U. S. Steel Canada Inc.

Retirement Plan for USW Local 8782 Members at Lake Erie Works

Registration #0698761

Actuarial Valuation Report as of
December 31, 2015

April 2016

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1. Introduction

This report has been prepared for and at the request of U. S. Steel Canada Inc. (the "Company") and presents the key results of the actuarial valuation of the U. S. Steel Canada Inc. Retirement Plan for USW Local 8782 Members at Lake Erie Works (the "Plan") as of December 31, 2015. The previous valuation of the Plan was prepared by Buck Consultants as of December 31, 2014.

1.1 Primary Purpose

The primary purpose of this actuarial valuation report is to comply with regulatory filing requirements and more specifically:

- To determine the financial position of the Plan on a going concern basis using the actuarial cost method;
- To determine the financial position of the Plan on a solvency/hypothetical wind up basis using the present value of accrued benefits;
- To provide minimum and maximum funding requirements for 2016; and
- To form part of the government filings, as required by the Financial Services Commission of Ontario ("FSCO") and Canada Revenue Agency ("CRA") for statutory and tax purposes.

These tasks are conducted in accordance with the Canadian Institute of Actuaries Standards of Practice for Pension Plans ("Standards of Practice") and all relevant regulations.

1.2 Changes Since the Last Valuation

Effective December, 31, 2015, the Special Agreement in conjunction with the 2006 Plan of Arrangement and Reorganization under the Companies' Creditors Arrangement Act (CCAA) ends. This agreement provided minimum funding requirements for USSC's four main pension plans:

- The U. S. Steel Canada Inc. Retirement Plan for USW Local 1005 Members at Hamilton Works (the "Hamilton Hourly Plan") Registration #0354878.
- The U. S. Steel Canada Inc. Retirement Plan for USW Local 8782 Members at Lake Erie Works, (the "Lake Erie Hourly Plan") Registration #0698761.
- The U. S. Steel Canada Inc. Retirement Plan for Salaried Employees at Hamilton Works, (the "Hamilton Salaried Plan") Registration #0338509.
- The U. S. Steel Canada Inc. Retirement Plan for Salaried Employees at Lake Erie Works, (the "Lake Erie Salaried Plan") Registration #0698753.

Key features of the funding arrangement were as follows:

1. The election under Section 5.1 of the regulations to the *Ontario Pension Benefits Act* which exempts the plans from funding on a solvency basis, no longer applies to the plans;

2. Contributions otherwise required under the general regulations to the *Ontario Pension Benefits Act* are replaced by the following provisions for future years,

   a. Level contributions, payable monthly, are allocated between the four plans:

2008 – 2010	$65.0 million per annum
2011 – 2015	$70.0 million per annum

This is the last report required under the Agreement.

On September 16, 2014, U. S. Steel Canada Inc. filed for the creditors' protection under the Companies' Creditors Arrangement Act (CCAA). On October 9, 2015, pursuant to a Cash Conservation and Business Preservation Plan, the Court ordered the company to pay only normal cost contributions into its pension trusts from and after September 29, 2015. U. S. Steel was required to provide USSC with the funds for the purpose of payment of pension contributions, under the Stelco Regulation, between September 1, 2015 and December 31, 2015, under and in respect of the parental guarantee by U. S. Steel of such pension payments relating to Past Service costs. No contributions remained outstanding as of December 31, 2015.

As of the filing date of this report, the court order has remained in effect. This report does not consider any future potential events resulting from the filing under CCAA.

1.3 Terms of Engagement

The terms of engagement that are material are as follows:

- To consider all benefits of which we are aware, including contingent benefits, payable under the pension plan;
- To use the market value of assets on a going concern basis;
- To use the market value of assets on a solvency basis;
- To include considerations such as the security of benefits and related provisions for adverse deviations;
- To be prepared on the basis that the Plan Administrator is not deferring the commencement of new solvency special payments determined in this report for 12 months;
- To exclude consent benefits from the solvency liabilities;

The terms of our engagement are in accordance with the Standards of Practice, the funding policy of the Plan and all relevant regulations.

1.4 Limitations

It should be noted that the results of this valuation are presented at a single point in time. Both the going concern and solvency funded positions of the Plan can change with time and the reader should bear that in mind when using this report as a guide for the current funded positions, now or in the future.

The solvency valuation is for the most part based on prescribed assumptions, whereas the going concern valuation is based on assumptions made by the Plan actuary, subject to discussions with the Plan sponsor. Those assumptions lie within a reasonable range of potential outcomes.

By necessity, we make a single estimate and this should not be taken to imply that it is the only possible outcome.

1.5 Third Party Disclaimer

This report is intended for U. S. Steel Canada Inc. and it should not be shared with others (unless required by pension legislation) without our consent. Please note that we take no responsibility for any actions that may be taken by third parties based upon the contents of this report.

1.6 Company Direction

To the best of the Company's knowledge, there have been no prior partial wind ups involving Ontario members [not yet completed] where there was surplus attributed to the partial wind up group. This report has been prepared assuming no historical partial wind ups will be declared or ordered.

It is the Company's position that the employer is entitled to any existing actuarial surplus and may be used toward employer contribution requirements as permitted by applicable pension legislation. This report does not address surplus ownership in the event of full wind up of the Plan.

1.7 Subsequent Events

In December 2014, the Canadian Institute of Actuaries released an Initial Communication of a Promulgation of the Mortality Table Referenced in the Standards of Practice for Pension Plans. The Initial Communication proposed the adoption of the 2014 Canadian Pension Mortality Table (CPM2014) combined with the mortality improvement scale CPM Improvement Scale B (CPM-B) for pension commuted value calculations on and after October 1, 2015. Once promulgated, the CPM2014 combined mortality table will be used for solvency and wind up valuations on and after October 1, 2015. The results presented in this report do consider the financial impact of the adoption of the CPM2014 combined mortality table.

