

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

FORM 8-K

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

Date of Report (Date of earliest event reported): **January 10, 2011**

NORTHERN TECHNOLOGIES INTERNATIONAL CORPORATION

(Exact name of registrant as specified in its charter)

Delaware
(State or Other Jurisdiction of
Incorporation)

001-11038
(Commission File Number)

41-0857886
(I.R.S. Employer Identification
Number)

**4201 Woodland Road
P.O. Box 69
Circle Pines, Minnesota**
(Address of Principal Executive Offices)

55014
(Zip Code)

(763) 225-6600
(Registrant's telephone number, including area code)

Not Applicable
(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 1.01 Entry into a Material Definitive Agreement.

On January 10, 2011, Northern Technologies International Corporation ("NTIC") refinanced its \$1,275,000 original principal amount term loan and increased its line of credit with PNC Bank, National Association ("PNC Bank") to \$3,000,000.

The amended term loan is evidenced by an amended and restated term note (the "Term Note") issued by Northern Technologies Holding Company, LLC, a wholly owned subsidiary of NTIC ("NTI LLC"), to PNC Bank in the principal amount of approximately \$1,141,788. The term loan matures on January 10, 2016, bears interest at an annual rate based on the daily LIBOR rate plus 2.15% and is payable in 59 consecutive monthly installments equal to approximately \$6,343 (inclusive of principal but exclusive of interest) commencing in February 2011. All of the remaining unpaid principal and accrued interest under the term loan is due and payable on the January 10, 2016 maturity date. The term loan is secured by a first lien on the real estate and building owned by NTI LLC and all of the assets of NTIC pursuant to a security agreement between NTIC and PNC Bank (the "Security Agreement") and is guaranteed by NTIC pursuant to an amended and restated guaranty agreement by NTIC in favor of PNC Bank (the "Guaranty Agreement").

The increased line of credit is evidenced by an amended and restated committed line of credit note in the principal amount of up to \$3,000,000 (the "Line of Credit Note"). The line of credit has a \$1,200,000 standby letter of credit subfacility, with any standby letters of credit issued thereunder being at the sole discretion of PNC Bank. Any standby letters of credit issued under the subfacility are subject to customary fees and charges payable by NTIC. Advances made under the line of credit are due and payable on January 10, 2012. At the option of NTIC, outstanding advances under the line of credit bear interest at either (a) an annual rate based on LIBOR plus 2.15% for the applicable LIBOR interest period selected by NTIC or (b) at the rate publicly announced by PNC Bank from time to time as its prime rate. Interest is payable in arrears (a) for the portion of advances bearing interest under the

prime rate on the **[last]** day of each month during the term thereof and (b) for the portion of advances bearing interest under the LIBOR option on the last day of the respective LIBOR interest period selected for such advance. Any unpaid interest is payable on the maturity date.

Both the term loan and the line of credit are governed under two separate loan agreements (collectively, the "Loan Agreements"). The Loan Agreements contain standard covenants, including affirmative financial covenants, such as the maintenance of a minimum fixed charge coverage ratio, and negative covenants, which, among other things, limit the incurrence of additional indebtedness, loans and equity investments, disposition of assets, mergers and consolidations and other matters customarily restricted in such agreements. Under the Loan Agreements, NTIC is subject to a minimum fixed charge coverage ratio of 1.10:1.00.

Under the fixed charge coverage ratio financial covenant, NTIC shall not, as of the last calendar day of any fiscal quarter, on a rolling four quarters basis, suffer or permit the ratio of its adjusted EBITDA (defined as the aggregate of (a) its net income for that period, plus (b) its interest expense for that period, plus (c) its federal, state, and local income taxes, if any, for that period, plus (d) its depreciation and amortization charges for that period, plus (e) other non-recurring non-cash expenses reducing net income, minus (f) non-recurring non-cash items

2

increasing net income, plus (g) increases to paid-in capital on stockholders' equity, minus (h) decreases to paid-in capital on stockholder's equity) to the aggregate (without duplication) of (i) its interest expense for that period, plus (ii) capital expenditures paid for from NTIC's funds other than funds borrowed as term debt to finance such capital expenditures during that period, plus (iii) all dividends and distributions paid during that period, plus (iv) taxes paid in cash plus, plus (v) payments made under all capital leases, plus (vi) an amount equal to the aggregate of all scheduled payments of principal on all indebtedness for borrowed money having an original term of more than one year, as shown on NTIC's financial statements as current liabilities as of one year prior to the date of determination to be less than 1.10:1.00. The fixed charge coverage ratio is to be computed and determined on a consolidated basis for NTIC and its subsidiaries in accordance with generally accepted accounting principles applied on a consistent basis (subject to normal year-end adjustments). The Loan Agreements also contain customary events of default, including, without limitation, payment defaults, material inaccuracy of representations and warranties, covenant defaults, bankruptcy and involuntary proceedings, and monetary judgment defaults.

PNC Bank and its affiliates have in the past performed, and may in the future from time to time perform, investment banking, financial advisory, lending and/or commercial banking services for NTIC and its subsidiaries in arm's length transactions, on terms customarily available to unrelated third-parties and for which services it has in the past received, and may in the future receive, customary compensation and reimbursement of expenses.

The foregoing descriptions of the Term Note, the Line of Credit Note, the Security Agreement, the Guaranty Agreement and the Loan Agreements are summaries of the material terms of such agreements, do not purport to be complete and are qualified in their entirety by reference to the complete text of the Term Note, the Line of Credit Note, the Security Agreement, the Guaranty Agreement and the Loan Agreements, copies of which are filed as Exhibits 10.1, 10.2, 10.3, 10.4, 10.5 and 10.6 to this Current Report on Form 8-K and are incorporated herein by this reference.

Item 2.03 Creation of a Direct Financial Obligation or an Obligation under an Off-Balance Sheet Arrangement of a Registration.

The information described above under Item 1.01 is incorporated herein by this reference.

Item 9.01 Financial Statements and Exhibits.

(d) *Exhibits.*

Exhibit No.	Description
10.1	Amended and Restated Term Note dated as of January 10, 2011 issued by Northern Technologies Holding Company, LLC to PNC Bank, National Association (filed herewith)
10.2	Amended and Restated Committed Line of Credit Note dated as of January 10, 2011 issued by Northern Technologies International Corporation to PNC Bank, National Association (filed herewith)

3

Exhibit No.	Description
10.3	Security Agreement dated as of January 10, 2011 between Northern Technologies International Corporation and PNC Bank, National Association (filed herewith)
10.4	Amended and Restated Guaranty Agreement dated as of January 10, 2011 by Northern Technologies International Corporation in favor of PNC Bank, National Association (filed herewith)
10.5	Loan Agreement dated as of January 10, 2011 between Northern Technologies Holding Company, LLC and PNC Bank, National Association (filed herewith)
10.6	Loan Agreement dated as of January 10, 2011 between Northern Technologies International Corporation and PNC Bank, National Association (filed herewith)

4

SIGNATURE

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



By: _____
Matthew C. Wolsfeld
Chief Financial Officer and Corporate Secretary

Dated: January 12, 2011

5

NORTHERN TECHNOLOGIES INTERNATIONAL CORPORATION

CURRENT REPORT ON FORM 8-K

EXHIBIT INDEX

<u>Exhibit No.</u>	<u>Description</u>	<u>Method of Filing</u>
10.1	Amended and Restated Term Note dated as of January 10, 2011 issued by Northern Technologies Holding Company, LLC to PNC Bank, National Association	Filed herewith
10.2	Amended and Restated Committed Line of Credit Note dated as of January 10, 2011 issued by Northern Technologies International Corporation to PNC Bank, National Association	Filed herewith
10.3	Security Agreement dated as of January 10, 2011 between Northern Technologies International Corporation and PNC Bank, National Association	Filed herewith
10.4	Amended and Restated Guaranty Agreement dated as of January 10, 2011 by Northern Technologies International Corporation in favor of PNC Bank, National Association	Filed herewith
10.5	Loan Agreement dated as of January 10, 2011 between Northern Technologies Holding Company, LLC and PNC Bank, National Association	Filed herewith
10.6	Loan Agreement dated as of January 10, 2011 between Northern Technologies International Corporation and PNC Bank, National Association	Filed herewith

6



**Amended and Restated
Term Note
(Daily LIBOR)**

\$1,141,788.03

January 10, 2011

FOR VALUE RECEIVED, NORTHERN TECHNOLOGIES HOLDING COMPANY, LLC (the “**Borrower**”), with an address at 4201 Woodland Road, Circle Pines, Minnesota 55014, promises to pay to the order of **PNC BANK, NATIONAL ASSOCIATION, successor to NATIONAL CITY BANK** (the “**Bank**”), in lawful money of the United States of America in immediately available funds at its offices located at 1900 East 9th Street, Cleveland, Ohio 44114, or at such other location as the Bank may designate from time to time in writing, the principal sum of **ONE MILLION ONE HUNDRED FORTY ONE THOUSAND SEVEN HUNDRED EIGHTY EIGHT AND 03/100 DOLLARS (\$1,141,788.03)**, together with interest accruing on the outstanding principal balance from the date hereof, all as provided below.

1. Rate of Interest. Amounts outstanding under this Note will bear interest at a rate per annum which is at all times equal to (A) the Daily LIBOR Rate plus (B) two hundred fifteen (215) basis points (2.15%). Interest hereunder will be calculated based on the actual number of days that principal is outstanding over a year of 360 days. In no event will the rate of interest hereunder exceed the maximum rate allowed by law.

If the Bank determines (which determination shall be final and conclusive absent manifest error) that, by reason of circumstances affecting the eurodollar market generally, deposits in dollars (in the applicable amounts) are not being offered to banks in the eurodollar market for the selected term, or adequate means do not exist for ascertaining the Daily LIBOR Rate, then the Bank shall give prompt notice thereof to the Borrower. Thereafter, until the Bank notifies the Borrower that the circumstances giving rise to such suspension no longer exist, the interest rate for all amounts outstanding under this Note shall be equal to the Base Rate (the “**Alternate Rate**”).

In addition, if, after the date of this Note, the Bank shall determine (which determination shall be final and conclusive absent manifest error) that any enactment, promulgation or adoption of or any change in any applicable law, rule or regulation, or any change in the interpretation or administration thereof by a governmental authority, central bank or comparable agency charged with the interpretation or administration thereof, or compliance by the Bank with any guideline, request or directive (whether or not having the force of law) of any such authority, central bank or comparable agency shall make it unlawful or impossible for the Bank to make or maintain or fund loans based on the Daily LIBOR Rate, the Bank shall promptly notify the Borrower. Upon receipt of such notice, until the Bank notifies the Borrower that the circumstances giving rise to such determination no longer apply, the interest rate on all amounts outstanding under this Note shall be the Alternate Rate.

For purposes hereof, the following terms shall have the following meanings:

“**Base Rate**” shall mean the Prime Rate. If and when the Base Rate changes, the rate of interest with respect to any amounts hereunder to which the Base Rate applies will change automatically without notice to the Borrower, effective on the date of any such change.

“**Business Day**” shall mean any day other than a Saturday or Sunday or a legal holiday on which commercial banks are authorized or required by law to be closed for business in Cleveland, Ohio.

Form 8I – OH (COJ) Rev. 12/09

“**Daily LIBOR Rate**” shall mean, for any day, the rate per annum determined by the Bank by dividing (A) the Published Rate by (B) a number equal to 1.00 minus the percentage prescribed by the Federal Reserve for determining the maximum reserve requirements with respect to any eurocurrency fundings by banks on such day. The rate of interest will be adjusted automatically as of each Business Day based on changes in the Daily LIBOR Rate without notice to the Borrower.

