attainment Percentage (NAR FTAP) before waivers to avoid At-Risk status: ((1)(a)(i)-(1)(d)(i)-(1)(d)(ii))/(1)(a)(iv)	80.34%
(b) At-Risk Funding Target Attainment Percentage (AR FTAP) before waivers to avoid At-Risk status	
(i) At-risk funding liability	85,587,689
(ii) Preliminary AR FTAP: ((1)(a)(i)-(1)(d)(i)-(1)(d)(ii))/(i)	71.07%
(c) Funding Target Benefit percentage for following year	80%
(d) At-Risk in following year? Yes if (a)<(c), (b)(ii)<70%, and >500 participants	No
(e) Credit balance(s) waived to avoid At-Risk status, if possible	0
(f) FTAPs after waivers	
(i) FSCB after waivers	0
(ii) PFB after waivers	1,839,692
(iii) NAR FTAP: ((1)(a)(i)-(i)-(ii))/(1)(a)(iv)	80.34%
(iv) AR FTAP: ((1)(a)(i)-(i)-(ii))/(b)(i)	71.07%

Funding Target

In accordance with Section 430(d) of the Internal Revenue Code, the Funding Target is the present value of all benefits accrued or earned under the plan as of the beginning of the plan year.

The Funding Target for plans that are "not-at-risk" is determined based on the following:

- Interest discounting is mandated through use of a segmented yield curve based on high-quality (AAA,AA,A) corporate bond yields. The three segments include benefits expected to be paid over the next 5 years, between years 5 and 20 and after year 20. The segmented yield curve is based on a 24-month unweighted average and there is an optional 3-year phase-in from the prior discounting basis beginning in 2008. There is also an optional lookback period up to 4 months prior to the beginning of the plan year. Alternatively, plan sponsors may elect to use the full yield curve in lieu of the segmented rates. The full yield curve, however, represents the rates for one month as opposed to the 24-month average.
- The mortality assumption is mandated by the IRS. The table is based upon the RP-2000 Mortality Table with separate tables for annuitant and non-annuitant mortality. Plan sponsors may use either the table with static projections or a table with generational projections. The static projection table projects non-annuitant mortality rates (i.e., prior to benefit commencement) 15 years beyond the valuation year and annuitant mortality rates (i.e. after benefit commencement) 7 years beyond the valuation year. The generational projection table projects mortality rates (annuitant and non-annuitant) to all future years. All projections are performed using Scale AA.
- Assumed utilization of lump sums, if applicable, is reflected.
- All other assumptions that are individually reasonable and, in combination, offer the enrolled actuary's best estimate of anticipated experience.

A plan is considered to be "at-risk" for the current plan year if it meets all of the following requirements:

- The Funding Target Attainment Percentage for the prior plan year is less than 80%
- As of the prior plan year, the Actuarial Value of Assets less any Credit Balances is less than 70% of the "at-risk" Funding Target*
- Total participants in all defined benefit plans sponsored by the employer (or any member of the employer's controlled group) is greater than 500.

*Determined without regard to the loading factor

Funding Target

The Funding Target for a plan that is "at-risk" is determined using the following additional mandated assumptions:

- Participants who will be eligible to elect benefits in the next 10 years will assume to do so at their earliest eligibility date
- Participants are assumed to elect the most-valuable form of benefit
- If a plan has been in "at-risk" status for at least 2 of the 4 preceding plan years, a loading factor is added equal to $700 per participant plus 4% of the "not-at-risk" Funding Target
- In no event shall the "at-risk" Funding Target be less than the "not-at-risk" Funding Target

If a plan is deemed to be "at-risk", the Funding Target for purposes of determining the contribution requirement will be based upon a 5-year "phase-in" of the "at-risk" Funding Target.

Funding Target

Development of Funding Target

1.	More than 500 participants in controlled group in prior year?	Yes
2.	Prior year funding target attainment percentage	
	(a) Not-at-risk liability	80.00%
	(b) At-risk liability	70.22%
3.	Funding target benchmark percentage	80%
4.	At-risk status	
	(a) Current year: If (1) and (2)(a)<(3) and (2)(b)<70%	No
	(b) Year-1	No
	(c) Year-2	No
	(d) Year-3	No
	(e) Year-4	No
	(f) At-risk current year and 2 of preceding 4 years? (If yes, loads apply)	No
5.	Not-at-risk funding liability	
	(a) Funding liability	
	(i) Retirees and benef. receiving payments	47,736,008
	(ii) Terminated vested participants	2,557,691
	(iii) Active participants, vested liability	25,420,086
	(iv) Active participants, total liability	25,420,086
	(v) Total liability: (i)+(ii)+(iv)	75,713,785
	(b) Normal cost before adjustments	0
	(c) Expenses included in Normal Cost	135,000
	(d) Normal cost: (b)+(c)	135,000