Other than the above mentioned events, we are unaware of any other significant events that would have a material impact on the results of this report.

1.8 Confirmation

We confirm that this report complies with the Canadian Institute of Actuaries Standards of Practice, the Pension Benefits Act (Ontario), and the Income Tax Act (Canada).

2. Asset Information

2.1 Source of Information

For the purposes of this valuation, we have relied on the audited pension fund financial statements for 2015 as provided by KPMG LLP.

2.2 Asset Reconciliation (Market Value)

The table below reconciles the change in the market value of assets from the last valuation of the Plan to the market value of assets as of December 31, 2015.

Asset reconciliation	2015
Market value of assets at beginning of period	$ 260,593,000
Employer contributions	9,587,000
Employee contributions	0
Benefit payments	(19,901,000)
Investment earnings net of investment expenses	13,116,000
Fees and expenses	0
Market value of assets at end of period	$ 263,395,000
Plus net outstanding amounts	0
Less benefits payable	(0)
Less fees and expenses payable	(0)
Market value of assets at end of period	$ 263,395,000

2.3 Asset Allocation (Mix)

The asset mix of the Plan as of December 31, 2015 was allocated between the following major investment categories:

Asset class		Amount	Actual asset mix	Investment policy target
Equities	$	169,027,000	64%	65%
Fixed income		90,580,000	34%	35%
Investment income receivable		1,899,000	1%	0%
Cash equivalent		1,889,000	1%	0%
Total invested assets as of December 31, 2015	$	263,395,000	100%	100%

2.4 Value of Assets

The value of assets used for the going concern valuation is the market value value of assets. The value of assets used for the solvency valuation is the market value of assets. There was no change in the going concern asset valuation method since the last actuarial valuation

There was no change in the solvency asset valuation method since the last actuarial valuation.

2.5 Performance of the Fund

The annual net rates of return (investment income and capital appreciation, less investment expenses) earned on the market value of the assets in the past five years were as follows:

Year	Net return on market value
2015	5.1 %
2014	14.1 %
2013	16.7 %
2012	10.2 %
2011	6.1 %
Five-year average	10.3 %

The rate of return calculation assumes that all cash flow items are uniformly distributed throughout the year.

2.6 Plan Asset Data Tests

The tests performed in review of the plan asset data include the following:

- ✓ Comparison of the opening market value of assets disclosed in the auditors' report with the ending values disclosed in the most recent actuarial valuation report;
- ✓ Comparison of contributions, benefits and expenses paid according to the auditors' report with expected contributions, benefits and expenses specified in the most recent actuarial valuation report;
- ✓ Comparison of pension payments made out of the fund with the total monthly pensions found in the retiree data, taking into account new retirees and deaths during the inter-valuation period;
- ✓ Comparison of lump sums paid out of the fund with payments made to members who received a commuted value during the inter-valuation period according to the pension administration records; and
- ✓ Consideration of all important changes in the composition of the funds invested.

Any anomalies or discrepancies discovered through testing, if any, have been resolved. The asset data was reviewed for reasonableness and consistency and found to be sufficient and reliable for the purposes of the valuation.

3. Going Concern Valuation

The financial position of the Plan on a going concern basis is determined by comparing the market value of assets to the going concern liabilities, in respect of accrued benefits, assuming the Plan will continue indefinitely.

Details of the actuarial methods and assumptions are set out in Appendix A to this Report.

If the going concern liabilities exceed the market value of assets, the shortfall, known as the going concern unfunded liability, must be amortized and paid for over no more than 15 years.

3.1 Financial Position

The financial positions of the Plan on a going concern basis as of December 31, 2014 and December 31, 2015 are:

Financial position	December 31, 2015	December 31, 2014
Market value of assets	$ 263,395,000	$ 260,593,000
Going concern liabilities		
Active members	$ 45,292,000	$ 43,189,000
Transferred members	3,849,000	3,720,000
Deferred vested members	1,274,000	1,480,000
Disabled pensioners	2,552,000	2,646,000
Retired members and beneficiaries	214,455,000	209,175,000
Total going concern liabilities	$ 267,422,000	$ 260,210,000
Going concern surplus/(unfunded liability)	$ (4,027,000)	$ 383,000

3.2 Reconciliation of the Going Concern Surplus/(Unfunded Liability)

The following table is a reconciliation of the going concern surplus/(unfunded liability) from the last valuation to this valuation. An explanation of the major items is provided in Section 3.3.

Reconciliation of financial position from previous valuation		
Going concern surplus/(unfunded liability) at beginning of period		$ 383,000
Interest on going concern surplus/(unfunded liability)		23,000
Amount of:		
Special payments plus interest		7,982,000
Expected going concern surplus/(unfunded liability)		$ 8,388,000
Experience gains/(losses) due to:		
Investments	$ (2,215,000)	
Salaries	0	
Termination	(28,000)	
Retirement	634,000	
Mortality	(379,000)	
Other experience	336,000	
Total experience gains/(losses)		(1,652,000)
Change in actuarial assumptions		(10,763,000)
Going concern surplus/(unfunded liability) at end of period		$ (4,027,000)

3.3 Explanation of Reconciliation of Going Concern Surplus/(Unfunded Liability) Items

The following section briefly describes the major gain/loss items that occurred since the prior valuation.

a. Investment experience

The Plan's actual return on the market value of assets of 5.1% was lower than the expected investment return assumption of 6.0% for the inter-valuation period. This resulted in a loss of $2,215,000.

b. Other sources

There are a number of other sources of gain/loss items such as retirement, mortality, termination and the like, and together they have resulted in a gain of $563,000 as of the valuation date.

c. Change in actuarial assumptions

Since the last valuation, the discount rate assumptions were changed. This resulted in an increase in going concern liabilities of $10,763,000 and an increase to the normal cost of $132,000 for 2016.