“**Prime Rate**” shall mean the rate publicly announced by the Bank from time to time as its prime rate. The Prime Rate is determined from time to time by the Bank as a means of pricing some loans to its borrowers. The Prime Rate is not tied to any external rate of interest or index, and does not necessarily reflect the lowest rate of interest actually charged by the Bank to any particular class or category of customers.

“**Published Rate**” shall mean the rate of interest published each Business Day in the Wall Street Journal “Money Rates” listing under the caption “London Interbank Offered Rates” for a one month period (or, if no such rate is published therein for any reason, then the Published Rate shall be the eurodollar rate for a one month period as published in another publication selected by the Bank).

2. Payment Terms. Principal shall be due and payable in fifty-nine (59) equal consecutive monthly installments in the amount of \$6,343.27 each, commencing on February 28, 2011, and continuing on the same day of each month thereafter, and a final installment of all outstanding principal on January 30, 2016. Interest shall be payable at the same times as the principal payments. Any outstanding principal and accrued interest shall be due and payable in full on January 30, 2016.

If any payment under this Note shall become due on a Saturday, Sunday or public holiday under the laws of the State where the Bank’s office indicated above is located, such payment shall be made on the next succeeding business day and such extension of time shall be included in computing interest in connection with such payment. The Borrower hereby authorizes the Bank to charge the Borrower’s deposit account at the Bank for any payment when due. If the Borrower revokes this authorization for any reason whatsoever or fails to maintain a deposit account with the Bank which may be charged, the Bank may, at its option, upon thirty (30) days notice to the Borrower, increase the interest rate payable by the Borrower under this Note by twenty-five (25) basis points (0.25%). Payments received will be applied to charges, fees and expenses (including reasonable attorneys’ fees), accrued interest and principal in any order the Bank may choose, in its sole discretion.

3. Late Payments; Default Rate. If the Borrower fails to make any payment of principal, interest or other amount coming due pursuant to the provisions of this Note within fifteen (15) calendar days of the date due and payable, the Borrower also shall pay to the Bank a late charge equal to the lesser of five percent (5%) of the amount of such payment or \$100.00 (the “**Late Charge**”). Such fifteen (15) day period shall not be construed in any way to extend the due date of any such payment. Upon maturity, whether by acceleration, demand or otherwise, and at the Bank’s option upon the occurrence of

any Event of Default (as hereinafter defined) and during the continuance thereof, amounts outstanding under this Note shall bear interest at a rate per annum (based on the actual number of days that principal is outstanding over a year of 360 days) which shall be three percentage points (3%) in excess of the interest rate in effect from time to time under this Note but not more than the maximum rate allowed by law (the “**Default Rate**”). The Default Rate shall continue to apply whether or not judgment shall be entered on this Note. Both the Late Charge and the Default Rate are imposed as liquidated damages for the purpose of defraying the Bank’s expenses incident to the handling of delinquent payments, but are in addition to, and not in lieu of, the Bank’s exercise of any rights and remedies hereunder, under the other Loan Documents or under applicable law, and any fees and expenses of any agents or attorneys which the Bank may employ. In addition, the Default Rate reflects the increased credit risk to the Bank of carrying a loan that is in default. The Borrower agrees that the Late Charge and Default Rate are reasonable forecasts of just compensation for anticipated and actual harm incurred by the Bank, and that the actual harm incurred by the Bank cannot be estimated with certainty and without difficulty.

4. **Prepayment.** The indebtedness evidenced by this Note may be prepaid in whole or in part at any time without penalty.

5. **Other Loan Documents.** This Note is issued in connection with a Loan Agreement between the Borrower and the Bank, dated on or before the date hereof, and the other agreements and documents executed and/or delivered in connection therewith or referred to therein, the terms of which are incorporated herein by reference (as amended, modified or renewed from time to time, collectively the “**Loan Documents**”), and is secured by the property (if any) described in the Loan Documents and by such other collateral as previously may have been or may in the future be granted to the Bank to secure this Note.

6. **Events of Default.** The occurrence of any of the following events will be deemed to be an “**Event of Default**” under this Note: (i) the nonpayment of any principal, interest or other indebtedness under this Note when due; (ii) the occurrence of any event of default or any default, or any Obligor’s failure to observe or perform any covenant or other agreement, under or contained in any Loan Document or any other document now or in the future evidencing or securing any debt, liability or obligation of any Obligor to the Bank; provided, however, that, no such failure to observe or perform any such covenant or other agreement (excluding financial covenants, financial reporting covenants, and negative covenants) shall constitute an Event of Default unless such failure continues for a period of 10 days after the earlier to occur of (a) the date when any Obligor becomes aware of such failure and (b) the date when the Bank gives written notice to the Borrower of such failure; (iii) the filing by or against any Obligor of any proceeding in bankruptcy, receivership, insolvency, reorganization, liquidation, conservatorship or similar proceeding (and, in the case of any such proceeding instituted against any Obligor, such proceeding is not dismissed or stayed within sixty (60) days of the commencement thereof, provided that the Bank shall not be obligated to advance additional funds hereunder during such period); (iv) any assignment by any Obligor for the benefit of creditors, or any levy, garnishment, attachment or similar proceeding is instituted against all or any material portion of the property of any Obligor held by or deposited with the Bank; (v) a default with respect to any other indebtedness with a principal amount in excess of \$200,000, individually or in the aggregate, of any Obligor for borrowed money, if the effect of such default is to cause or permit the acceleration of such debt; (vi) the commencement of any foreclosure or forfeiture proceeding, execution or attachment against any collateral securing the obligations of any Obligor to the Bank; (vii) the entry of a final judgment against any Obligor and the failure of such Obligor to discharge the judgment within thirty (30) days of the entry thereof; (viii) any material adverse change in any Obligor’s business, assets, operations, financial condition or results of operations, as determined in the Bank’s good faith business judgment; (ix) any Obligor ceases doing business as a going concern; (x) any representation or warranty made by any Obligor to the Bank in any Loan Document or any other documents now or in the future evidencing or securing the obligations of any Obligor to the Bank, is false, erroneous or misleading in any material respect; (xi) the revocation or attempted revocation, in whole or in part, of any guarantee by any Obligor; or (xii) the death, incarceration, indictment or legal incompetency of any individual Obligor or, if any Obligor is a partnership or limited liability company, the death, incarceration, indictment or legal incompetency of any individual general partner or member. As used herein, the term “**Obligor**” means any Borrower and any guarantor of, or any pledgor, mortgagor or other person or entity providing collateral support for, the Borrower’s obligations to the Bank existing on the date of this Note or arising in the future.

Upon the occurrence and during the continuance of an Event of Default: (a) the Bank shall be under no further obligation to make advances hereunder; (b) if an Event of Default specified in clause (iii) or (iv) above shall occur, the outstanding principal balance and accrued interest hereunder together with any additional amounts payable hereunder shall be immediately due and payable without demand or notice of any kind; (c) if any other Event of Default shall occur, the outstanding principal balance and accrued interest hereunder together with any additional amounts payable hereunder, at the Bank’s option and without demand or notice of any kind, may be accelerated and become immediately due and payable; (d) at the Bank’s option, this Note will bear interest at the Default Rate from the date of the occurrence of the Event of Default until such time as the Event of Default is

cured; and (e) the Bank may exercise from time to time any of the rights and remedies available under the Loan Documents or under applicable law.

7. **Power to Confess Judgment.** The Borrower hereby irrevocably authorizes any attorney-at-law, including an attorney employed by or retained and paid by the Bank, to appear in any court of record in or of the State of Ohio, or in any other state or territory of the United States, at any time after the indebtedness evidenced by this Note becomes due, whether by acceleration or otherwise, to waive the issuing and service of process and to confess a judgment against the Borrower in favor of the Bank, and/or any assignee or holder hereof for the amount of principal and interest and expenses then appearing due from the Borrower under this Note, together with costs of suit and thereupon to release all errors and waive all right of appeal or stays of execution in any court of record. The Borrower hereby expressly (i) waives any conflict of interest of the attorney(s) retained by the Bank to confess judgment against the Borrower upon this Note, and (ii) consents to the receipt by such attorney(s) of a reasonable legal fee from the Bank for legal services rendered for confessing judgment against the Borrower upon this Note. A copy of this Note, certified by the Bank, may be filed in each such proceeding in place of filing the original as a warrant of attorney.

8. **Right of Setoff.** In addition to all liens upon and rights of setoff against the Borrower’s money, securities or other property given to the Bank by law, the Bank shall have, with respect to the Borrower’s obligations to the Bank under this Note and to the extent permitted by law, a contractual possessory security interest in and a contractual right of setoff against, and the Borrower hereby grants the Bank a security interest in, and hereby assigns, conveys, delivers, pledges and transfers to the Bank, all of the Borrower’s right, title and interest in and to, all of the Borrower’s deposits, moneys, securities and other property now or hereafter in the possession of or on deposit with, or in transit to, the Bank or any other direct or indirect subsidiary of The PNC Financial Services Group, Inc., whether held in a general or special account or deposit, whether held jointly with someone else, or whether held for safekeeping or otherwise, excluding, however, all IRA, Keogh, and trust accounts. Every such security interest and right of setoff may be exercised without demand upon or notice to the Borrower. Every such right of setoff shall be deemed to have been exercised immediately upon the occurrence of an Event of Default hereunder without any action of the Bank, although the Bank may enter such setoff on its books and records at a later time. The Bank agrees to notify the Borrower

promptly after any such setoff and application; provided, however, that the failure to give such notice shall not affect the validity of such setoff and application.

9. Indemnity. The Borrower agrees to indemnify each of the Bank, each legal entity, if any, who controls, is controlled by or is under common control with the Bank, and each of their respective directors, officers and employees (the “**Indemnified Parties**”), and to defend and hold each Indemnified Party harmless from and against any and all claims, damages, losses, liabilities and expenses (including all reasonable fees and charges of internal or external counsel with whom any Indemnified Party may consult and all expenses of litigation and preparation therefor) which any Indemnified Party incurs or are asserted against any Indemnified Party by any person, entity or governmental authority (including any person or entity claiming derivatively on behalf of the Borrower), in connection with or arising out of or relating to the matters referred to in this Note or in the other Loan Documents or the use of any advance hereunder, whether (a) arising from or incurred in connection with any breach of a representation, warranty or covenant by the Borrower, or (b) arising out of or resulting from any suit, action, claim, proceeding or governmental investigation, pending or threatened, whether based on statute, regulation or order, or tort, or contract or otherwise, before any court or governmental authority; provided, however, that the foregoing indemnity agreement shall not apply to any claims, damages, losses, liabilities and expenses attributable to an Indemnified Party’s gross negligence or willful misconduct. The indemnity agreement contained in this Section shall survive the termination of this Note, payment of any advance hereunder and the assignment of any rights hereunder. The Borrower may participate at its expense in the defense of any such action or claim.

10. Miscellaneous. All notices, demands, requests, consents, approvals and other communications required or permitted hereunder (“**Notices**”) must be in writing (except as may be agreed otherwise above with respect to

borrowing requests) and will be effective upon receipt. Notices may be given in any manner to which the parties may separately agree, including electronic mail. Without limiting the foregoing, first-class mail, facsimile transmission and commercial courier service are hereby agreed to as acceptable methods for giving Notices. Regardless of the manner in which provided, Notices may be sent to a party’s address as set forth above or to such other address as any party may give to the other in writing for such purpose in accordance with this paragraph. No delay or omission on the Bank’s part to exercise any right or power arising hereunder will impair any such right or power or be considered a waiver of any such right or power, nor will the Bank’s action or inaction impair any such right or power. The Bank’s rights and remedies hereunder are cumulative and not exclusive of any other rights or remedies which the Bank may have under other agreements, at law or in equity. No modification, amendment or waiver of, or consent to any departure by the Borrower from, any provision of this Note will be effective unless made in a writing signed by the Bank, and then such waiver or consent shall be effective only in the specific instance and for the purpose for which given. The Borrower agrees to pay on demand, to the extent permitted by law, all costs and expenses incurred by the Bank in the enforcement of its rights in this Note and in any security therefore, including without limitation reasonable fees and expenses of the Bank’s counsel. If any provision of this Note is found to be invalid, illegal or unenforceable in any respect by a court, all the other provisions of this Note will remain in full force and effect. The Borrower and all other makers and indorsers of this Note hereby forever waive presentment, protest, notice of dishonor and notice of non-payment. The Borrower also waives all defenses based on suretyship or impairment of collateral. If this Note is executed by more than one Borrower, the obligations of such persons or entities hereunder will be joint and several. This Note shall bind the Borrower and its heirs, executors, administrators, successors and assigns, and the benefits hereof shall inure to the benefit of the Bank and its successors and assigns; provided, however, that the Borrower may not assign this Note in whole or in part without the Bank’s written consent and the Bank at any time may assign this Note in whole or in part.