Funding Target

6.	At-risk funding liability			
	(a)	At-risk funding liability		
		(i)	Retirees and benef. receiving payments	47,736,008
		(ii)	Terminated vested participants	3,179,488
		(iii)	Active participants, vested liability	34,672,193
		(iv)	Active participants, total liability	34,672,193
		(v)	Total liability: (i)+(ii)+(iv)	85,587,689
	(b)	Number of plan participants		725
	(c)	Per-participant load: $700 x (b)		N/A
	(d)	Liability load: 4% of (5)(a)(v)		N/A
	(e)	At-risk funding target: (a)(v)+(c)+(d), not less than (5)(a)(v)		85,587,689
	(f)	Preliminary at-risk normal cost (adj. for expenses)		135,000
	(g)	Normal cost load: 4% of (5)(b)		N/A
	(h)	At-risk normal cost: (f)+(g), not less than (5)(d)		135,000
7.	Funding target			
	(a)	Number of consecutive years at-risk (max 5)		0
	(b)	Transition percentage: 20% x (a)		0%
	(c)	Funding target: (5)(a)(v)+[(b)x((6)(e)-(5)(a)(v))]		75,713,785
	(d)	Target normal cost: (5)(d)+[(b)x((6)(h)-(5)(d)]		$135,000

Development of Shortfall Amortization Charge

In accordance with Section 430(c) of the Internal Revenue Code, the Shortfall Amortization Charge for any plan year is the aggregate total (not less than zero) of the shortfall amortization installments for such plan year with respect to the shortfall amortization bases for the current plan year and 6 preceding plan years.

In the initial year of application of PPA, the Shortfall Amortization Base is equal to the initial Funding Shortfall. In subsequent years, a Shortfall Amortization Base is created equal to that year's Funding Shortfall less the present value of remaining Shortfall Amortization Installments.

If the Actuarial Value of Assets reduced by the Prefunding Balance is greater than or equal to the Funding Target for a plan year, the plan is exempt from establishing a Shortfall Amortization Base.

In any year in which the Funding Shortfall is zero, all Shortfall Amortization Bases are considered fully amortized.

Development of Shortfall Amortization Charge

1.	1st segment rate			2.06%
	2nd segment rate			5.25%
2.	Funding target			$75,713,785
3.	Adjusted plan assets			
	(a)	Actuarial assets		62,672,136
	(b)	Funding Standard Carryover Balance		0
	(c)	Prefunding Balance (PFB)		1,839,692
	(d)	Adjusted assets: (a)-(b)-(c), not less than 0		60,832,444
4.	Funding shortfall: (2)-(3)(d), not less than 0			14,881,341
5.	Current shortfall amortization installments			
	(a)	Annual installments		
		(i)	Year -1 base (6 years remaining)	2,300,361
		(ii)	Year -2 base (5 years remaining)	0
		(iii)	Year -3 base (4 years remaining)	0
		(iv)	Year -4 base (3 years remaining)	0
		(v)	Year -5 base (2 years remaining)	0
		(vi)	Year -6 base (1 year remaining)	0
	(b)	Total annual installments		2,300,361
	(c)	Present value of annual installments		
		(i)	Year -1 base (6 years remaining)	12,827,861
		(ii)	Year -2 base (5 years remaining)	0
		(iii)	Year -3 base (4 years remaining)	0
		(iv)	Year -4 base (3 years remaining)	0
		(v)	Year -5 base (2 years remaining)	0
		(vi)	Year -6 base (1 year remaining)	0
	(d)	Total present value of annual installments		12,827,861
6.	Exemption from new shortfall amortization base			
	(a)	Target liability percentage		100%
	(b)	Shortfall funding target: (2)x(a)		75,713,785
	(c)	Prefunding Balance if used to reduce the Minimum Required Contribution, else 0		1,839,692
	(d)	Exempt?: [(3)(a)-(c)]>=(b)		No

Development of Shortfall Amortization Charge

7.	Shortfall amortization base			
	(a)	Adjusted funding shortfall:		
		(6)(b)-(3)(d), not less than 0		14,881,341
	(b)	New current year base:		
		(a)-(5)(d), or 0 if exempt		2,053,480
	(c)	New 7-year installment amount		325,324
8.	Shortfall amortization charge:			
	(5)(b)+(7)(c), not less than 0			$2,625,685

Minimum Required Contribution

If the Actuarial Value of Assets reduced by the Credit Balances is less than the Funding Target, then the Minimum Required Contribution for such plan year shall be the sum of the Target Normal Cost and the Shortfall Amortization Charge.

If the Actuarial Value of Assets reduced by the Credit Balances is greater than the Funding Target for a year, then the Minimum Required Contribution for such plan year shall be the Target Normal Cost less the excess of adjusted assets over the Funding Target, but not less than $0.

Quarterly contributions are required if the Funding Shortfall was greater than $0 on the prior valuation date. If applicable, the quarterly contribution is due on or before the 15th day following the end of each quarter. If the quarterly contribution is not made on time, late interest is charged at the Effective Interest Rate plus 5%. If applicable, the quarterly contribution amount is 25% of the lesser of 90% of the current year's minimum required contribution or 100% of the prior year's minimum required contribution.