3.4 Normal Cost

The following table shows the normal cost required to fund the benefits accruing in the year following the valuation.

	December 31, 2015	December 31, 2014
Total normal cost	$1,907,000	$1,834,000
Administrative expenses	0	0
Member contributions	0	0
Employer normal cost	$1,907,000	$1,834,000

3.5 Schedule of Final Going Concern Special Payments

The excess of the going concern unfunded liability over the present value of the going concern special payments of the Plan as of December 31, 2015 is nil. The following table shows the final schedule of annual going concern special payments required to fund the going concern unfunded liability of the Plan as of the valuation date.

Original effective date	Beginning of amortization period	Annual special payment	Present value of remaining payments	End of amortization period
12/31/2015	12/31/2015	$ 392,200	$ 4,027,000	12/31/2030
Total		$ 392,200	$ 4,027,000	

4. Solvency Valuation

The Pension Benefits Act (Ontario) requires a measure of solvency based on assumptions, which are prescribed by the Act, to assess the financial status of the Plan in the event of Plan termination and wind up.

4.1 Financial Position

The financial position of the Plan on a solvency basis is determined by comparing the solvency assets to the solvency liabilities (the actuarial present value of benefits, as determined by the Act, earned for service prior to the valuation date, calculated as if the pension plan were wound up on that date).

The financial positions of the Plan on a solvency basis as of December 31, 2014 and December 31, 2015 are:

Financial position	December 31, 2015	December 31, 2014
Solvency assets		
Market value of assets	$ 263,395,000	$ 260,593,000
Windup expenses	(644,000)	(390,000)
Total solvency assets	$ 262,751,000	$ 260,203,000
Solvency liabilities		
Active members	$ 89,456,000	$ 90,221,000
Transferred members	7,695,000	8,061,000
Deferred vested members	2,321,000	2,604,000
Disabled pensioners	4,035,000	4,389,000
Retired members and beneficiaries	291,023,000	295,037,000
Total solvency liabilities	$ 394,530,000	$ 400,312,000
Solvency surplus/(unfunded liability)	$ (131,779,000)	$ (140,109,000)

If the Plan were to be wound up on the valuation date, the wind up liabilities would be equal to the solvency liabilities plus liabilities for certain employees who are not yet eligible, but who on the date of the valuation would have grown into eligibility for special early retirement benefits had they been able to work until they attained age 55 and had at least 10 years of service, absent a termination of their employment. The wind up liabilities at December 31, 2015 equal $399,201,000 (and at December 31, 2014 are equal to $404,574,000). Consequently the wind up surplus/(unfunded liability) as of the valuation date is $(136,450,000).

4.2 Solvency Excess/(Deficiency)

The minimum funding requirements under the Regulation to the Pension Benefits Act (Ontario) are based on the solvency deficiency as of the valuation date. In calculating the solvency deficiency, various adjustments can be made to the solvency financial position, including:

- Recognition of the present value of existing special payments, including any going concern special payments established at the valuation date, due to be paid within the periods prescribed by the Regulation (in this case, five years). No prior special payments exist as of December 31, 2015

To the extent that there exists a solvency deficiency, after taking account of these adjustments, additional special payments must be made over a period of not more than five years. If there is no solvency deficiency, the solvency excess may be used to reduce the period of any existing solvency special payments or may be used to offset any solvency deficiency created by benefit improvements.

Solvency excess/(deficiency)	December 31, 2015	December 31, 2014
Solvency surplus/(unfunded liability) [1]	$(131,779,000)	$(140,109,000)
Solvency adjustments:		
Present value of special payments	$ 1,872,000 [2]	$ 0
Solvency liability adjustment	0	0
Smoothed value of assets adjustment	0	0
Total solvency adjustments	$ 1,872,000	$ 0
Solvency excess/(deficiency)	$ (129,907,000)	$(140,109,000)

(1) The development of the solvency surplus/(unfunded liability) is shown in Section 4.1.

(2) The development of the present value of special payments is shown in Section 4.5.

4.3 Incremental Cost

The following table shows the incremental cost for the Plan on a solvency basis for the period until the next required valuation which is December 31, 2016. In summary, this incremental cost represents the present value of the estimated expected change in the solvency liability until the next valuation excluding the impact of any change in discount rate.

Incremental cost		
2016	$	(76,000)

This is provided for information purposes only. It is additional disclosure required by our professional standards. Please note that this is not the cost of an additional year of service and is not reflected in the contribution requirements.

4.4 Transfer and Solvency Ratios

The transfer ratio, as defined in the Regulation to the Pension Benefits Act (Ontario), is 0.660 at December 31, 2015.

The solvency ratio, defined as the ratio of the solvency value of assets prior to deduction of the provision for plan windup expenses to the solvency liabilities, is 0.668 at December 31, 2015.

The Plan's transfer ratio is determined by dividing the market value of assets by the wind up liabilities.

Because the transfer ratio of the plan is less than 1.0, the Plan can pay out only 66.0% of the commuted value of a benefit payable on termination or death, unless the Company makes an additional contribution equal to 34.0% of the commuted value to cover the shortfall. This shortfall is referred to as the "transfer deficiency".