This Note has been delivered to and accepted by the Bank and will be deemed to be made in the State where the Bank’s office indicated above is located. **THIS NOTE WILL BE INTERPRETED AND THE RIGHTS AND LIABILITIES OF THE BANK AND THE BORROWER DETERMINED IN ACCORDANCE WITH THE LAWS OF THE STATE WHERE THE BANK’S OFFICE INDICATED ABOVE IS LOCATED, EXCLUDING ITS CONFLICT OF LAWS RULES.** The Borrower hereby irrevocably consents to the exclusive jurisdiction of any state or federal court in the county or judicial district where the Bank’s office indicated above is located; provided that nothing contained in this Note will prevent the Bank from bringing any action, enforcing any award or judgment or exercising any rights against the Borrower individually, against any security or against any property of the Borrower within any other county, state or other foreign or domestic jurisdiction. The Borrower acknowledges and agrees that the venue provided above is the most convenient forum for both the Bank and the Borrower. The Borrower waives any objection to venue and any objection based on a more convenient forum in any action instituted under this Note.

11. Amendment and Restatement. This Note amends and restates, and is in substitution for, that certain Commercial Note in the original principal amount of \$1,275,000.00 payable to the order of the Bank (as successor to National City Bank) and dated May 03, 2006 (the “**Existing Note**”). However, without duplication, this Note shall in no way extinguish, cancel or satisfy Borrower’s unconditional obligation to repay all indebtedness evidenced by the Existing Note or constitute a novation of the Existing Note. Nothing herein is intended to extinguish, cancel or impair the lien priority or effect of any security agreement, pledge agreement or mortgage with respect to any Obligor’s obligations hereunder and under any other document relating hereto.

12. Depository. The Borrower will establish and maintain with the Bank the Borrower’s primary depository accounts. If the Borrower fails to establish and/or maintain its primary depository accounts with the Bank, the Bank may, at its option, upon thirty (30) days notice to the Borrower, increase the interest rate payable by the Borrower under this Note by up to 1.00 percentage points (1.00%). The Bank’s right to increase the interest rate pursuant to this paragraph shall be in addition to any other rights or remedies the Bank may have under this Note, all of which are hereby reserved, and shall not constitute a waiver, release or limitation upon the Bank’s exercise of any such rights or remedies.

13. WAIVER OF JURY TRIAL. THE BORROWER IRREVOCABLY WAIVES ANY AND ALL RIGHTS THE BORROWER MAY HAVE TO A TRIAL BY JURY IN ANY ACTION, PROCEEDING OR CLAIM OF ANY NATURE RELATING TO THIS NOTE, ANY DOCUMENTS EXECUTED IN CONNECTION WITH THIS NOTE OR ANY TRANSACTION CONTEMPLATED IN ANY OF SUCH DOCUMENTS. THE BORROWER ACKNOWLEDGES THAT THE FOREGOING WAIVER IS KNOWING AND VOLUNTARY.

The Borrower acknowledges that it has read and understood all the provisions of this Note, including the confession of judgment and waiver of jury trial, and has been advised by counsel as necessary or appropriate.

WITNESS the due execution hereof, as of the date first written above, with the intent to be legally bound hereby.

WARNING-BY SIGNING THIS PAPER YOU GIVE UP YOUR RIGHT TO NOTICE AND COURT TRIAL. IF YOU DO NOT PAY ON TIME A COURT JUDGMENT MAY BE TAKEN AGAINST YOU WITHOUT YOUR PRIOR KNOWLEDGE AND THE POWERS OF A COURT CAN BE USED TO COLLECT FROM YOU REGARDLESS OF ANY CLAIMS YOU MAY HAVE AGAINST THE CREDITOR WHETHER FOR RETURNED GOODS, FAULTY GOODS, FAILURE ON HIS PART TO COMPLY WITH THE AGREEMENT, OR ANY OTHER CAUSE.

WITNESS / ATTEST:

NORTHERN TECHNOLOGIES HOLDING COMPANY, LLC

By: /s/ Matthew Wolsfeld

Print Name: _____

Print Name: Matthew Wolsfeld

Title: _____

Title: CFO

(Include title only if an officer of entity signing to the right)

**Amended and Restated
Committed Line Of Credit Note
(Multi-Rate Options)**



\$3,000,000.00

January , 2011

FOR VALUE RECEIVED, NORTHERN TECHNOLOGIES INTERNATIONAL CORPORATION (the “**Borrower**”), with an address at 4201 Woodland Road, Circle Pines, Minnesota 55014, promises to pay to the order of **PNC BANK, NATIONAL ASSOCIATION** (the “**Bank**”), in lawful money of the United States of America in immediately available funds at its offices located at 1900 East 9th Street, Cleveland, Ohio 45202, or at such other location as the Bank may designate in writing from time to time, the principal sum of **THREE MILLION AND 00/100 DOLLARS (\$3,000,000.00)** (the “**Facility**”) or such lesser amount as may be advanced to or for the benefit of the Borrower hereunder, together with interest accruing on the outstanding principal balance from the date hereof, all as provided below.

1. **Advances.** The Borrower may request advances, repay and request additional advances hereunder until the Expiration Date, subject to the terms and conditions of this Note and the Loan Documents (as hereinafter defined). The “**Expiration Date**” shall mean **January 10, 2012**, or such later date as may be designated by the Bank by written notice from the Bank to the Borrower. The Borrower acknowledges and agrees that in no event will the Bank be under any obligation to extend or renew the Facility or this Note beyond the Expiration Date. The Borrower may request advances hereunder upon giving oral or written notice to the Bank by 11:00 a.m. (Cleveland, Ohio time) (a) on the day of the proposed advance, in the case of advances to bear interest under the Base Rate Option (as hereinafter defined) and (b) three (3) Business Days prior to the proposed advance, in the case of advances to bear interest under the LIBOR Option (as hereinafter defined), followed promptly thereafter by the Borrower’s written confirmation to the Bank of any oral notice. The aggregate unpaid principal amount of advances under this Note shall not exceed the face amount of this Note.

2. **Rate of Interest.** Each advance outstanding under this Note will bear interest at a rate or rates per annum as may be selected by the Borrower from the interest rate options set forth below (each, an “**Option**”):

(i) **Base Rate Option.** A rate of interest per annum which is at all times equal to the Base Rate. If and when the Base Rate changes, the rate of interest with respect to any advance to which the Base Rate Option applies will change automatically without notice to the Borrower, effective on the date of any such change. There are no required minimum interest periods for advances bearing interest under the Base Rate Option.

(ii) **LIBOR Option.** A rate per annum equal to (A) LIBOR plus (B) two hundred fifteen (215) basis points (2.15%), for the applicable LIBOR Interest Period.

For purposes hereof, the following terms shall have the following meanings:

“**Base Rate**” shall mean the Prime Rate.

“**Business Day**” shall mean any day other than a Saturday or Sunday or a legal holiday on which commercial banks are authorized or required by law to be closed for business in Cleveland, Ohio.

“**Daily LIBOR Rate**” shall mean, for any day, the rate per annum determined by the Bank by dividing (x) the Published Rate by (y) a number equal to 1.00 minus the LIBOR Reserve Percentage.

Form 8B - OH (COJ) Rev. 11/10

“**LIBOR**” shall mean, with respect to any advance to which the LIBOR Option applies for the applicable LIBOR Interest Period, the interest rate per annum determined by the Bank by dividing (the resulting quotient rounded upwards, at the Bank’s discretion, to the nearest 1/100th of 1%) (i) the rate of interest determined by the Bank in accordance with its usual procedures (which determination shall be conclusive absent manifest error) to be the eurodollar rate two (2) Business Days prior to the first day of such LIBOR Interest Period for an amount comparable to such advance and having a borrowing date and a maturity comparable to such LIBOR Interest Period by (ii) a number equal to 1.00 minus the LIBOR Reserve Percentage.

“**LIBOR Interest Period**” shall mean, as to any advance to which the LIBOR Option applies, the period of one (1), two (2), or three (3) months as selected by the Borrower in its notice of borrowing or notice of conversion, as the case may be, commencing on the date of disbursement of an advance (or the date of conversion of an advance to the LIBOR Option, as the case may be) and each successive period selected by the Borrower thereafter; provided that, (i) if a LIBOR Interest Period would end on a day which is not a Business Day, it shall end on the next succeeding Business Day unless such day falls in the next succeeding calendar month in which case the LIBOR Interest Period shall end on the next preceding Business Day, (ii) the Borrower may not select a LIBOR Interest Period that would end on a day after the Expiration Date, and (iii) any LIBOR Interest Period that begins on the last Business Day of a calendar month (or a day for which there is no numerically corresponding day in the last calendar month of such LIBOR Interest Period) shall end on the last Business Day of the last calendar month of such LIBOR Interest Period.

“**LIBOR Reserve Percentage**” shall mean the maximum effective percentage in effect on such day as prescribed by the Board of Governors of the Federal Reserve System (or any successor) for determining the reserve requirements (including, without limitation, supplemental, marginal and emergency reserve requirements) with respect to eurocurrency funding (currently referred to as “Eurocurrency liabilities”).

“**Prime Rate**” shall mean the rate publicly announced by the Bank from time to time as its prime rate. The Prime Rate is determined from time to time by the Bank as a means of pricing some loans to its borrowers. The Prime Rate is not tied to any external rate of interest or index, and does not necessarily reflect the lowest rate of interest actually charged by the Bank to any particular class or category of customers.

“**Published Rate**” shall mean the rate of interest published each Business Day in the Wall Street Journal “Money Rates” listing under the caption “London Interbank Offered Rates” for a one month period (or, if no such rate is published therein for any reason, then the Published Rate shall be the eurodollar rate for a one month period as published in another publication selected by the Bank).

LIBOR and the Daily LIBOR Rate shall be adjusted with respect to any advance to which the LIBOR Option or Base Rate Option applies, as applicable, on and as of the effective date of any change in the LIBOR Reserve Percentage. The Bank shall give prompt notice to the Borrower of LIBOR or the Daily LIBOR Rate as determined or adjusted in accordance herewith, which determination shall be conclusive absent manifest error.

If the Bank determines (which determination shall be final and conclusive absent manifest error) that, by reason of circumstances affecting the eurodollar market generally, deposits in dollars (in the applicable amounts) are not being offered to banks in the eurodollar market for the selected term, or adequate means do not exist for ascertaining LIBOR, then the Bank shall give prompt notice thereof to the Borrower. Thereafter, until the Bank notifies the Borrower that the circumstances giving rise to such suspension no longer exist, (a) the availability of the LIBOR Option shall be suspended, and (b) the interest rate for all advances then bearing interest under the LIBOR Option shall be converted at the expiration of the then current LIBOR Interest Period(s) to the Base Rate Option.