Contributions can be made up to 8½ months after the end of the plan year for such plan year. All contributions will be discounted back to the valuation date with interest at the Effective Interest Rate, including contributions made after the end of the plan year, to determine whether the Minimum Required Contribution has been satisfied.

The plan's "Effective Interest Rate" for any particular plan year is the single rate that, if used to discount the plan's expected benefit payments, would produce the same Funding Target that the Segment Rates produce. The Effective Interest Rate is the rate at which interest is charged on contributions until the date they are actually made.

If the plan sponsor fails to pay the minimum required contribution by 8½ months after the end of the plan year, the plan sponsor will be required to pay a 10% excise tax under IRC Section 4971 on the amount of any unpaid minimum required contributions. This tax can increase to 100% if the unpaid minimum required contribution is not corrected in subsequent plan years.

Minimum Required Contribution

Summary of Minimum Required Contribution:

1.	Effective interest rate		5.48%
2.	Target normal cost		$135,000
3.	Shortfall amortization charge		2,625,685
4.	Credit for excess assets		
	(a)	Adjusted Assets	60,832,444
	(b)	Funding Target	75,713,785
	(c)	Excess assets: (a)-(b), not less than 0	0
5.	Preliminary minimum required contribution (MRC): (2)+(3)-(4)(c), not less than 0		2,760,685
6.	Credit balances		
	(a)	Eligible to apply against MRC?: Yes if for prior year, assets minus prefunding balance >= 80% of not-at-risk funding target	Yes
	(b)	Funding Standard Carryover Balance (FSCB)	0
	(c)	Elected to apply FSCB against MRC?	No
	(d)	Prefunding Balance (PFB)	1,839,692
	(e)	Elected to apply PFB against MRC?	Yes
	(f)	Balances eligible to apply against MRC: (b)+(d) if eligible and elected	1,839,692
7.	MRC adjusted for credit balances: (5)-(6)(f), not less than 0		920,993
8.	Required quarterly contributions		
	(a)	Quarterlies required?: Yes if prior year funding shortfall	Yes
	(b)	Prior year minimum required contribution	4,235,017
	(c)	Current year MRC: (5)	2,760,685
	(d)	Required annual payment: lesser of (b) and 90% of (c), if applicable	2,484,617
	(e)	Required installment: 25% of (d)	$621,154

Maximum Deductible Contribution Limit

Contributions to a qualified pension plan may be deducted for tax purposes, subject to limitations contained in Section 404(a) of the IRC. If the plan sponsor's taxable year and plan year coincide, the limit for a taxable year is the maximum amount for the coinciding plan year. Otherwise, the limit for the taxable year is the maximum amount with respect to either the plan year that commences or the plan year that ends in the taxable year (or a weighted average of the respective maximum amounts). Once the method for matching plan years to taxable years is established, it may not be changed without prior approval from the IRS.

For a contribution to be deductible in a particular taxable year, the contribution must be made during the taxable year or not later than the time for filing a tax return, which is the 15th day of the third month following the end of the taxable year. A later contribution may be deductible if the IRS has granted an approval to extend the deadline for filing the tax return.

Any contribution in excess of the tax-deductible limit for a taxable year may not be deducted in that year, even though the sponsor may have taken deductions in previous years that were less than the applicable tax-deductible limits. Contributions in excess of the tax-deductible limit may be deducted in succeeding taxable years, but may be subject to a 10% excise tax under Section 4972 of the IRC. The amount (if any) of the excess that may be deducted in a later year may not exceed the tax-deductible limit for that year minus the amount contributed in such later year.

For purposes of this report, the following assumptions have been made:

- The tax year begins January 1, 2012 and ends on December 31, 2012; and
- Historically, the deductible limit has been established based upon the plan year beginning in this tax year.

Since the tax-deductible contribution is dependent upon the relationship between the taxable year and the plan year and previous tax deductions, we recommend that you consult with your tax advisor with respect to the tax treatment of contributions to the plan.

In accordance with IRC Sections 404(a) and 404(o), the maximum deductible contribution for a limitation year shall be the greatest of:

a) Target Normal Cost plus 150% of the Funding Target plus expected benefit increases*
   less the Actuarial Value of Plan Assets
b) Minimum Required Contribution
c) If a plan is not "at-risk", the Target Normal Cost and Funding Target (both determined as if the plan were "at-risk") less the Actuarial Value of Plan Assets.