However, commuted values may be paid in full without the requirement to cover the transfer deficiency if the sum of all transfer deficiencies made since the date of the last actuarial review is less than 5% of the market value of the assets as of December 31, 2015 (that is, if the sum of all commuted values is less than $38,735,000).

4.5 Present Value of Special Payments

The following table shows the present value of special payments established in prior valuations as well as any going concern special payments established at the valuation date.

Payment type	Original effective date	Annual special payment	PV of special payments (max 5 years) (1)	End of amortization period
Solvency	12/31/2014	$ 12,600	$ 47,000	12/31/2019
Going Concern	12/31/2015	392,200	1,825,000	12/31/2030
Present value of special payments			$ 1,872,000	

(1) Based on a blended rate of 3.01% per annum. The previously established solvency special payments in the last valuation were under the Special Stelco Agreement for benefit improvements.

4.6 Schedule of Solvency Special Payments

The following table shows the schedule of annual solvency special payments including any changes resulting from this valuation. It is the minimum solvency funding requirement as of December 31, 2015 and this amount is included in the minimum employer contributions in Section 5.2.

Original effective date	Annual special payment	Present value of remaining payments (1)	End of amortization period
12/31/2014	$ 12,600	$ 47,000	12/31/2019
12/31/2015	27,920,800	129,907,000	12/31/2020
Total	$ 27,933,400	$ 129,954,000	

(1) Based on a blended rate of 3.01% per annum.

4.7 Pension Benefits Guarantee Fund (PBGF) Assessment

There is an annual assessment for Ontario Plan Beneficiaries that is payable to the Guarantee Fund pursuant to the Pension Benefits Act (Ontario).

The PBGF assessment base shown below is to be used for annual filing purposes until a new actuarial valuation report is filed.

Ontario asset ratio	
Solvency assets	$ 263,395,000
PBGF liabilities	394,530,000
Solvency liabilities	394,530,000
Ontario asset ratio	100.00%

PBGF assessment base	
PBGF liabilities	$ 394,530,000
less PBGF assets (solvency assets times Ontario asset ratio)	263,395,000
PBGF assessment base	$ 131,135,000

The PBGF assessment for 2016 is as follows:

PBGF assessment	
$5 per Ontario Plan beneficiary	$ 6,440.00
plus 0.5% x PBGF assessment base up to 10% of PBGF liabilities	197,265.00
plus 1.0% x PBGF assessment base from 10% to 20% of PBGF liabilities	394,530.00
plus 1.5% x PBGF assessment base above 20% of PBGF liabilities	783,435.00
Total (a)	$ 1,381,670.00
$300 per Ontario Plan beneficiary (b)	$ 386,400.00
PBGF assessment [minimum of (a) and (b)]	$ 386,400.00
Retail sales tax at 8%	30,912.00
PBGF assessment	$ 417,312.00

5. Employer Contributions

In this section we set out the range of permissible employer contributions to the Plan for the next year. The range of permissible employer contributions is based on the minimum that the employer must pay each year as prescribed by provincial pension regulations and the maximum permissible as prescribed by the Income Tax Act.

5.1 General

The permissible range of employer contributions is based on the following different measures:

- minimum going concern funding (normal cost plus going concern special payments);
- going concern maximum or "excess surplus"; and
- minimum solvency funding (solvency special payments).

If the Plan has a solvency funding requirement (i.e., a solvency funded position less than 100%), then the going concern maximum or "excess surplus" measure is not applicable. In addition, the calculation of any solvency special payments recognizes any going concern special payments that are required to be made.

Sections 5.2 and 5.3 below show the range of permissible employer contributions after considering the different measures mentioned above.

5.2 Minimum Employer Contributions

The minimum employer contributions determined at the prior valuation and for the year following the valuation date are as follows:

	Estimated employer normal cost (1)	Going concern special payments (2)	Solvency special payments (3)	Total minimum employer contributions
2015	$ 1,834,000	$ 0	$ 7,753,000	$ 9,587,000
2016	1,907,000	392,200	27,933,400	30,232,600

(1) Developed in Section 3.4.

(2) Developed in Section 3.5.

(3) Developed in Section 4.6 – for 2015, this number was calculated based on the Special Agreement.

On the basis of the current valuation, the employer normal cost for 2016 is estimated to be $1,907,000 per annum.

5.3 Maximum Permissible Employer Contributions

The maximum permissible employer contributions determined at the prior valuation and for the year following the valuation date are as follows:

	Estimated employer normal cost	Wind up unfunded liability	Total maximum employer contributions
2015	$ 1,834,000	$ 144,371,000	$ 146,205,000
2016	1,907,000	136,450,000	138,357,000

The above maximum permissible contribution schedule assumes that the wind up unfunded liability revealed as of December 31, 2015 would be paid into the fund during 2016. The Company must not make contributions in excess of the maximum permissible amounts, as this may cause the Plan to be revoked of its registered status under the Income Tax Act.

5.4 Timing of Employer Contributions

The Ontario Regulation 909 under the Pension Benefits Act (Ontario) requires that the normal cost contributions be paid in monthly installments within 30 days after the month for which the contributions are payable, and that all going concern and solvency deficiency special payments be paid by equal monthly installments throughout the fiscal year of the Plan.

The first employer contribution due 60 days after submission of this report to the government authorities must be increased by the excess, if any of:

- The amount of required employer contributions that should have been paid after the valuation date according to the minimum contribution requirements revealed by this report, over

- The actual amount of employer contributions made in respect of periods after the valuation date.