2

In addition, if, after the date of this Note, the Bank shall determine (which determination shall be final and conclusive absent manifest error) that any enactment, promulgation or adoption of or any change in any applicable law, rule or regulation, or any change in the interpretation or administration thereof by a governmental authority, central bank or comparable agency charged with the interpretation or administration thereof, or compliance by the Bank with any guideline, request or directive (whether or not having the force of law) of any such authority, central bank or comparable agency shall make it unlawful or impossible for the Bank to make or maintain or fund loans based on LIBOR, the Bank shall promptly notify the Borrower. Upon receipt of such notice, until the Bank notifies the Borrower that the circumstances giving rise to such determination no longer apply, (a) the availability of the LIBOR Option shall be suspended, and (b) the interest rate on all advances then bearing interest under the LIBOR Option shall be converted to the Base Rate Option either (i) on the last day of the then current LIBOR Interest Period(s) if the Bank may lawfully continue to maintain advances based on LIBOR to such day, or (ii) immediately if the Bank may not lawfully continue to maintain advances based on LIBOR.

The foregoing notwithstanding, it is understood that the Borrower may select different Options to apply simultaneously to different portions of the advances and may select up to four (4) different interest periods to apply simultaneously to different portions of the advances bearing interest under the LIBOR Option. Interest hereunder will be calculated based on the actual number of days that principal is outstanding over a year of 360 days. In no event will the rate of interest hereunder exceed the maximum rate allowed by law.

3. Interest Rate Election. Subject to the terms and conditions of this Note, at the end of each interest period applicable to any advance, the Borrower may renew the Option applicable to such advance or convert such advance to a different Option; provided that, during any period in which any Event of Default (as hereinafter defined) has occurred and is continuing, any advances bearing interest under the LIBOR Option shall, at the Bank's sole discretion, be converted at the end of the applicable LIBOR Interest Period to the Base Rate Option and the LIBOR Option will not be available to Borrower with respect to any new advances (or with respect to the conversion or renewal of any existing advances) until such Event of Default has been cured by the Borrower or waived by the Bank. The Borrower shall notify the Bank of each election of an Option, each conversion from one Option to another, the amount of the advances then outstanding to be allocated to each Option and where relevant the interest periods therefor. In the case of converting to the LIBOR Option, such notice shall be given at least three (3) Business Days prior to the commencement of any LIBOR Interest Period. If no interest period is specified in any such notice for which the resulting advance is to bear interest under the LIBOR Option, the Borrower shall be deemed to have selected a LIBOR Interest Period of one month's duration. If no notice of election, conversion or renewal is timely received by the Bank with respect to any advance, the Borrower shall be deemed to have elected the Base Rate Option. Any such election shall be promptly confirmed in writing by such method as the Bank may require.

4. Advance Procedures. A request for advance made by telephone must be promptly confirmed in writing by such method as the Bank may require. The Borrower authorizes the Bank to accept telephonic requests for advances, and the Bank shall be entitled to rely upon the authority of any person providing such instructions. The Borrower hereby indemnifies and holds the Bank harmless from and against any and all damages, losses, liabilities, costs and expenses (including reasonable attorneys' fees and expenses) which may arise or be created by the acceptance of such telephone requests or making such advances other than damages, losses, liabilities, costs and expenses resulting from the gross negligence or willful misconduct of the Bank. The Bank will enter on its books and records, which entry when made will be presumed correct absent manifest error, the date and amount of each advance, the interest rate and interest period applicable thereto, as well as the date and amount of each payment.

5. Payment Terms. The Borrower shall pay accrued interest on the unpaid principal balance of this Note in arrears: (a) for the portion of advances bearing interest under the Base Rate Option, on the 30th day of each month during the term hereof, (b) for the portion of advances bearing interest under the LIBOR Option, on the last day of the respective LIBOR Interest Period for such advance, (c) if any LIBOR Interest Period is longer than three (3) months, then also on the three (3) month anniversary of such interest period and every three (3) months

3

thereafter, and (d) for all advances, at maturity, whether by acceleration of this Note or otherwise, and after maturity, on demand until paid in full. All outstanding principal and accrued interest hereunder shall be due and payable in full on the Expiration Date.

If any payment under this Note shall become due on a Saturday, Sunday or public holiday under the laws of the State where the Bank's office indicated above is located, such payment shall be made on the next succeeding Business Day and such extension of time shall be included in computing interest in connection with such payment. The Borrower hereby authorizes the Bank to charge the Borrower's deposit account at the Bank for any payment when due hereunder. Payments received will be applied to charges, fees and expenses (including reasonable attorneys' fees), accrued interest and principal in any order the Bank may choose, in its sole discretion.

6. Late Payments; Default Rate. If the Borrower fails to make any payment of principal, interest or other amount coming due pursuant to the provisions of this Note within fifteen (15) calendar days of the date due and payable, the Borrower also shall pay to the Bank a late charge equal to the lesser of five percent (5%) of the amount of such payment or \$100.00 (the "Late Charge"). Such fifteen (15) day period shall not be construed in any way to extend the due date of any such payment. Upon maturity, whether by acceleration, demand or otherwise, and at the Bank's option upon the occurrence of any Event of Default (as hereinafter defined) and during the continuance thereof, each advance outstanding under this Note shall bear interest at a rate per annum (based on the actual number of days that principal is outstanding over a year of 360 days) which shall be three percentage points (3%) in excess of the interest rate in effect from time to time under this Note but not more than the maximum rate allowed by law (the "Default Rate"). The Default Rate shall continue to apply whether or not judgment shall be entered on this Note. Both the Late Charge and the Default Rate are imposed as liquidated damages for

the purpose of defraying the Bank's expenses incident to the handling of delinquent payments, but are in addition to, and not in lieu of, the Bank's exercise of any rights and remedies hereunder, under the other Loan Documents or under applicable law, and any fees and expenses of any agents or attorneys which the Bank may employ. In addition, the Default Rate reflects the increased credit risk to the Bank of carrying a loan that is in default. The Borrower agrees that the Late Charge and Default Rate are reasonable forecasts of just compensation for anticipated and actual harm incurred by the Bank, and that the actual harm incurred by the Bank cannot be estimated with certainty and without difficulty.

7. **Prepayment.** The Borrower shall have the right to prepay any advance hereunder at any time and from time to time, in whole or in part; subject, however, to payment of any break funding indemnification amounts owing pursuant to paragraph 8 below.

8. **Yield Protection; Break Funding Indemnification.** The Borrower shall pay to the Bank on written demand therefor, together with the written evidence of the justification therefor, all direct costs incurred, losses suffered or payments made by Bank by reason of any change in law or regulation or its interpretation imposing any reserve, deposit, allocation of capital, or similar requirement (including without limitation, Regulation D of the Board of Governors of the Federal Reserve System) on the Bank, its holding company or any of their respective assets as the Bank reasonably and in good faith determines. The Bank agrees that, as promptly as practicable after becoming aware of the occurrence of any event or the existence of a condition that would entitle the Bank to receive payments under this Section 8, the Bank will, to the extent not inconsistent with internal policies of the Bank and applicable legal or regulatory restrictions, take reasonable measures to reduce any additional amounts that would otherwise be payable to the Bank under this Section 8. In addition, the Borrower agrees to indemnify the Bank against any liabilities, losses or expenses (including, without limitation, loss of margin, any loss or expense sustained or incurred in liquidating or employing deposits from third parties, and any loss or expense incurred in connection with funds acquired to effect, fund or maintain any advance (or any part thereof) bearing interest under the LIBOR Option) which the Bank sustains or incurs as a consequence of either (i) the Borrower's failure to make a payment on the due date thereof, (ii) the Borrower's revocation (expressly, by later inconsistent notices or otherwise) in whole or in part of any notice given to Bank to request, convert, renew or prepay any advance bearing interest under the LIBOR Option, or (iii) the Borrower's payment or prepayment (whether voluntary, after acceleration of the maturity of this Note or otherwise) or conversion of any advance bearing interest under the LIBOR Option on a day other than the last day of the applicable LIBOR Interest Period.

4

Notwithstanding anything contained herein to the contrary, if the security the loan evidenced by for this Note includes a mortgage against residential real estate located in the State of Ohio containing two or fewer dwelling units, the amount of the Borrower's indemnification obligations hereunder shall not exceed one percent (1.00%) of the original principal amount secured by the residential mortgage during the first five (5) years after the date of this Note, and there shall be no indemnification obligations arising from prepayments made after the expiration of such five (5) year period. A notice as to any amounts payable pursuant to this paragraph given to the Borrower by the Bank shall, in the absence of manifest error, be conclusive and shall be payable upon demand. The Borrower's indemnification obligations hereunder shall survive the payment in full of the advances and all other amounts payable hereunder.

9. **Other Loan Documents.** This Note is issued in connection with a Loan Agreement between the Borrower and the Bank, dated on or before the date hereof, and the other agreements and documents executed and/or delivered in connection therewith or referred to therein, the terms of which are incorporated herein by reference (as amended, modified or renewed from time to time, collectively the "Loan Documents"), and is secured by the property (if any) described in the Loan Documents and by such other collateral as previously may have been or may in the future be granted to the Bank to secure this Note.

10. **Events of Default.** The occurrence of any of the following events will be deemed to be an "Event of Default" under this Note: (i) the nonpayment of any principal, interest or other indebtedness under this Note when due; (ii) the occurrence of any event of default or any default, or any Obligor's failure to observe or perform any covenant or other agreement, under or contained in any Loan Document or any other document now or in the future evidencing or securing any debt, liability or obligation of any Obligor to the Bank; provided, however, that, no such failure to observe or perform any such covenant or other agreement (excluding financial covenants, financial reporting covenants, and negative covenants) shall constitute an Event of Default unless such failure continues for a period of 10 days after the earlier to occur of (a) the date when any Obligor becomes aware of such failure and (b) the date when the Bank gives written notice to the Borrower of such failure; (iii) the filing by or against any Obligor of any proceeding in bankruptcy, receivership, insolvency, reorganization, liquidation, conservatorship or similar proceeding (and, in the case of any such proceeding instituted against any Obligor, such proceeding is not dismissed or stayed within sixty (60) days of the commencement thereof, provided that the Bank shall not be obligated to advance additional funds hereunder during such period); (iv) any assignment by any Obligor for the benefit of creditors, or any levy, garnishment, attachment or similar proceeding is instituted against all or any material portion of the property of any Obligor held by or deposited with the Bank; (v) a default with respect to any other indebtedness with a principal amount in excess of \$200,000, individually or in the aggregate, of any Obligor for borrowed money, if the effect of such default is to cause or permit the acceleration of such debt; (vi) the commencement of any foreclosure or forfeiture proceeding, execution or attachment against any collateral securing the obligations of any Obligor to the Bank; (vii) the entry of a final judgment against any Obligor and the failure of such Obligor to discharge the judgment within thirty (30) days of the entry thereof; (viii) any material adverse change in any Obligor's business, assets, operations, financial condition or results of operations, as determined in the Bank's good faith business judgment; (ix) any Obligor ceases doing business as a going concern; (x) any representation or warranty made by any Obligor to the Bank in any Loan Document or any other documents now or in the future evidencing or securing the obligations of any Obligor to the Bank, is false, erroneous or misleading in any material respect; (xi) the revocation or attempted revocation, in whole or in part, of any guarantee by any Obligor; or (xii) the death, incarceration, indictment or legal incompetency of any individual Obligor or, if any Obligor is a partnership or limited liability company, the death, incarceration, indictment or legal incompetency of any individual general partner or member. As used herein, the term "Obligor" means any Borrower and any guarantor of, or any pledgor, mortgagor or other person or entity providing collateral support for, the Borrower's obligations to the Bank existing on the date of this Note or arising in the future.