* Increase in the Funding Target determined including compensation increases after the current plan year (if the plan is pay-related) or including scheduled benefit increases

Maximum Deductible Contribution Limit

Summary of Maximum Tax Deductible Contribution

1.	Funding target			$75,713,785
2.	Target normal cost			135,000
3.	Cushion amount			
	(a)	50% of funding target: 50% of (1)		37,856,893
	(b)	Expected benefit increases		
		(i)	Not-at-risk maximum liability	75,713,785
		(ii)	At-risk maximum liability	85,587,689
		(iii)	Per-participant load	N/A
		(iv)	Liability load: 4% of (i)	N/A
		(v)	At-risk target: (ii)+(iii)+(iv), not less than (i)	85,587,689
		(vi)	Transition percentage	0%
		(vii)	Maximum funding target: (i)+[(vi)x((v)-(i))]	75,713,785
	(c)	Cushion amount: (a)+(b)(vii)-(1)		37,856,893
4.	Actuarial value of assets			62,672,136
5.	Preliminary limit: (1)+(2)+(3)(c)-(4), not less than 0			51,033,542
6.	Maximum if not at-risk			
	(a)	At-risk funding liability		85,587,689
	(b)	At-risk normal cost (incl. expenses)		135,000
	(c)	Maximum if not at-risk: (a)+(b)-(4), not less than 0		23,050,553
7.	Minimum required contribution			986,062
8.	Maximum tax deductible contribution: max of (5),(6) and (7)			$51,033,542

Supplementary Exhibits

PBGC Premiums

ERISA established the Pension Benefit Guaranty Corporation (PBGC), under the jurisdiction of the Department of Labor, to guarantee most vested retirement benefits and certain disability and survivor pensions.

PBGC guarantees are limited. For example, the PBGC does not guarantee benefits that had not vested prior to the plan termination or benefits for which all age, service, or other requirements had not been met at the time the plan terminates. Further, benefit increases and new benefits that have been in place for less than a year are not guaranteed, and those that have been in place for less than 5 years are only partly guaranteed. The maximum guaranteed benefit under a plan terminating in 2012 payable as a single life annuity at age 65, is $4,653 per month. Lower guarantees apply if benefits begin before age 65 or if survivor benefits are payable. Benefits other than pension benefits, such as health insurance, life insurance, death benefits, vacation pay, or severance pay are not guaranteed, and the PBGC does not pay lump sums exceeding $5,000 (even if available under the plan prior to termination).

Plans covered by the PBGC insurance program must file an annual premium filing each year with the PBGC via their online myPAA system within 9 1/2 months after the beginning of the plan year. Plans covering more than 500 participants must also file an Estimated Premium Filing through myPAA by the end of the second month of the plan year. All plans must pay a basic premium of $35 times the number of participants as of the end of the previous plan year, and plans with unfunded vested benefits must also pay an additional risk-related premium to the PBGC.

Development of PBGC Premium for 2012:

1.	Flat-rate premium			
	(a)	National Average Wage (NAW), 2 years prior		$41,673.83
	(b)	Flat-rate: $30 x (a)/$35,648.55 (2004 NAW), rounded		35
	(c)	Prior year applicable flat premium rate		35
	(d)	Participant count (excludes 2 Alternate Payees)		723
	(e)	Flat-rate premium: [max of (b) and (c)] x (d)		$25,305
2.	Variable-rate premium			
	(a)	PBGC funding target		
		(i)	Not-at-risk PBGC liability	75,713,785
		(ii)	At-risk PBGC liability	85,587,689
		(iii)	Per-participant load	N/A
		(iv)	Liability load: 4% x (i)	N/A
		(v)	At-risk PBGC target: (ii)+(iii)+(iv), not less than (i)	85,587,689
		(vi)	Transition percentage	0%
		(vii)	PBGC funding target: (i)+[(vi)x((v)-(i))]	75,713,785
	(b)	Market value of plan assets		60,998,166
	(c)	Unfunded vested benefits: (a)(vii)-(b), min zero, rounded up to $1,000		14,716,000
	(d)	Variable-rate premium: 0.009x(c), or zero if exempt		132,444
3.	PBGC Premium: (1)(e)+(2)(d)			$157,749

ASC 960 Information (previously known as FAS 35)

The information in this exhibit is intended to satisfy the requirements under Accounting Standards Codification Topic 960 (ASC 960) with regard to the financials of the plan. It is not intended to meet the requirements of Accounting Standards Codification Topic 715 (ASC 715) (previously known as FAS 87) which are the financials of the plan sponsor. If applicable, information for ASC 715 is presented in a separate report.

The Present Value of Accumulated Plan Benefits has been calculated using the Actuarial Assumptions Supplementary Exhibit. No future increases in salaries, Social Security benefits, or benefit service were assumed.

1.	Actuarial present value of accrued plan benefits			
	(a)	Actuarial present value of vested benefits		
		(i)	Participants currently receiving benefits	$39,226,439
		(ii)	Participants entitled to deferred benefits	1,867,189
		(iii)	Other participants	18,812,871
		(iv)	Total	59,906,499
	(b)	Actuarial present value of nonvested benefits		0
	(c)	Actuarial present value of accrued plan benefits: (a)(iv)+(b)		59,906,499
2.	Market value of assets (includes receivables)*			61,060,821
3.	Unfunded PVAB (Surplus assets): (1)(c)-(2)			(1,154,322)
4.	Funded percentage: (2)/(1)(c)			101.93%
5.	Changes in present value			
	(a)	PVAB as of January 1, 2011		59,140,096
	(b)	Changes due to:		
		(i)	Decrease in discount period at 7.75%	4,361,912
		(ii)	Benefits paid	(5,823,366)
		(iii)	Assumption changes**	1,049,669
		(iv)	Plan amendments	0
		(v)	Additional benefits earned, including experience gains and losses	1,178,188
		(vi)	Total change	766,403
	(c)	PVAB as of January 1, 2012: (a)+(b)(vi)		$59,906,499