Interest must be added to this excess, with such interest determined by reference to the going concern discount rate for payments in respect of the normal cost or going concern special payments and the solvency discount rate for payments in respect of solvency special payments.

To satisfy the requirements of the Income Tax Act (Canada), employer contributions that are remitted to the Plan in the taxation year or within 120 days after the end of such taxation year are deductible in such taxation year provided they were made to fund benefits in respect of periods preceding the end of the taxation year.

5.5 Other Statutory Contributions

Additional contributions may be required in respect of the transfer values for terminating members. Where applicable, such additional contributions must be remitted before the related transfer value may be paid in full to the terminated member. Details are provided in Section 4.4.

6. Sensitivity Analysis

It should be noted that the results of this valuation are presented at a single point in time. Both the going concern and solvency funded positions of the Plan can change with time and the potential for such variations must be borne in mind when using this report as a guide for the funded positions, now or in the future.

This section provides details on the sensitivity of discount rate on the going concern and solvency valuation results.

6.1 Discount Rates

If the future long-term annual rate of return on pension plan assets is on average 1.0% (i.e., 100 basis points) below our current assumption of 5.60% per annum, the going concern unfunded liability would increase by $30,914,000 and the employer normal cost for 2016 would increase by $405,000.

If the prescribed solvency discount rate and the annuity purchase rate drop by 1.00% below current levels, the solvency deficiency would increase by $57,937,000.

7. Actuarial Cost Certificate and Opinion

U. S. Steel Canada Inc.

U. S. Steel Canada Inc. Retirement Plan for USW Local 8782 Members at Lake Erie Works

Registration #0698761

In our opinion, for the purposes of this actuarial valuation report, the membership data on which the valuation is based are sufficient and reliable, the assumptions are appropriate and the methods employed in the valuations are appropriate.

This report has been prepared, and our opinions given, in accordance with accepted actuarial practice in Canada. This actuarial valuation report has been conducted in accordance with the funding and solvency standards prescribed by the Pension Benefits Act (Ontario) and Regulation, and in conformity with the requirements of the Income Tax Act (Canada) and Regulation. This actuarial opinion forms an integral part of the report.

Based on the results of this actuarial valuation report as of December 31, 2015, we certify that in our opinion:

1. The Plan does not have a prior year credit balance or prepaid contribution balance.
2. The estimated employer normal cost for 2016 is $1,907,000.
3. There is an unfunded liability of $4,027,000 in the Plan on a going concern basis.
4. The annual special payments required to fund the going concern unfunded liability are as follows:

Original effective date	Annual special payment	Present value of remaining payments	End of amortization period
12/31/2015	$ 392,200	$ 4,027,000	12/31/2030
Total	$ 392,200	$ 4,027,000	

5. There is no excess actuarial surplus, pursuant to Section 147.2(2) of the Income Tax Act (Canada
6. If the Plan had been wound up on the valuation date, the market value of Plan assets (less the provision for the wind up expenses) would have been $136,450,000 less than the wind up liabilities of the Plan.
7. This valuation revealed a solvency deficiency of $129,907,000.

8. The annual special payments required to fund the solvency deficiency are as follows:

Original effective date	Annual special payment	Present value of remaining payments [1]	End of amortization period
12/31/2014	$ 12,600	$ 47,000	12/31/2019
12/31/2015	27,920,800	129,907,000	12/31/2020
Total	$27,933,400	$129,954,000	

[1] Based on a blended rate of 3.01% per annum.

9. The Income Tax Act (Canada) permits the employer to make contributions up to the sum of the normal cost and wind up unfunded liability, less the special payments made in respect of periods since the valuation date, provided that at the time the contribution is made all assumptions made in this valuation remain reasonable and the wind up unfunded liability still exists. As of the valuation date, the maximum permissible employer contributions for 2016 are estimated to be $138,357,000.

10. The transfer ratio, as defined in the Regulation to the Pension Benefits Act (Ontario), is 0.660.

11. The assessment base determined for the Pension Benefits Guarantee Fund (PBGF) is $131,135,000. The PBGF liabilities are $ 394,530,000. The additional liabilities for excluded plant closure benefits in accordance with Section 37(4)(a)(ii) of the Regulation to the Pension Benefits Act (Ontario) are $0.

12. In accordance with the Regulation to the Pension Benefits Act (Ontario), the next actuarial valuation report should be prepared with a valuation date not later than December 31, 2016. The basis for employer contributions presented in this report is effective until the next actuarial opinion is filed.

13. Since the completion of this valuation, we are unaware of any subsequent events that would have a material impact on the results of this report.

The undersigned is available to answer any questions with respect to this valuation report.

Buck Consultants

N Frenette

Normand Frenette
Fellow, Canadian Institute of Actuaries

April 26, 2016
Date

Appendix A Going Concern Assumptions and Methods

The assumptions and methods used in the going concern valuation are described below. If actual Plan experience differs from the assumptions below, gains and losses will arise in future valuations.

A.1 Economic Assumptions

Investment return:	5.60% per annum, net of investment expenses (6.00% per annum in prior valuation).
Administrative expenses:	$0 per annum.
Salary increase:	3.00% per annum.
YMPE increase:	3.00% per annum.
Income tax act maximum benefit limit:	$2,890 at 2016 with a 3% increase ($2,819 at 2015).
Interest on employee contributions:	3.00% per annum.

A.2 Demographic Assumptions

Mortality:	CPM 2014 Private table with CPM-B projection at base year 2012 with 1.204 size of adjustment for males and 1.351 size of adjustment for females. See B.3. for additional information.
Disabled mortality:	GATT Pre-95 Disabled Mortality set forward 1 year.