Upon the occurrence and during the continuance of an Event of Default: (a) the Bank shall be under no further obligation to make advances hereunder; (b) if an Event of Default specified in clause (iii) or (iv) above shall occur, the outstanding principal balance and accrued interest hereunder together with any additional amounts payable hereunder shall be immediately due and payable without demand or notice of any kind; (c) if any other

5

Event of Default shall occur, the outstanding principal balance and accrued interest hereunder together with any additional amounts payable hereunder, at the Bank's option and without demand or notice of any kind, may be accelerated and become immediately due and payable; (d) at the Bank's option, this Note will bear interest at the Default Rate from the date of the occurrence of the Event of Default until such time as the Event of Default is cured; and (e) the Bank may exercise from time to time any of the rights and remedies available under the Loan Documents or under applicable law.

11. **Power to Confess Judgment.** The Borrower hereby irrevocably authorizes any attorney-at-law, including an attorney employed by or retained and paid by the Bank, to appear in any court of record in or of the State of Ohio, or in any other state or territory of the United States, at any time after the indebtedness evidenced by this Note becomes due, whether by acceleration or otherwise, to waive the issuing and service of process and to confess a judgment against the Borrower in favor of the Bank, and/or any assignee or holder hereof for the amount of principal and interest and expenses then appearing due from the Borrower under this Note, together with costs of suit and thereupon to release all errors and waive all right of appeal or stays of execution in any court of record. The Borrower hereby expressly (i) waives any conflict of interest of the attorney(s) retained by the Bank to confess judgment against the Borrower upon this Note, and (ii) consents to the receipt by such attorney(s) of a reasonable legal fee from the Bank for legal services rendered for confessing judgment against the Borrower upon this Note. A copy of this Note, certified by the Bank, may be filed in each such proceeding in place of filing the original as a warrant of attorney.

12. **Right of Setoff.** In addition to all liens upon and rights of setoff against the Borrower's money, securities or other property given to the Bank by law, the Bank shall have, with respect to the Borrower's obligations to the Bank under this Note and to the extent permitted by law, a contractual possessory security interest in and a contractual right of setoff against, and the Borrower hereby grants the Bank a security interest in, and hereby assigns, conveys, delivers, pledges and transfers to the Bank, all of the Borrower's right, title and interest in and to, all of the Borrower's deposits, moneys, securities and other property now or hereafter in the possession of or on deposit with, or in transit to, the Bank or any other direct or indirect subsidiary of The PNC Financial Services Group, Inc., whether held in a general or special account or deposit, whether held jointly with someone else, or whether held for safekeeping or otherwise, excluding, however, all IRA, Keogh, and trust accounts. Every such security interest and right of setoff may be exercised without demand upon or notice to the Borrower. Every such right of setoff shall be deemed to have been exercised immediately upon the occurrence of an Event of Default hereunder without any action of the Bank, although the Bank may enter such setoff on its books and records at a later time. The Bank agrees to notify the Borrower promptly after any such setoff and application; provided, however, that the failure to give such notice shall not affect the validity of such setoff and application.

13. **Indemnity.** The Borrower agrees to indemnify each of the Bank, each legal entity, if any, who controls, is controlled by or is under common control with the Bank, and each of their respective directors, officers and employees (the "**Indemnified Parties**"), and to defend and hold each Indemnified Party harmless from and against any and all claims, damages, losses, liabilities and expenses (including all reasonable fees and charges of internal or external counsel with whom any Indemnified Party may consult and all expenses of litigation and preparation therefor) which any Indemnified Party incurs or are asserted against any Indemnified Party by any person, entity or governmental authority (including any person or entity claiming derivatively on behalf of the Borrower), in connection with or arising out of or relating to the matters referred to in this Note or in the other Loan Documents or the use of any advance hereunder, whether (a) arising from or incurred in connection with any breach of a representation, warranty or covenant by the Borrower, or (b) arising out of or resulting from any suit, action, claim, proceeding or governmental investigation, pending or threatened, whether based on statute, regulation or order, or tort, or contract or otherwise, before any court or governmental authority; provided, however, that the foregoing indemnity agreement shall not apply to any claims, damages, losses, liabilities and expenses attributable to an Indemnified Party's gross negligence or willful misconduct. The indemnity agreement contained in this Section shall survive the termination of this Note, payment of any advance hereunder and the assignment of any rights hereunder. The Borrower may participate at its expense in the defense of any such action or claim.

6

14. **Miscellaneous.** All notices, demands, requests, consents, approvals and other communications required or permitted hereunder ("**Notices**") must be in writing (except as may be agreed otherwise above with respect to borrowing requests) and will be effective upon receipt. Notices may be given in any manner to which the parties may separately agree, including electronic mail. Without limiting the foregoing, first-class mail, facsimile transmission and commercial courier service are hereby agreed to as acceptable methods for giving Notices. Regardless of the manner in which provided, Notices may be sent to a party's address as set forth above or to such other address as any party may give to the other in writing for such purpose in accordance with this paragraph. No delay or omission on the Bank's part to exercise any right or power arising hereunder will impair any such right or power or be considered a waiver of any such right or power, nor will the Bank's action or inaction impair any such right or power. The Bank's rights and remedies hereunder are cumulative and not exclusive of any other rights or remedies which the Bank may have under other agreements, at law or in equity. No modification, amendment or waiver of, or consent to any departure by the Borrower from, any provision of this Note will be effective unless made in a writing signed by the Bank, and then such waiver or consent shall be effective only in the specific instance and for the purpose for which given. The Borrower agrees to pay on demand, to the extent permitted by law, all costs and expenses incurred by the Bank in the enforcement of its rights in this Note and in any security therefor, including without limitation reasonable fees and expenses of the Bank's counsel. If any provision of this Note is found to be invalid, illegal or unenforceable in any respect by a court, all the other provisions of this Note will remain in full force and effect. The Borrower and all other makers and indorsers of this Note hereby forever waive presentment, protest, notice of dishonor and notice of non-payment. The Borrower also waives all defenses based on suretyship or impairment of collateral. If this Note is executed by more than one Borrower, the obligations of such persons or entities hereunder will be joint and several. This Note shall bind the Borrower and its heirs, executors, administrators, successors and assigns, and the benefits hereof shall inure to the benefit of the Bank and its successors and assigns; provided, however, that the Borrower may not assign this Note in whole or in part without the Bank's written consent and the Bank at any time may assign this Note in whole or in part.

This Note has been delivered to and accepted by the Bank and will be deemed to be made in the State where the Bank's office indicated above is located. **THIS NOTE WILL BE INTERPRETED AND THE RIGHTS AND LIABILITIES OF THE BANK AND THE BORROWER DETERMINED IN ACCORDANCE WITH THE LAWS OF THE STATE WHERE THE BANK'S OFFICE INDICATED ABOVE IS LOCATED, EXCLUDING ITS CONFLICT OF LAWS RULES.** The Borrower hereby irrevocably consents to the exclusive jurisdiction of any state or federal court in the county or judicial district where the Bank's office indicated above is located; provided that nothing contained in this Note will prevent the Bank from bringing any action, enforcing any award or judgment or exercising any rights against the Borrower individually, against any security or against any property of the Borrower within any other county, state or other foreign or domestic jurisdiction. The Borrower acknowledges and agrees that the venue provided above is the most convenient forum for both the Bank and the Borrower. The Borrower waives any objection to venue and any objection based on a more convenient forum in any action instituted under this Note.

15. **Amendment and Restatement.** This Note amends and restates, and is in substitution for that certain Commercial Note in the amended principal amount of \$2,300,000.00 payable to the order of the Bank and dated December 14, 2006 (as amended, the "**Existing Note**"). However, without duplication, this Note shall in no way extinguish, cancel or satisfy Borrower's unconditional obligation to repay all indebtedness evidenced by the Existing Note or constitute a novation of the Existing Note. Nothing herein is intended to extinguish, cancel or impair the lien priority or effect of any security agreement, pledge agreement or mortgage with respect to any Obligor's obligations hereunder and under any other document relating hereto.

7

15. **WAIVER OF JURY TRIAL.** THE BORROWER IRREVOCABLY WAIVES ANY AND ALL RIGHTS THE BORROWER MAY HAVE TO A TRIAL BY JURY IN ANY ACTION, PROCEEDING OR CLAIM OF ANY NATURE RELATING TO THIS NOTE, ANY DOCUMENTS EXECUTED IN CONNECTION WITH THIS NOTE OR ANY TRANSACTION CONTEMPLATED IN ANY OF SUCH DOCUMENTS. THE BORROWER ACKNOWLEDGES THAT THE FOREGOING WAIVER IS KNOWING AND VOLUNTARY.

The Borrower acknowledges that it has read and understood all the provisions of this Note, including the confession of judgment and the waiver of jury trial, and has been advised by counsel as necessary or appropriate.

WITNESS the due execution hereof, as of the date first written above, with the intent to be legally bound hereby.

WARNING-BY SIGNING THIS PAPER YOU GIVE UP YOUR RIGHT TO NOTICE AND COURT TRIAL. IF YOU DO NOT PAY ON TIME A COURT JUDGMENT MAY BE TAKEN AGAINST YOU WITHOUT YOUR PRIOR KNOWLEDGE AND THE POWERS OF A COURT CAN BE USED TO COLLECT FROM YOU REGARDLESS OF ANY CLAIMS YOU MAY HAVE AGAINST THE CREDITOR WHETHER FOR RETURNED GOODS, FAULTY GOODS, FAILURE ON HIS PART TO COMPLY WITH THE AGREEMENT, OR ANY OTHER CAUSE.

WITNESS / ATTEST:

NORTHERN TECHNOLOGIES HOLDING COMPANY, LLC

By: /s/ Matthew Wolsfeld

Print Name: _____

Print Name: Matthew Wolsfeld

Title: _____

Title: CFO

(Include title only if an officer of entity signing to the right)

Security Agreement



THIS SECURITY AGREEMENT (this “**Agreement**”), dated as of this 10th day of January, 2011, is made by **NORTHERN TECHNOLOGIES INTERNATIONAL CORPORATION** (the “**Grantor**”), with an address at 4201 Woodland Road, Circle Pines, Minnesota 55014, in favor of **PNC BANK, NATIONAL ASSOCIATION, successor to NATIONAL CITY BANK** (the “**Bank**”), with an address at 1900 East 9th Street, Cleveland, Ohio 45202.

Under the terms hereof, the Bank desires to obtain and the Grantor desires to grant the Bank security for all of the Obligations (as hereinafter defined).

NOW, THEREFORE, the Grantor and the Bank, intending to be legally bound, hereby agree as follows:

1. Definitions.

(a) “**Collateral**” shall include all personal property of the Grantor, including the following, all whether now owned or hereafter acquired or arising and wherever located: (i) accounts (including health-care-insurance receivables and credit card receivables); (ii) securities entitlements, securities accounts, commodity accounts, commodity contracts and investment property; (iii) deposit accounts; (iv) instruments (including promissory notes); (v) documents (including warehouse receipts); (vi) chattel paper (including electronic chattel paper and tangible chattel paper); (vii) inventory, including raw materials, work in process, or materials used or consumed in Grantor’s business, items held for sale or lease or furnished or to be furnished under contracts of service, sale or lease, goods that are returned, reclaimed or repossessed; (viii) goods of every nature, including stock-in-trade, goods on consignment, standing timber that is to be cut and removed under a conveyance or contract for sale, the unborn young of animals, crops grown, growing, or to be grown, manufactured homes, computer programs embedded in such goods and farm products; (ix) equipment, including machinery, vehicles and furniture; (x) fixtures; (xi) agricultural liens; (xii) as-extracted collateral; (xiii) commercial tort claims, if any, described on Exhibit “A” hereto; (xiv) letter of credit rights; (xv) general intangibles, of every kind and description, including payment intangibles, software, computer information, source codes, object codes, records and data, all existing and future customer lists, choses in action, claims (including claims for indemnification or breach of warranty), books, records, patents and patent applications, copyrights, trademarks, tradenames, tradestyles, trademark applications, goodwill, blueprints, drawings, designs and plans, trade secrets, contracts, licenses, license agreements, formulae, tax and any other types of refunds, returned and unearned insurance premiums, rights and claims under insurance policies; (xvi) all supporting obligations of all of the foregoing property; (xvii) all property of the Grantor now or hereafter in the Bank’s possession or in transit to or from, or under the custody or control of, the Bank or any affiliate thereof; (xviii) all cash and cash equivalents thereof; and (xix) all cash and noncash proceeds (including insurance proceeds) of all of the foregoing property, all products thereof and all additions and accessions thereto, substitutions therefor and replacements thereof. The Collateral shall also include any and all other tangible or intangible property that is described as being part of the Collateral pursuant to one or more Riders to Security Agreement that may be attached hereto or delivered in connection herewith, including the Rider to Security Agreement - Copyrights, the Rider to Security Agreement - Patents, the Rider to Security Agreement - Trademarks and the Rider to Security Agreement - Cash Collateral Account.