**Receivables under ASC 960 are not discounted back to the valuation date with interest.*
*** Mortality table was changed to IRS 2012 Static Mortality Table (from RP 2000 Mortality Table projected to 2010).*

Participant Data

	January 1, 2012	January 1, 2011
Active Participants		
Number	270	299
Average age	46.92	46.04
Average past service	18.40	17.45
Average future service	13.90	14.44
Covered payroll*:		
- Total	N/A	$20,690,681
- Average	N/A	$69,200
Terminated Vested Participants		
Number	49	41
Average age	46.39	49.17
Annual benefits:		
- Total	$409,010	$371,263
- Average	$8,347	$9,055
Retirees and Beneficiaries		
Number	406	408
Average age	74.51	74.07
Annual benefits:		
- Total	$4,479,258	$4,430,612
- Average	$11,033	$10,859
Total Participant Count	725	748

* Covered payroll is an estimate of current year earnings limited by IRC Section 401(a)(17) and excluding participants that are assumed to fully retire within the year.

Participant Data

Reconciliation of Participant Data:

	Active	Terminated Vested	Retirees and Beneficiaries	Total
As of January 1, 2011	299	41	408	748
New Hires	0	0	0	0
Rehires	0	0	0	0
Nonvested termination	(2)	0	0	(2)
Vested termination	(14)	14	0	0
Lump sum cashout	(7)	(2)	0	(9)
Retirement	(6)	(4)	10	0
Disability	0	0	0	0
Deceased	0	0	(18)	(18)
New beneficiaries	0	0	6	6
Miscellaneous	0	0	0	0
As of January 1, 2012*	270	49	406	725

**Includes 2 Alternate Payees under Qualified Domestic Relations Orders*

Distribution of Inactive Benefits Inforce:

Attained Age	Retired, Survivor, and Disabled		Vested	
	No.	Avg. Annuities	No.	Avg. Annuities
Under 30	0	$0	2	$4,077
30 to 34	0	0	5	6,257
35 to 39	0	0	7	6,487
40 to 44	0	0	7	5,543
45 to 49	2	2,806	8	5,097
50 to 54	0	0	12	11,851
55 to 59	9	12,054	7	12,076
60 to 64	59	16,647	1	17,844
65 to 69	69	14,869	0	0
70 to 74	63	12,041	0	0
75 to 79	90	9,449	0	0
80 to 84	70	7,768	0	0
85 to 89	29	5,888	0	0
90 to 94	11	2,244	0	0
95 & up	4	2,204	0	0
Total	406	$11,033	49	$8,347

Active Participant Data

Years of service

	Under 1	1 to 4	5 to 9	10 to 14	15 to 19	20 to 24	25 to 29	30 to 34	35 to 39	40 & up	Total
Attained Age	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
Under 25		2									2
25 to 29		1	9								10
30 to 34		1	16	9							26
35 to 39		2	9	21	1						33
40 to 44			10	10	11	5					36
45 to 49			8	13	12	9	2				44
50 to 54			2	13	10	11	5	20			61
55 to 59			2	1	7	3	6	15	7		41
60 to 64					1	2		3	8	2	16
65 to 69						1					1
70 & up											
Total		6	56	67	42	31	13	38	15	2	270

Actuarial Cost Method

Funding Target / Target Normal Cost

An Actuarial Cost Method is an allocation of the expected cost of a pension plan on a year-by-year basis. The primary objective of an Actuarial Cost Method is to accumulate enough assets prior to each participant's retirement to provide the promised pension benefits.

The Pension Protection Act of 2006 (PPA) mandates the use of the Traditional Unit Credit Actuarial Cost Method. Under this method, the accrued benefit is estimated based upon service and, if applicable, earnings as of the valuation date. The Funding Target is equal to the actuarial present value of all accrued benefits as of the valuation date. The Target Normal Cost is the actuarial present value, as of the valuation date, of the expected increases in projected accrued benefit attributable to service expected to be completed during the plan year (i.e. if applicable, one year's salary growth is reflected in the determination of Target Normal Cost).

For tax deduction purposes, the Funding Target may reflect the value of future pay increases on accrued benefits, if applicable.

PPA Discounting Method

The plan sponsor is responsible for making the following decisions with regard to the discounting method:

- Full yield-curve spot rates or a segmented yield-curve of 24-month average rates of corporate bond rates
- If the segmented yield curve is used, the rates as of the month of the valuation may be used or as of a lookback month up to 4 months prior to the valuation date (the full yield curve must use the rates as of the month of the valuation starting in 2010)

For purposes of this valuation, the following discounting method was used and is assumed to be approved by the plan sponsor:

- Rates through the month of August preceding the valuation date
- Segment Rates

Asset Valuation Method

The Plan Assets for purposes of this Actuarial Valuation are valued under the asset averaging method, including, if applicable, discounted receivable contributions. The value of plan assets is set equal to the average of the fair market value of assets on the valuation date and the adjusted fair market value of assets (including expected earnings) determined for the two earlier annual determination dates. Expected earnings are calculated using the third segment rate of the segmented yield-curve in effect at the beginning of each valuation year. The resulting average value must be constrained so that it falls between 90 and 110 percent of the fair market value of assets on the valuation date.