Retirement rates:

The following rates of retirement were assumed per 100 employees for those eligible for the following retirement categories:

Age	Age 60 10 Yrs	Age 60 15 Yrs +	30yr Rate	>30yr Rate	Normal Rate
47			16.0%	8.5%	
48			16.0%	8.5%	
49			16.0%	8.5%	
50			16.0%	8.5%	
51			16.0%	8.5%	
52			16.0%	8.5%	
53			16.0%	8.5%	
54			16.0%	8.5%	
55			17.7%	10.6%	
56			20.5%	11.0%	
57			22.5%	12.2%	
58			24.5%	14.2%	
59			30.0%	16.9%	
60	2.0%	4.6%	30.0%	20.0%	
61	2.0%	9.4%	30.0%	23.5%	
62	4.0%	37.5%	60.8%	55.2%	
63	4.0%	23.1%	51.6%	34.7%	
64	4.0%	17.6%	44.4%	32.2%	
65					51.2%
66					33.3%
67					33.3%
68					33.3%
69					33.3%
70					100.0%

In addition, if under 30 Years of Service but over Age 55 with Age + Service at least 85, the retirement assumption is 2.0 per 100 employees.

Withdrawal rates:

The following rates of withdrawal were assumed per 100 employees (rates do not apply to those eligible for retirement):

Sample Rates		
Age	Less Than 15 Years of Service	15 or More Years of Service
25	5.0%	
30	4.0%	1.3%
35	3.5%	1.3%
40	3.5%	1.2%
45	3.5%	0.9%
50	3.5%	0.6%
55	3.5%	0.4%
60	3.5%	0.0%

These rates were chosen from withdrawal rates USS uses for its own Steelworker population in the U.S.

Disability rates:

The following rates of withdrawal were assumed per 100 employees:

Age	Disability rates
20	0.03%
25	0.03%
30	0.04%
35	0.06%
40	0.10%
45	0.16%
50	0.30%
55	0.55%
60	1.00%

A.3 Other Assumptions

Spousal assumption:	80% married.
Age difference:	Male members three years older than their female spouse.
Members electing a commuted value:	100% of members who terminate are assumed to elect a commuted value, calculated using a long-term discount assumption of 5.6% per annum
Actuarial cost method:	Unit Credit

The going concern liabilities for active members are determined by calculating the actuarial present value of benefits accrued to the valuation date based on projected earnings assuming future increases. This calculation is done for each plan member based on his or her age, service and earnings.

The going concern liabilities for deferred vested members, retired members and beneficiaries were calculated as the actuarial present value of their respective benefits.

The normal cost is determined by calculating the actuarial present value of benefits to be earned in respect of service for the twelve months following the valuation date based on projected earnings assuming future increases. This calculation is done for each plan member based on his or her age and earnings.

Under the projected unit credit actuarial cost method, the normal cost for an individual member will increase each year as the member approaches retirement. Value of assets: Market value of assets.

Appendix B Rationale for Going Concern Assumptions

The following rationale is provided to support the most significant going concern actuarial assumptions used in this report:

B.1 Investment Return (Discount Rate)

The expected future benefit payments have been discounted using the expected investment return on the fund. The discount rate of 5.6% per annum was selected and the components of which are as follows:

Assumed Gross real investment return	3.59%
Plus: Inflation	2.00%
Plus: Diversification of asset classes	0.35%
Less: Provision for investment paid from the fund	(0.10%)
Less: Margins for adverse deviation	(0.25%)
Discount rate	5.59%
Discount rate, rounded to the nearest 0.1%	5.60%

The above items are supported as follows:

- The best estimate gross rate of return was developed by establishing expected returns for each major asset class in which the pension fund is invested and then using a building block approach based on the Plan's target asset allocation presented in Section 2.3. It is assumed that the Plan's long term asset allocation will not change over time. In determining a return on equity investments, we have assumed an equity risk premium (i.e. the difference between expected return on Canadian equities and Canadian bonds) of 4.75% per annum.

- A regularly rebalanced portfolio of assets in more than one asset class will produce returns in excess of the weighted average of the long-term average rates of returns of the individual asset classes due to correlations amongst the asset classes. This is called the diversification effect. We have assumed that the portfolio is maintained reasonably close to the original target asset mix and that they allowance for this diversification effect would be 0.35% per annum.

- We have assumed that the additional return due to active management will cover the additional cost pf active investment management over the cost of passive management. We have assumed that the cost of passive investment management combined with any administrative expenses charged to the fund would represent 0.10% of the assets.

- To account for volatility in future investment returns and after having a discussion with the Company, a margin for adverse deviation of 0.25% per annum was included.

B.2 Administrative Expenses

No allowance is made for administrative expenses, since none are charged to the trust.

B.3 Mortality

The Canadian Pensioner's Mortality Registered Pension Plan Private Table ("CPM2014 Priv") reflects the mortality experience as of 2014 from a private sector analysis of members in Canadian registered pension plans. In addition, mortality experience is expected to follow Scale CPM-B. This table was used and adjusted based on actual experience for the years 2009-2013 to develop our final table. The CPM2014 Priv at a base year 2012 with 1.204 size of adjustment for males and 1.351 size of adjustment for females was used for the valuation.

B.4 Retirement

The retirement rates used in this valuation were chosen off of retirement rates USS uses for its own Steelworker population in the U. S. Given the 30 year benefit structure and the makeup of the workforce, U. S. Steel believes these rates are more appropriate to use until a formal study can be accumulated from a normal retirement period. The retirement rates reflect the best estimate assumption; no margins for adverse deviation were used.