(b) “**Obligations**” shall include all loans, advances, debts, liabilities, obligations, covenants and duties owing by the Grantor or by **NORTHERN TECHNOLOGIES HOLDING COMPANY, LLC** to the Bank or to any other direct or indirect subsidiary of The PNC Financial Services Group, Inc., of any kind or nature, present or future (including any interest accruing thereon after maturity, or after the filing of any petition in bankruptcy, or the commencement of any insolvency, reorganization or like proceeding relating to the Grantor, whether or not a claim for post-filing or post-petition interest is allowed in such proceeding), whether direct or

Form 10A - Multistate Rev. 10/09

indirect (including those acquired by assignment or participation), absolute or contingent, joint or several, due or to become due, now existing or hereafter arising, whether or not (i) evidenced by any note, guaranty or other instrument, (ii) arising under any agreement, instrument or document, (iii) for the payment of money, (iv) arising by reason of an extension of credit, opening of a letter of credit, loan, equipment lease or guarantee, (v) under any interest or currency swap, future, option or other interest rate protection or similar agreement, (vi) under or by reason of any foreign currency transaction, forward, option or other similar transaction providing for the purchase of one currency in exchange for the sale of another currency, or in any other manner, (vii) arising out of overdrafts on deposit or other accounts or out of electronic funds transfers (whether by wire transfer or through automated clearing houses or otherwise) or out of the return unpaid of, or other failure of the Bank to receive final payment for, any check, item, instrument, payment order or other deposit or credit to a deposit or other account, or out of the Bank’s non-receipt of or inability to collect funds or otherwise not being made whole in connection with depository or other similar arrangements; and any amendments, extensions, renewals and increases of or to any of the foregoing, and all costs and expenses of the Bank incurred in the documentation, negotiation, modification, enforcement, collection and otherwise in connection with any of the foregoing, including reasonable attorneys’ fees and expenses.

(c) “**Permitted Transfers**” means (a) Transfers of obsolete or worn out property, whether now owned or hereafter acquired, in the ordinary course of business; (b) Transfers of inventory and collections of accounts in the ordinary course of business; and (c) Transfers of equipment or fixtures to the extent that (i) such property is exchanged for credit against the purchase price of similar replacement property or (ii) the proceeds of such Transfer are reasonably promptly applied to the purchase price of such replacement property.

(d) “**Transfer**” means the sale, transfer, license, lease or other of any property by the Grantor.

(e) “**UCC**” means the Uniform Commercial Code, as adopted and enacted and as in effect from time to time in the State whose law governs pursuant to the Section of this Agreement entitled “Governing Law and Jurisdiction.” Terms used herein which are defined in the UCC and not otherwise defined herein shall have the respective meanings ascribed to such terms in the UCC. To the extent the definition of any category or type of collateral is modified by any amendment, modification or revision to the UCC, such modified definition will apply automatically as of the date of such amendment, modification or revision.

2. Grant of Security Interest. To secure the Obligations, the Grantor, as debtor, hereby assigns and grants to the Bank, as secured party, a continuing lien on and security interest in the Collateral.

3. **Change in Name or Locations.** The Grantor hereby agrees that if the location of the Collateral (other than Permitted Transfers) changes from the locations listed on Exhibit "A" hereto and made part hereof, or if the Grantor changes its name, its type of organization, its state of organization (if Grantor is a registered organization), its principal residence (if Grantor is an individual), its chief executive office (if Grantor is a general partnership or non-registered organization) or establishes a name in which it may do business that is not listed as a tradename on Exhibit "A" hereto, the Grantor will immediately notify the Bank in writing of the additions or changes.

4. **Representations and Warranties.** The Grantor represents, warrants and covenants to the Bank that: (a) all information, including its type of organization, jurisdiction of organization, chief executive office, and (for individuals only) principal residence are as set forth on Exhibit "A" hereto and are true and correct on the date hereof; (b) the Grantor has good, marketable and indefeasible title to the Collateral, has not made any prior sale, pledge, encumbrance, assignment or other disposition of any of the Collateral, and the Collateral is free from all encumbrances and rights of setoff of any kind except the lien in favor of the Bank created by this Agreement; (c) except for Permitted Transfers, the Grantor will not hereafter without the Bank's prior written consent sell, pledge, encumber, assign or otherwise dispose of any of the Collateral or permit any right of setoff, lien or security interest to exist thereon except to the Bank; (d) the Grantor will defend the Collateral against all claims

2

and demands of all persons at any time claiming the same or any interest therein other than those in favor of the Bank; (e) to the Grantor's knowledge, each account and general intangible, if included in the definition of Collateral, is genuine and enforceable in accordance with its terms and the Grantor will defend the same against all claims, demands, setoffs and counterclaims at any time asserted; and (f) at the time any account or general intangible becomes subject to this Agreement, such account or general intangible will be a good and valid account representing a bona fide sale of goods or services by the Grantor and such goods will have been shipped to the respective account debtors or the services will have been performed for the respective account debtors, and no such account or general intangible will be subject to any claim for credit, allowance or adjustment by any account debtor or any setoff, defense or counterclaim other than those arising in the ordinary course of business.

5. **Grantor's Covenants.** The Grantor covenants that it shall:

(a) from time to time and at all reasonable times and at reasonable intervals allow the Bank, by or through any of its officers, agents, attorneys, or accountants, to examine or inspect the Collateral, and obtain valuations and audits of the Collateral, at the Grantor's expense but in no event greater than \$7,500.00 per audit, wherever located. The Grantor shall do, obtain, make, execute and deliver all such additional and further acts, things, deeds, assurances and instruments as the Bank may reasonably require to vest in and assure to the Bank its rights hereunder and in or to the Collateral, and the proceeds thereof, including waivers from landlords, warehousemen and mortgagees. After the occurrence and during the continuance of an Event of Default, the Grantor agrees that the Bank has the right to notify (on invoices or otherwise) account debtors and other obligors or payors on any Collateral of its assignment to the Bank, and that all payments thereon should be made directly to the Bank, and that the Bank has full power and authority to collect, compromise, endorse, sell or otherwise deal with the Collateral in its own name or that of the Grantor at any time after the occurrence and during the continuance of an Event of Default;

(b) keep the Collateral in good order and repair (subject to normal wear and tear) at all times and immediately notify the Bank of any event causing a material loss or decline in value of the Collateral, whether or not covered by insurance, and the amount of such loss or depreciation;

(c) only use or permit the Collateral to be used in accordance with all applicable federal, state, county and municipal laws and regulations; and

(d) have and maintain insurance at all times with respect to all Collateral against risks of fire (including so-called extended coverage), theft, sprinkler leakage, and other risks (including risk of flood if any Collateral is maintained at a location in a flood hazard zone) as the Bank may reasonably require, in such form, in such amount, for such period and written by such companies as may be reasonably satisfactory to the Bank. Each such casualty insurance policy shall contain a standard Lender's Loss Payable Clause issued in favor of the Bank under which all losses thereunder shall be paid to the Bank as the Bank's interests may appear. Such policies shall expressly provide that the requisite insurance cannot be altered or canceled without at least thirty (30) days prior written notice to the Bank and shall insure the Bank notwithstanding the act or neglect of the Grantor. Upon the Bank's demand, the Grantor shall furnish the Bank with duplicate original policies of insurance or such other evidence of insurance as the Bank may require. In the event of failure to provide insurance as herein provided, the Bank may, at its option, obtain such insurance and the Grantor shall pay to the Bank, on demand, the cost thereof. After the occurrence and during the continuance of an Event of Default, proceeds of insurance may be applied by the Bank to reduce the Obligations or to repair or replace Collateral, all in the Bank's sole discretion.

6. **Negative Pledge; No Transfer.** The Grantor will not sell or offer to sell or otherwise transfer the Collateral (except for Permitted Transfers) or grant or allow the imposition of a lien or security interest upon the Collateral will not allow any third party to gain control of all or any part of the Collateral, and will not use any

3

portion thereof in any manner inconsistent with this Agreement or with the terms and conditions of any policy of insurance thereon.

7. **Covenants for Accounts.** If accounts are included in the definition of Collateral:

(a) The Grantor will, on the Bank's demand, make notations on its books and records showing the Bank's security interest and make available to the Bank shipping and delivery receipts evidencing the shipment of the goods that gave rise to an account, completion certificates or other proof of the satisfactory performance of services that gave rise to an account, a copy of the invoice for each account and copies of any written contract or order from which an account arose. The Grantor shall promptly notify the Bank if an account becomes evidenced or secured by an instrument or chattel paper and upon the Bank's request, will promptly deliver any such instrument or chattel paper to the Bank, including any letter of credit delivered to the Grantor to support a shipment of inventory by the Grantor.

(b) The Grantor will promptly advise the Bank whenever an account debtor refuses to retain or returns any goods in a material amount from the sale of which an account arose and will comply with any reasonable instructions that the Bank may give regarding the sale or other disposition of such returns. From time to time with such frequency as the Bank may request, the Grantor will report to the Bank all material credits given to account debtors on all accounts.

(c) The Grantor will immediately notify the Bank if any account arises out of contracts with the United States or any department, agency or instrumentality thereof, and will execute any instruments and take any steps required by the Bank so that all monies due and to become due under such contract shall be assigned to the Bank and notice of the assignment given to and acknowledged by the appropriate government agency or authority under the Federal Assignment of Claims Act.

(d) At any time after the occurrence and during the continuance of an Event of Default, and without notice to the Grantor, the Bank may direct any persons who are indebted to the Grantor on any Collateral consisting of accounts or general intangibles to make payment directly to the Bank of the amounts due. Upon the occurrence and during the continuance of an Event of Default, the Bank is authorized to collect, compromise, endorse and sell any such Collateral in its own name or in the Grantor's name and to give receipts to such account debtors for any such payments and the account debtors will be protected in making such payments to the Bank. Upon the Bank's written request after the occurrence and during the continuance of an Event of Default, the Grantor will establish with the Bank and maintain a lockbox account ("**Lockbox**") with the Bank and a depository account(s) ("**Cash Collateral Account**") with the Bank subject to the provisions of this subparagraph and such other related agreements as the Bank may require, and the Grantor shall notify its account debtors to remit payments directly to the Lockbox. Thereafter, funds collected in the Lockbox shall be transferred to the Cash Collateral Account, and funds in the Cash Collateral Account shall be applied by the Bank, daily, to reduce the outstanding Obligations.