Actuarial Assumptions

Actuarial Assumptions

Actuarial assumptions are estimates of the occurrence of future events affecting the costs of the plan. The assumptions have been chosen to anticipate the long-term experience of the plan. The enrolled actuary will certify the reasonableness of these assumptions, as required by ERISA.

The actuarial assumptions used to compute this year's plan costs are as follows:

Economic Assumptions

PPA Segment Rates	Funding Target	PBGC
- Segment 1: Up to Year 5	2.06%	2.06%
- Segment 2: Years 5-20	5.25%	5.25%
- Segment 3: Years 20+	6.32%	6.32%

ASC 960 Assumed Investment Return 7.75%

Annual rates of increase:

- Salaries N/A
- Future Social Security wage bases N/A
- Statutory limits on compensation and benefits N/A

Demographic Assumptions

Mortality:

- Funding Target / PBGC IRS 2012 Static Mortality Table
- ASC 960 IRS 2012 Static Mortality Table

Terminations: Rates vary by age and sex. Illustrative annual rates of withdrawal are as follows:

Age	Male	Female
25	7.18%	15.05%
40	1.57%	2.14%
55	0.29%	0.42%

Disability: None

Actuarial Assumptions

Assumed Retirement Age (Actives):	Rates varying by age. Representative rates:

Age	Rate
55	3%
56-58	1%
59	3%
60-61	10%
62	25%
63-64	20%
65	100%

Assumed Retirement Age (Vested Terms): Age 62

Benefit Commencement date:

Preretirement Death Benefit: Surviving spouse benefits commence at the later of the death of the active participant or the date the participant would have attained age 55.

Deferred Vested Benefit: Upon termination of employment (if lump sum) or at early retirement date (if annuity)

Retirement Benefit: Upon termination of employment

Form of Payment: Life annuity. Retirement benefit loaded 6.4% for subsidized option factor. Withdrawal benefits are assumed to be paid as a lump sum for participants hired on or before January 1, 2004, otherwise they are assumed to be paid as a life annuity commencing at the participant's early retirement date.

Miscellaneous Assumptions

Percent Married: 80%

Spouse Age: Wife three years younger than husband

Administrative Expenses: $135,000 (Prior year's administrative expenses rounded up to nearest $5,000)

Summary of Plan Provisions

Summary of Plan Provisions

Effective Dates:	Original Plan: January 1, 1955	
Employee:	All bargaining employees of Montana-Dakota Utilities Co.	
Eligibility Requirements:	Age:	21 for employees hired on or after 1/1/85; if hired prior to 1/1/04, no service required.
	Service:	One Year of Service
	Maximum Age:	None
	Plan eligibility is frozen for employees hired after June 30, 2007.	
Plan Entry Date:	An eligible employee will enter the plan on the first day of the month following completion of the eligibility requirements. No employee hired after June 30, 2007 may enter the plan.	
Year of Service:	12-consecutive month computation period in which an employee is credited with 1,000 or more hours of service.	
	Eligibility:	Computation period commences on employee's date of hire.
	Vesting:	One year for each 1,000-hour calendar year of employment by MDU Resources Group, Inc., or a related company.
Credited Service:	Service following age 21 with a maximum of 35 years; full year if 2,080 hours in a year, prorate for less than 2,080 hours. Except for years of hire and termination, exclude years with less than 1,000 hours. Credited Service is frozen as of June 30, 2011.	

Summary of Plan Provisions

Normal Retirement Date (NRD):	Last day of the month in which 65th birthday occurs
Basic Monthly Compensation:	Basic rate of regular compensation as of the first day of the first payroll period of the month, including Section 125 and 401(k) deferrals. Special rules for commissioned and part-time employees.
Final Average Monthly Compensation:	The average of the highest 60 consecutive basic monthly compensation rates in the last 120 months of employment. Compensation earned after June 30, 2011 is not taken into consideration.
Normal Retirement Benefit:	Monthly pension benefit determined as of NRD. Effective June 30, 2011, benefit accruals are frozen.
Normal Form of Benefit:	Single: Life Annuity Married: 50% Joint and Survivor
Early Retirement Eligibility:	Retire before NRD and on or after both attaining age 55 and completing five years of vesting service.
Early Retirement Benefit:	Monthly pension benefit determined as of early retirement date. For retirements prior to age 60, the benefit is reduced .25% for each month that commencement of payment precedes age 60.
Deferred Vested Eligibility:	Terminate for reason other than death or retirement after completing five years of vesting service.
Deferred Vested Benefit:	-Monthly pension benefit determined as of date of termination payable at NRD -Monthly pension benefit determined as of termination date, reduced .25% for each month that commencement of payments precedes age 62. -Participants hired before January 1, 2004 who are not eligible for early retirement may elect a single sum payment equal to the actuarial