This assumption is considered to be reasonable for this valuation and will continue to be monitored and reviewed at the next valuation.

Appendix C Solvency Assumptions and Methods

The assumptions and methods used in the solvency valuation are prescribed by regulation and are described below. Any changes to assumptions from the previous valuation are referenced by footnote.

C.1 Assumptions and Methods

Mortality(1):	CPM-2014 Combined Table with dynamic generational mortality projection using Scale CPM-B.
Transfer value rate(2):	2.1% per annum for the first 10 years and 3.7% per annum thereafter.
Annuity purchase rate(3):	For pensions-in-pay and members who are eligible to retire, 3.1% per annum. The duration of the liability that will be settled by annuity purchase is 12.19.
Blended discount rate used to determine special payments(4):	3.01% per annum.
Form of benefit settlement elected by member:	Transfer Value
	100% of active members that are not retirement eligible elect to receive the transfer value of their benefit entitlement.
Annuity Purchase	All remaining members are assumed to elect to receive their benefit entitlement in the form of a deferred or immediate pension. These benefits are assumed to be settled through the purchase of deferred or immediate annuities from a life insurance company.

(1) UP 1994 table with dynamic generational mortality projection using Scale AA at prior valuation.

(2) 2.5% for 10 years, 3.8% thereafter at prior valuation.

(3) 2.7% per annum at prior valuation.

(4) 2.50% per annum at prior valuation.

Retirement age:	Members eligible to retire and Ontario members whose age plus continuous service is greater than or equal to 55, are assumed to retire at the age which produces the highest value. Other members are assumed to retire at age 65.
Spousal assumption:	Pensions-in-pay: Actual spousal data. All others: 80% married and males 3 years older than females.
Value of assets:	Market value of assets
Provision for wind up expenses:	$500 per participant.

C.2 Provision for Windup Expenses

The rule used to determine the wind up expenses is $500 per member.

Actuarial and administration expense reasonably expected to wind up the Plan have been included in the expense assumption. These expenses are assumed to be charged to the Plan. These wind up expenses do not include other expenses assumed to occur post valuation date up to the time of actual settlement. These additional expenses can include trustee, investment management and consulting expenses that may be incurred up until the time of final settlement. Any legal or actuarial expenses related to legal disputes, if any, are not included in these expense provisions.

Appendix D Summary of Membership Data

The membership data was provided and maintained by the Company. The membership data was compiled on December 31, 2015 and reviewed for reasonableness and consistency and found to be sufficient and reliable for the purposes of the valuation. These data tests are, by nature, high level and will not capture all possible deficiencies in the data. Therefore, reliance is also placed on the certification of the U. S. Steel Canada Inc. (Appendix F) as to the quality of data.

D.1 Data Tests

The tests done in review of the data include the following:

- ✓ High level review of the data to determine that an appropriate number of records was obtained, the appropriate data fields were provided and that the data fields contained valid information;
- ✓ A membership reconciliation was prepared to ensure the complete membership of the pension plan was accounted for;
- ✓ Review of age and service distributions for active members for reasonableness;
- ✓ For active members, review of age, service, and date of entry for reasonableness;
- ✓ For terminated vested members, dates of birth and deferred pension amounts were reviewed against the prior valuation data for consistency;
- ✓ For retired members and beneficiaries, dates of birth and pension amounts were reviewed against the prior valuation data for consistency; and
- ✓ Aggregate pension payments in the data were compared to actual payments shown in the trust statement.

D.2 Summary of Plan Participants included in the Valuation

	December 31, 2015	December 31, 2014
Active members		
Number	378	400
Average age (years)	48.2	47.3
Average service (years)	18.2	17.7
Transferred members		
Number	42	43
Average age (years)	49.5	48.6
Average service (years)	12.9	13.0
Deferred vested members		
Number	70	73
Average age (years)	47.2	46.8
Annual benefit	$237,000	$279,000
Average annual benefit	3,379	3,822
Retired members and beneficiaries		
Number	783	769
Number receiving bridge pensions	465	484
Average age (years)	63.3	62.4
Annual pension	$14,301,000	$14,067,000
Average annual pension benefit	18,265	18,293
Annual bridge benefit	$4,773,000	$4,966,000
Average annual bridge benefit	10,265	10,260
Disabled members		
Number	15	16
Number receiving bridge pensions	6	7
Average age (years)	63.9	62.6
Annual pension	$201,000	$216,000
Average annual pension benefit	13,430	13,500
Annual bridge benefit	$51,000	$52,000
Average annual bridge benefit	8,555	7,429

D.3 Data Reconciliation

	Actives	Transfers	Deferred Vesteds	Disabled Pensioners	Retirees and Beneficiaries	Total
Number at December 31, 2014	400	43	73	16	769	1,301
Changes due to:						
Transfers in	0	0	0	0	0	0
Vested termination	(1)	0	1	0	0	0
Non-vested termination	0	0	0	0	0	0
Paid out	(6)	(1)	(3)	0	(1)	(11)
Retirements	(11)	(1)	(2)	0	14	0
Deaths with survivor	(3)	0	0	0	(5)	(8)
Deaths without survivor	0	0	0	(1)	(1)	(2)
New survivors	0	0	0	0	8	8
Data corrections	0	0	1	0	(1)	0
Transfers out	(1)	1	0	0	0	0
Number at December 31, 2015	378	42	70	15	783	1,288