8. Further Assurances. By its signature hereon, the Grantor hereby irrevocably authorizes the Bank to execute (on behalf of the Grantor) and file against the Grantor one or more financing, continuation or amendment statements pursuant to the UCC in form satisfactory to the Bank, and the Grantor will pay the cost of preparing and filing the same in all jurisdictions in which such filing is reasonably deemed by the Bank to be necessary or desirable in order to perfect, preserve and protect its security interests. If required by the Bank, the Grantor will execute all documentation necessary for the Bank to obtain and maintain perfection of its security interests in the Collateral. At the Bank's request, the Grantor will execute, in form satisfactory to the Bank, a Rider to Security Agreement - Copyrights (if any Collateral consists of registered or unregistered copyrights), a Rider to Security Agreement - Patents (if any Collateral consists of patents or patent applications), a Rider to Security Agreement - Trademarks (if any Collateral consists of trademarks, tradenames, tradestyles or trademark applications). If any Collateral consists of letter of credit rights, electronic chattel paper, deposit accounts or supporting obligations

4

not maintained with the Bank or one of its affiliates, or any securities entitlement, securities account, commodities account, commodities contract or other investment property, then at the Bank's request the Grantor will execute, and will cause the depository institution or securities intermediary upon whose books and records the ownership interest of the Grantor in such Collateral appears, to execute such Pledge Agreements, Notification and Control Agreements or other agreements as the Bank deems necessary in order to perfect, prioritize and protect its security interest in such Collateral, in each case in a form satisfactory to the Bank.

9. Events of Default. The Grantor shall, at the Bank's option, be in default under this Agreement upon the happening of any of the following events or conditions (each, an "**Event of Default**"): (a) any Event of Default (as defined in any of the Obligations); (b) any default under any of the Obligations that does not have a defined set of "Events of Default" and the lapse of any notice or cure period provided in such Obligations with respect to such default; (c) demand by the Bank under any of the Obligations that have a demand feature; (d) the failure by the Grantor to perform any of its obligations under this Agreement (not constituting an Event of Default under any other provision of this Section 9) and such failure shall continue for ten (10) days after the earlier to occur of the date upon which the Grantor becomes aware of such default and (ii) the date upon which written notice thereof is given to the Grantor by the Bank; (e) falsity, inaccuracy or material breach by the Grantor of any written warranty, representation or statement made or furnished to the Bank by or on behalf of the Grantor; (f) an uninsured material loss, theft, damage, or destruction to any of the Collateral, or the entry of any material judgment against the Grantor or any lien against or the making of any levy, seizure or attachment of or on all or a material portion of the Collateral; (g) the failure of the Bank to have a perfected first priority security interest in the Collateral; (h) any indication or evidence received by the Bank that the Grantor engaged in the type of activity which, in the Bank's reasonable discretion, would reasonably be expected to result in the forfeiture of all or a material portion of the property of the Grantor to any governmental entity, federal, state or local.

10. Remedies. Upon the occurrence of any such Event of Default and at any time thereafter during the continuance thereof, the Bank may declare all Obligations secured hereby immediately due and payable and shall have, in addition to any remedies provided herein or by any applicable law or in equity, all the remedies of a secured party under the UCC. The Bank's remedies include, but are not limited to, the right to (a) peaceably by its own means or with judicial assistance enter the Grantor's premises and take possession of the Collateral without prior notice to the Grantor or the opportunity for a hearing, (b) render the Collateral unusable, (c) dispose of the Collateral on the Grantor's premises, (d) require the Grantor to assemble the Collateral and make it available to the Bank at a place reasonably designated by the Bank, and (e) notify the United States Postal Service to send the Grantor's mail to the Bank. Unless the Collateral is perishable or threatens to decline speedily in value or is of a type customarily sold on a recognized market, the Bank will give the Grantor reasonable written notice of the time and place of any public sale thereof or of the time after which any private sale or any other intended disposition thereof is to be made. The requirements of commercially reasonable notice shall be met if such notice is sent to the Grantor at least ten (10) days before the time of the intended sale or disposition. Expenses of retaking, holding, preparing for disposition, disposing or the like shall include the Bank's reasonable attorneys' fees and legal expenses, incurred or expended by the Bank to enforce any payment due it under this Agreement either as against the Grantor, or in the prosecution or defense of any action, or concerning any matter growing out of or connection with the subject matter of this Agreement and the Collateral pledged hereunder. The Grantor waives all relief from all appraisal or exemption laws now in force or hereafter enacted.

11. Power of Attorney. The Grantor does hereby make, constitute and appoint any officer or agent of the Bank as the Grantor's true and lawful attorney-in-fact, with power to (a) after the occurrence and during the continuance of an Event of Default endorse the name of the Grantor or any of the Grantor's officers or agents upon any notes, checks, drafts, money orders, or other instruments of payment or Collateral that may come into the Bank's possession in full or part payment of any Obligations; (b) after the occurrence and during the continuance of an Event of Default, sue for, compromise, settle and release all claims and disputes with respect to, the Collateral; and (c) sign, for the Grantor, such documentation required by the UCC, or supplemental

5

intellectual property security agreements; granting to the Grantor's said attorney full power to do any and all things necessary to be done in and about the premises as fully and effectually as the Grantor might or could do. The Grantor hereby ratifies all that said attorney shall lawfully do or cause to be done by virtue hereof. This power of attorney is coupled with an interest, and is irrevocable.

12. **Payment of Expenses.** At its option after the occurrence and during the continuance of an Event of Default, to the extent the Grantor fails to do so, the Bank may discharge taxes, liens, security interests or such other encumbrances as may attach to the Collateral, may pay for required insurance on the Collateral and may pay for the maintenance, appraisal or reappraisal, and preservation of the Collateral, as determined by the Bank to be necessary. The Grantor will reimburse the Bank on demand for any payment so made or any expense incurred by the Bank pursuant to the foregoing authorization, and the Collateral also will secure any advances or payments so made or expenses so incurred by the Bank.
13. **Notices.** All notices, demands, requests, consents, approvals and other communications required or permitted hereunder (“**Notices**”) must be in writing and will be effective upon receipt. Notices may be given in any manner to which the parties may separately agree, including electronic mail. Without limiting the foregoing, first-class mail, facsimile transmission and commercial courier service are hereby agreed to as acceptable methods for giving Notices. Regardless of the manner in which provided, Notices may be sent to a party’s address as set forth above or to such other address as any party may give to the other in writing for such purpose in accordance with this section.
14. **Preservation of Rights.** No delay or omission on the Bank’s part to exercise any right or power arising hereunder will impair any such right or power or be considered a waiver of any such right or power, nor will the Bank’s action or inaction impair any such right or power. The Bank’s rights and remedies hereunder are cumulative and not exclusive of any other rights or remedies which the Bank may have under other agreements, at law or in equity.
15. **Illegality.** If any provision contained in this Agreement should be invalid, illegal or unenforceable in any respect, it shall not affect or impair the validity, legality and enforceability of the remaining provisions of this Agreement.
16. **Changes in Writing.** No modification, amendment or waiver of, or consent to any departure by the Grantor from, any provision of this Agreement will be effective unless made in a writing signed by the Bank, and then such waiver or consent shall be effective only in the specific instance and for the purpose for which given. No notice to or demand on the Grantor will entitle the Grantor to any other or further notice or demand in the same, similar or other circumstance.
17. **Entire Agreement.** This Agreement (including the documents and instruments referred to herein) constitutes the entire agreement and supersedes all other prior agreements and understandings, both written and oral, between the parties with respect to the subject matter hereof.
18. **Counterparts.** This Agreement may be signed in any number of counterpart copies and by the parties hereto on separate counterparts, but all such copies shall constitute one and the same instrument. Delivery of an executed counterpart of signature page to this Agreement by facsimile transmission shall be effective as delivery of a manually executed counterpart. Any party so executing this Agreement by facsimile transmission shall promptly deliver a manually executed counterpart, provided that any failure to do so shall not affect the validity of the counterpart executed by facsimile transmission.
19. **Successors and Assigns.** This Agreement will be binding upon and inure to the benefit of the Grantor and the Bank and their respective heirs, executors, administrators, successors and assigns; provided, however,

that the Grantor may not assign this Agreement in whole or in part without the Bank’s prior written consent and the Bank at any time may assign this Agreement in whole or in part.

20. **Interpretation.** In this Agreement, unless the Bank and the Grantor otherwise agree in writing, the singular includes the plural and the plural the singular; words importing any gender include the other genders; references to statutes are to be construed as including all statutory provisions consolidating, amending or replacing the statute referred to; the word “or” shall be deemed to include “and/or”, the words “;including”, “includes” and “include” shall be deemed to be followed by the words “without limitation”; references to articles, sections (or subdivisions of sections) or exhibits are to those of this Agreement; and references to agreements and other contractual instruments shall be deemed to include all subsequent amendments and other modifications to such instruments, but only to the extent such amendments and other modifications are not prohibited by the terms of this Agreement. Section headings in this Agreement are included for convenience of reference only and shall not constitute a part of this Agreement for any other purpose. Unless otherwise specified in this Agreement, all accounting terms shall be interpreted and all accounting determinations shall be made in accordance with GAAP. If this Agreement is executed by more than one Grantor, the obligations of such persons or entities will be joint and several.
21. **Indemnity.** The Grantor agrees to indemnify each of the Bank, each legal entity, if any, who controls the Bank and each of their respective directors, officers and employees (the “**Indemnified Parties**”) and to defend and hold each Indemnified Party harmless from and against any and all claims, damages, losses, liabilities and expenses (including all reasonable fees and charges of internal or external counsel with whom any Indemnified Party may consult and all expenses of litigation and preparation therefor) which any Indemnified Party incurs or are asserted against any Indemnified Party by any person, entity or governmental authority (including any person or entity claiming derivatively on behalf of the Grantor), in connection with or arising out of or relating to the matters referred to in this Agreement or the Obligations, whether (a) arising from or incurred in connection with any breach of a representation, warranty or covenant by the Grantor, or (b) arising out of or resulting from any suit, action, claim, proceeding or governmental investigation, pending or threatened, whether based on statute, regulation or order, or tort, or contract or otherwise, before any court or governmental authority; provided, however, that the foregoing indemnity agreement shall not apply to any claims, damages, losses, liabilities and expenses attributable to an Indemnified Party’s gross negligence or willful mis conduct. The indemnity agreement contained in this Section shall survive the termination of this Agreement, payment of the Obligations and assignment of any rights hereunder. The Grantor may participate at its expense in the defense of any such claim.
22. **Governing Law and Jurisdiction.** This Agreement has been delivered to and accepted by the Bank and will be deemed to be made in the State where the Bank’s office indicated above is located. **THIS AGREEMENT WILL BE INTERPRETED AND THE RIGHTS AND LIABILITIES OF THE PARTIES HERETO DETERMINED IN ACCORDANCE WITH THE LAWS OF THE STATE WHERE THE BANK’S OFFICE INDICATED ABOVE IS LOCATED, EXCEPT THAT THE LAWS OF THE STATE WHERE ANY TANGIBLE COLLATERAL IS LOCATED (IF DIFFERENT FROM THE STATE WHERE SUCH OFFICE OF THE BANK IS LOCATED) SHALL GOVERN THE PERFECTION IF BY POSSESSION AND FORECLOSURE OF THE LIENS CREATED HEREUNDER ON SUCH PROPERTY OR ANY INTEREST THEREIN.** The Grantor hereby irrevocably consents to the exclusive jurisdiction of any state or federal court in the county or judicial district where the Bank’s office indicated above is located; provided that nothing contained in this Agreement will prevent the Bank from bringing any action, enforcing any award or judgment or exercising any rights against the Grantor individually, against any security or against any property of the Grantor within any other county, state or other foreign or domestic jurisdiction. The Bank and the Grantor agree that the venue provided above is the most convenient forum for both the Bank and the Grantor. The Grantor waives any objection to venue and any objection based on a more convenient forum in any action instituted under this Agreement.

23. **WAIVER OF JURY TRIAL.** EACH OF THE GRANTOR AND THE BANK IRREVOCABLY WAIVES ANY AND ALL RIGHT IT MAY HAVE TO A TRIAL BY JURY IN ANY ACTION, PROCEEDING OR CLAIM OF ANY NATURE RELATING TO THIS AGREEMENT, ANY DOCUMENTS EXECUTED IN CONNECTION WITH THIS AGREEMENT OR ANY TRANSACTION CONTEMPLATED IN ANY OF SUCH DOCUMENTS. THE GRANTOR AND THE BANK ACKNOWLEDGE THAT THE FOREGOING WAIVER IS KNOWING AND VOLUNTARY.