Summary of Plan Provisions

Deferred Vested Benefit:	equivalent of the benefit payable at age 55, based on the interest and mortality assumptions specified under IRC 417(e)(3).
Pre-Retirement Spousal Death Benefit:	If death while active employee after age 45, 50% of monthly pension benefit at date of death reduced for early payment to employee's date of death. If death while active employee before age 45 or after termination, 50% of monthly pension benefit at date of death reduced for the 50% joint and survivor annuity option, payable as early as the employee's 55th birthday.
Monthly Pension Benefit:	The greater of total Pension Credits and the Final Pay Benefit, with a minimum benefit equal to the pension benefit as of December 31 preceding termination. A modified formula is applied for participants who had annualized basic compensation during a plan year prior to 1994 in excess of $150,000.
Pension Credits:	For employees who began participation and attained age 40 on or before February 28, 1990, a pension credit for each year after December 31, 1988 equal to 1.65% of the first $1,100 of basic monthly compensation as of the first day of the first payroll period of the plan year plus 2% of the excess; proportionately reduced for less than 2,080 hours of service. Different formulas applied for service prior to 1989.
Final Pay Benefit:	1.1% of final average monthly compensation up to the integration level plus 1.45% of the final average monthly compensation in excess of the integration level, times years of credited service (maximum of 35 years).
Integration Level:	For plan years after 1989, the integration level equals $1,400 multiplied by a fraction equal to the current year Taxable Wage Base divided by $48,000. Integration Level is frozen as of June 30, 2011.

MDU Resources Group, Inc. Pension Plan for Collective Bargaining Unit Employees

Determination of the
Net Periodic Pension Cost
for the Fiscal Year Ending December 31, 2012

Prepared by:

New York Life Retirement Plan Services
690 Canton Street
Westwood, MA 02090

TABLE OF CONTENTS

I. INTRODUCTION

The purpose of this report is to present certain financial information in accordance with FASB Accounting Standards Codification (ASC) 715-30.

Actuarial computations under ASC 715-30 are for purposes of fulfilling employer accounting requirements. The calculations reported herein have been made on a basis consistent with our understanding of the applicable accounting standards. Determinations for purposes other than meeting employer financial accounting requirements may be significantly different from the results reported herein. Accordingly, additional determinations are needed for other purposes, such as judging benefit security at termination or adequacy of funding for an ongoing plan.

In preparing the results presented in this report, we have relied upon information provided to us regarding plan provisions, participant data and plan assets. We have reviewed this information for overall reasonableness, but we have not audited this information. Plan provisions and participant data are summarized in the January 1, 2012 actuarial valuation report. In addition, the actuarial assumptions as to weighted-average discount rate, rate of increase in compensation levels, and expected long-term rate of return on plan assets described in Section IV of this report were supported by the plan sponsor and its auditors. In the actuary's professional opinion, the assumptions reflected in this report are reasonable.

The Net Periodic Pension Cost has been determined to be ($317,409) for the Fiscal Year Ending December 31, 2012. The assumptions used to determine the Net Periodic Pension Cost include a discount rate of 4.25% and are illustrated in Section IV.

The undersigned meets the Qualification Standards of the American Academy of Actuaries to render the actuarial opinion contained herein.

May 7, 2012 — Mark B Magnus

Date — Mark B. Magnus, A.S.A., Enrolled Actuary

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II. DETERMINATION OF NET PERIODIC PENSION COST FISCAL YEAR ENDING DECEMBER 31, 2012

1. Employer Service Cost	
a) Amount at beginning of year	$0
b) Interest	0
c) Total service cost (a)+(b)	0
2. Interest Cost	
a) Projected Benefit Obligation (PBO) at beginning of year	87,884,294
b) Expected distributions	4,745,848
c) Average expected PBO	85,313,626
d) Discount rate	4.25%
e) Interest cost (c)x(d)	3,625,829
3. Expected return on assets	
a) Market-related value at beginning of year	64,491,447
b) Expected distributions	4,745,848
c) Total expected contributions	2,191,126
d) Expected expenses	0
e) Average market-related value of assets	63,051,624
f) Long term rate of return	7.75%
g) Expected return (e)x(f)	4,886,501
4. Amortization of Transition (Asset) or Obligation	0
- Attachment A	
5. Amortization of Prior Service Cost	0
- Attachment A	
6. Amortization of (Gain) or Loss	943,263
-Attachment B-2, end of year	
7. Net Periodic Pension Cost	**($317,409)**
(1c)+(2e)-(3g)+(4)+(5)+(6)	

III. ATTACHMENTS - Attachment A

AMORTIZATION OF TRANSITION OBLIGATION (ASSET) AND PRIOR SERVICE COST

Summary for Fiscal Year Ending 12/31/12

	Date Established	Beginning of Year Balance	Amount Recognized	End of Year Balance
Transition Obligation/(Asset)	N/A	N/A	N/A	N/A
Prior Service Cost		0	0	0
Total		$0	$0	$0