D.4 Active Participants - by Age and Service as of December 31, 2015

	Service								
Age	**0-4**	**5-9**	**10-14**	**15-19**	**20-24**	**25-29**	**30-34**	**35+**	**Total**
20-24	0	0	0	0	0	0	0	0	0
25-29	0	7	0	0	0	0	0	0	7
30-34	2	15	12	0	0	0	0	0	29
35-39	1	19	20	8	0	0	0	0	48
40-44	1	13	24	17	0	0	0	0	55
45-49	0	7	15	19	0	15	0	0	56
50-54	0	9	17	11	1	15	21	0	74
55-59	0	7	5	9	1	9	31	17	79
60-64	0	0	4	2	0	3	10	8	27
65+	0	0	0	1	0	0	2	0	3
Total	4	77	97	67	2	42	64	25	378

Appendix E Summary of Plan Provisions

The following summary describes the main features of the Plan which are of financial significance to the actuarial valuation and does not encompass all details required to properly administer the Plan. This summary is based on the most recent Plan document dated August, 2006 and Amendment #23, dated August 2013. For a detailed description of the benefits, please refer to the Plan document.

This valuation is based on the plan provisions in effect as of December 31, 2015.

Eligibility:

The Plan was closed to new entrants effective April 16, 2010. Prior to that date, each full-time bargaining unit employee who was a member of the USW union was automatically a member of the Plan upon hire. No service is credited for period of lay-off for lack of work.

Normal Retirement:

Normal retirement takes place on the last day of the month in which the member attains age 65.

Early Retirement:

Early retirement is permitted upon attaining age 60 with 10 years of service, after completion of 30 years of service, or upon attaining age 55 with years of age plus service totaling 85 or more. The member's pension is calculated in the same way as for normal retirement and reduced by 0.5% per month for each month, if any, by which the member's early retirement date precedes, age 62. In any event, no reduction will apply if the member has 30 years of service.

Special Early Retirement:

A member who has attained age 55 with 10 years of service may be retired from the service of the Company at the option of the Company or at the request of the employee with the consent of the Company. The pension amount is calculated in the same way as for normal retirement subject to a reduction of 0.25% per month for each month, if any, by which the member's early retirement date precedes the earliest of:

- Attaining age 60;
- Attaining a total of age plus service of 80; or
- Completion of 30 years of service

Disability Retirement: A member who has completed 10 years of service, and who becomes permanently and totally disabled before attainment of age 65, may retire and receive a disability pension calculated in the same manner as a normal retirement pension, subject to a minimum amount of $750 per month.

Pension Benefit: The monthly pension payable on normal retirement is the sum of the following:

- A Basic pension of $58.00 per month for each year of credited service, not exceeding 40 years; and
- A Supplemental pension of $30.00 per month for each year of credited service not exceeding 30 years, reduced by the amount of the member's Old Age Security Pension and Canada/Quebec Pension Plan benefits as determined at retirement.

Additional service credit of 20% is provided for each year, if any, in which a member was employed in the iron-making division.

Contributions: No employee contributions are required or permitted to be made to the Plan.

Death Benefits

Before Retirement: On the death of a member, prior to normal retirement date, his spouse or beneficiary is entitled to receive the commuted value of that portion of the member's vested accrued pension for service on or after January 1, 1987. However, on the death of a member who dies after completion of 10 years of service there will be payable to his spouse or beneficiary a pension equal to 70% of the member's accrued pension, without reduction for early retirement.

After Retirement: For a member without a spouse at the pension commencement date, pension payments will be made for the lifetime of the member, ceasing with the payment made in the month of the member's death.

	A member with an eligible spouse at the pension commencement date will receive a pension which will be equal to 95% of his normal pension. A reduced pension will continue to his spouse after his death, the reduced pension being 74.5% of the pension the member was receiving. This benefit may be waived by the member and spouse.
Termination Benefits:	On termination of service, the normal pension based on accrued credited service will be fully vested and payable as a deferred life annuity from age 65. A terminating member may elect to have his deferred life annuity commence after attainment of age 55 and prior to age 65, in which event it will be reduced by 0.5% for each month between commencement of pension and age 65.
	A member who terminates prior to being eligible for retirement, elects to defer his pension, and who has an eligible spouse at the pension commencement date will not be eligible for the 95% spousal pension option, but will instead be entitled to a 60% joint and survivor pension of actuarial equivalent value to a lifetime pension to the member.
Cost of Living Adjustments:	The current CBA provides for no further COLA adjustments to retiree pensions in the future.
Income Tax Act Limitations:	Benefits payable under the plan are subject to limitations resulting from regulations under the Income Tax Act.

Appendix F Employer Certification

U. S. Steel Canada Inc.

U. S. Steel Canada Inc. Retirement Plan for USW Local 8782 Members at Lake Erie Works

Registration #0698761

I hereby certify that to the best of my knowledge and belief:

1. The significant terms of engagement contained in Section 1.3 of this report are accurate and reflect the plan administrator's judgement of the plan provisions and/or an appropriate basis for the actuarial valuation of the plan

2. The asset information summarized in Sections 2.2 and 2.3 is complete and accurate;

3. The membership data summarized in Appendix D is complete and accurate for all persons who are entitled or will become entitled to benefits under the Plan in respect of service up to the date of the valuation;

4. The Plan Provisions summarized in Appendix E are accurate and up to date for the purpose of representing member benefit entitlements that significantly affect the financial condition of the Plan; and

5. There have been no subsequent events that would materially change the Plan's financial position since the valuation date.

United States Steel Corporation

Kimberly Fast
Name

Kimberly Fast
Signature

Corporate Accounting Assistant Controller –
United States Steel Corporation
Comptroller -
United States Steel & Carnegie Pension Fund
Title

4/20/16
Date