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III. ATTACHMENTS - Attachment B-1

CALCULATION OF (GAIN) OR LOSS

1. Net actuarial (gain) or loss from December 31, 2011 disclosure	$36,293,895
2. PBO from December 31, 2011 disclosure	87,874,873
3. Fair value of plan assets from December 31, 2011 disclosure	58,869,695
4. PBO as of January 1, 2012	87,884,294
5. Fair value of plan assets as of January 1, 2012	58,869,695
6. (Gain)/Loss (1)-(2)+(3)+(4)-(5)	$36,303,316

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III. ATTACHMENTS - Attachment B-2

(GAIN) OR LOSS SUBJECT TO AMORTIZATION

	Fiscal Year Ending December 31, 2012
1. (Gain)/loss-Attachment B-1,line 6	$36,303,316
2. PBO - Attachment B-1,line 4	87,884,294
3. (Gain) or loss not reflected in market-related value	
a) Fair value	58,869,695
b) Market-related value	64,491,447
c) Amount not reflected in b) (a)-(b)	(5,621,752)
4. (Gain) or loss subject to amortization (1)+(3c)	30,681,564
5. Greater of (2) or (3b)	87,884,294
6. 10% of (5)	8,788,429
7. (Gain) or loss subject to amortization [excess of (4) over (6)]	21,893,135
8. Average future life expectancy of plan participants	23.21
9. Amortization amount (7)/(8)	$943,263

IV. ACTUARIAL ASSUMPTIONS

For determining the Net Periodic Pension Cost
for the Fiscal Year Ending December 31, 2012

Measurement Date:	December 31, 2011
Discount Rate:	4.25%
Annual Rate of Increase in Compensation:	N/A
Expected Long Term Rate of Return on Plan Assets:	7.75%
Mortality:	2012 IRS Static Mortality Table

Turnover:

Rates vary by age and sex.
Representative rates:

Age	Male	Female
25	7.2%	15.1%
40	1.6%	2.1%
55	0.3%	0.4%

Taxable Wage Base Increase:	N/A
Cost of Living Increase:	3.25%
Expenses:	None

V. DEFINITIONS

Discount Rate. This Discount Rate reflects the rate used to adjust for the time value of money. It should reflect the rates at which the pension benefits could effectively be settled.

Expected Long Term Rate of Return on Plan Assets. This is an assumption concerning the rate of return on plan assets. The product of the Expected Long Term Rate of Return on Plan Assets and the plan's assets is applied as a credit towards the current year's net periodic pension cost.

Gain or Loss. Gains and Losses measure the difference between actual experience and that assumed. Under US GAAP the impact of changes in actuarial assumptions is also measured as a Gain or Loss.

Fair Value of Plan Assets. The market value of assets.

Measurement Date. The date at which plan assets and obligations are measured.

Net Transition (Asset) Obligation. The excess(deficit) of the PBO over the Fair Value of ets (adjusted for previously recognized accrued or prepaid pension costs) as of the date of initial compliance with US GAAP.

Prior Service Cost. This is the amount of change in the Projected Benefit Obligation due to amendments to the plan.

Projected Benefit Obligation (PBO). This represents the present value of pension benefits based on service earned to date and expected future increases in salary.

V. DEFINITIONS

Net Periodic Pension Cost. This represents the pension expense for the fiscal year. The Net Periodic Pension Cost consists of the following:

(1) **Service Cost**. The Service Cost represents the value of benefits earned each year. This is comparable to the normal cost used in determining funding levels under ERISA.

(2) **Interest Cost**. The Interest Cost equals the product of the Discount Rate and the Projected Benefit Obligation adjusted for benefit payments expected during the year.

(3) **Return on Plan Assets**. The Return on Plan Assets is the product of the Expected Long Term Rate of Return on Plan Assets and the Fair Value of Plan Assets adjusted for contributions and benefit payments expected during the year. This component represents a credit which reduces the Net Periodic Pension Cost for the year.

(4) **Amortization of Unrecognized Gain or Loss**. Amortization payments are included in the Net Periodic Pension Cost to systematically recognize cumulative Gains and Losses that are unrecognized as they occur.

(5) **Amortization of Unrecognized Prior Service Cost**. This is the amortization of increases or decreases in the Projected Benefit Obligation due to amendments to the plan.

(6) **Amortization of Unrecognized Net Obligation or Asset at Transition**. This represents the amortization of the Net Obligation(Asset) that existed at transition in the initial year of US GAAP compliance.

Projected Unit Credit Cost Method. Under this method, the benefit for each participant is projected to retirement and a pro-rata part of this benefit is then assigned to each year of service from hire date to the participant's retirement date. The Service Cost for each participant is the present value of the pro-rata benefit assigned to the current year. The Service Cost for the Fiscal Year is equal to the sum of the individual Service Costs for all participants. This method is required to be used in all calculations under US GAAP.

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