The Grantor acknowledges that it has read and understood all the provisions of this Agreement, including the waiver of jury trial, and has been advised by counsel as necessary or appropriate.

WITNESS the due execution hereof, as of the date first written above.

WITNESS / ATTEST:

NORTHERN TECHNOLOGIES HOLDING COMPANY, LLC

By: /s/ Matthew Wolsfeld

Print Name: _____

Print Name: Matthew Wolsfeld

Title: _____

Title: CFO

(Include title only if an officer of entity signing to the right)

PNC BANK, NATIONAL ASSOCIATION

By: /s/ Pamela LeRose

Pamela LeRose
Vice President

EXHIBIT "A"
TO SECURITY AGREEMENT

1. Grantor's form of organization: corporation
2. Grantor's State of organization, if a registered organization: Delaware
3. Grantor's principal residence, if a natural person or general partnership: N/A
4. Address of Grantor's chief executive office, including the County: 4201 Woodland Road, Circle Pines, Minnesota 55014 (Anoka County).
5. Grantor's EIN, if not a natural person: 41-0857886
6. Grantor's organizational ID# (if any exists): 0844552
7. Address for books and records, if different: 4201 Woodland Road, Circle Pines, Minnesota 55014
8. Addresses of other Collateral locations, including Counties, for the past five (5) years: N/A
9. Name and address of landlord or owner if location is not owned by the Grantor: N/A
10. Other names or tradenames now or formerly used by the Grantor: N/A
11. List of all existing Commercial Tort Claims (by case title with court and brief description of claim): N/A

**Amended and Restated
Guaranty Agreement**



THIS AMENDED AND RESTATED GUARANTY AGREEMENT (this “**Guaranty**”) is made and entered into as of this 10th day of January, 2011, by **NORTHERN TECHNOLOGIES INTERNATIONAL CORPORATION** (the “**Guarantor**”), with an address at 4021 Woodland Road, Circle Pines, Minnesota 55014, in consideration of the extension of credit by **PNC BANK, NATIONAL ASSOCIATION, successor to NATIONAL CITY BANK** (the “**Bank**”), with an address at 1900 East 9th Street, Cleveland, Ohio 44114, to **NORTHERN TECHNOLOGIES HOLDING COMPANY, LLC** (the “**Borrower**”), and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged. This Guaranty amends, restates and replaces that certain Commercial Guaranty, dated April 28, 2005, executed and delivered by the Guarantor to the Bank (as successor to National City Bank) (the “**Existing Guaranty**”). However, without duplication, this Guaranty shall in no way extinguish, cancel or satisfy the Guarantor’s obligation to repay any and all Indebtedness as defined in the Existing Guaranty, or constitute a novation of the Existing Guaranty.

1. Guaranty of Obligations. The Guarantor hereby unconditionally guarantees, as a primary obligor, the prompt payment and performance of all loans, advances, debts, liabilities, obligations, covenants and duties owing by the Borrower to the Bank or to any other direct or indirect subsidiary of The PNC Financial Services Group, Inc., of any kind or nature, present or future (including any interest accruing thereon after maturity, or after the filing of any petition in bankruptcy, or the commencement of any insolvency, reorganization or like proceeding relating to the Borrower, whether or not a claim for post-filing or post-petition interest is allowed in such proceeding), whether direct or indirect (including those acquired by assignment or participation), absolute or contingent, joint or several, due or to become due, now existing or hereafter arising, whether or not (i) evidenced by any note, guaranty or other instrument, (ii) arising under any agreement, instrument or document, (iii) for the payment of money, (iv) arising by reason of an extension of credit, opening of a letter of credit, loan, equipment lease or guarantee, (v) under any interest or currency swap, future, option or other interest rate protection or similar agreement, (vi) under or by reason of any foreign currency transaction, forward, option or other similar transaction providing for the purchase of one currency in exchange for the sale of another currency, or in any other manner, or (vii) arising out of overdrafts on deposit or other accounts or out of electronic funds transfers (whether by wire transfer or through automated clearing houses or otherwise) or out of the return unpaid of, or other failure of the Bank to receive final payment for, any check, item, instrument, payment order or other deposit or credit to a deposit or other account, or out of the Bank’s non-receipt of or inability to collect funds or otherwise not being made whole in connection with depository or other similar arrangements; and any amendments, extensions, renewals and increases of or to any of the foregoing, and all costs and expenses of the Bank incurred in the documentation, negotiation, modification, enforcement, collection and otherwise in connection with any of the foregoing, including reasonable attorneys’ fees and expenses (collectively, the “**Obligations**”). If the Borrower defaults under any such Obligations, the Guarantor will pay the amount due to the Bank.

2. Nature of Guaranty; Waivers. This is a guaranty of payment and not of collection and the Bank shall not be required or obligated, as a condition of the Guarantor’s liability, to make any demand upon or to pursue any of its rights against the Borrower, or to pursue any rights which may be available to it with respect to any other person who may be liable for the payment of the Obligations.

This is an absolute, unconditional, irrevocable and continuing guaranty and will remain in full force and effect until all of the Obligations have been indefeasibly paid in full, and the Bank has terminated this Guaranty. This Guaranty will remain in full force and effect even if there is no principal balance outstanding under the Obligations at a particular time or from time to time. This Guaranty will not be affected by any surrender, exchange, acceptance, compromise or release by the Bank of any other party, or any other guaranty or any security held by it for any of the Obligations, by any failure of the Bank to take any steps to perfect or maintain its

Form 9A — OH (COJ) Rev. 6/10

lien or security interest in or to preserve its rights to any security or other collateral for any of the Obligations or any guaranty, or by any irregularity, unenforceability or invalidity of any of the Obligations or any part thereof or any security or other guaranty thereof. The Guarantor’s obligations hereunder shall not be affected, modified or impaired by any counterclaim, set-off recoupment, deduction or defense based upon any claim the Guarantor may have (directly or indirectly) against the Borrower or the Bank, except payment or performance of the Obligations.

Notice of acceptance of this Guaranty, notice of extensions of credit to the Borrower from time to time, notice of default, diligence, presentment, notice of dishonor, protest, demand for payment, and any defense based upon the Bank’s failure to comply with the notice requirements under Sections 9-611 and 9-612 of the Uniform Commercial Code as in effect from time to time are hereby waived. The Guarantor waives all defenses based on suretyship or impairment of collateral.

The Bank at any time and from time to time, without notice to or the consent of the Guarantor, and without impairing or releasing, discharging or modifying the Guarantor’s liabilities hereunder, may (a) change the manner, place, time or terms of payment or performance of or interest rates on, or other terms relating to, any of the Obligations; (b) renew, substitute, modify, amend or alter, or grant consents or waivers relating to any of the Obligations, any other guaranties, or any security for any Obligations or guaranties; (c) apply any and all payments by whomever paid or however realized including any proceeds of any collateral, to any Obligations of the Borrower in such order, manner and amount as the Bank may determine in its sole discretion; (d) settle, compromise or deal with any other person, including the Borrower or the Guarantor, with respect to any Obligations in such manner as the Bank deems appropriate in its sole discretion; (e) substitute, exchange or release any security or guaranty; or (f) take such actions and exercise such remedies hereunder as provided herein.

3. Repayments or Recovery from the Bank. If any demand is made at any time upon the Bank for the repayment or recovery of any amount received by it in payment or on account of any of the Obligations and if the Bank repays all or any part of such amount by reason of any judgment, decree or order of any court or administrative body or by reason of any settlement or compromise of any such demand, the Guarantor will be and remain liable hereunder for the amount so repaid or recovered to the same extent as if such amount had never been received originally by the Bank. The provisions of this section will be and remain effective notwithstanding any contrary action which may have been taken by the Guarantor in reliance upon such payment, and any such contrary action so taken will be without prejudice to the Bank’s rights hereunder and will be deemed to have been conditioned upon such payment having become final and irrevocable.

4. Financial Statements. Unless compliance is waived in writing by the Bank or until all of the Obligations have been paid in full, the Guarantor will promptly submit to the Bank such information relating to the Guarantor’s affairs (including but not limited to annual financial statements and tax returns for the Guarantor) or any security for the Guaranty as the Bank may reasonably request.

5. **Enforceability of Obligations.** No modification, limitation or discharge of the Obligations arising out of or by virtue of any bankruptcy, reorganization or similar proceeding for relief of debtors under federal or state law will affect, modify, limit or discharge the Guarantor's liability in any manner whatsoever and this Guaranty will remain and continue in full force and effect and will be enforceable against the Guarantor to the same extent and with the same force and effect as if any such proceeding had not been instituted. The Guarantor waives all rights and benefits which might accrue to it by reason of any such proceeding and will be liable to the full extent hereunder, irrespective of any modification, limitation or discharge of the liability of the Borrower that may result from any such proceeding.

6. **Events of Default.** The occurrence of any of the following shall be an "Event of Default": (i) any Event of Default (as defined in any of the Obligations); (ii) any default under any of the Obligations that does not have a defined set of "Events of Default" and the lapse of any notice or cure period provided in such Obligations with respect to such default; (iii) demand by the Bank under any of the Obligations that have a demand feature; (iv) the Guarantor's failure to perform any of its obligations hereunder (not constituting an Event

2

of Default under any other provision of this Section 6) and such failure continues for a period of ten (10) days after the earlier to occur of (a) the date when the Guarantor or Borrower becomes aware of such failure and (b) the date when the Bank gives written notice to the Guarantor or Borrower of such failure; (v) the failure of the Guarantor to pay any amounts under this Guaranty when due; (vi) the falsity, inaccuracy or material breach by the Guarantor of any written warranty, representation or statement made or furnished to the Bank by or on behalf of the Guarantor; or (vii) the termination or attempted termination of this Guaranty. Upon the occurrence and during the continuance of any Event of Default, (a) the Guarantor shall pay to the Bank the amount of the Obligations; or (b) on demand of the Bank, the Guarantor shall immediately deposit with the Bank, in U.S. dollars, all amounts due or to become due under the Obligations, and the Bank may at any time use such funds to repay the Obligations; or (c) the Bank in its discretion may exercise with respect to any collateral any one or more of the rights and remedies provided a secured party under the applicable version of the Uniform Commercial Code; or (d) the Bank in its discretion may exercise from time to time any other rights and remedies available to it at law, in equity or otherwise.

7. **Right of Setoff.** In addition to all liens upon and rights of setoff against the Guarantor's money, securities or other property given to the Bank by law, the Bank shall have, with respect to the Guarantor's obligations to the Bank under this Guaranty and to the extent permitted by law, a contractual possessory security interest in and a contractual right of setoff against, and the Guarantor hereby grants Bank a security interest in, and hereby assigns, conveys, delivers, pledges and transfers to the Bank all of the Guarantor's right, title and interest in and to, all of the Guarantor's deposits, moneys, securities and other property now or hereafter in the possession of or on deposit with, or in transit to, the Bank or any other direct or indirect subsidiary of The PNC Financial Services Group, Inc., whether held in a general or special account or deposit, whether held jointly with someone else, or whether held for safekeeping or otherwise, excluding, however, all IRA, Keogh, and trust accounts. Every such security interest and right of setoff may be exercised without demand upon or notice to the Guarantor. Every such right of setoff shall be deemed to have been exercised immediately upon the occurrence of an Event of Default hereunder without any action of the Bank, although the Bank may enter such setoff on its books and records at a later time. The Bank agrees to notify the Borrower promptly after any such setoff and application; provided, however, that the failure to give such notice shall not affect the validity of such setoff and application.

8. **Collateral.** This Guaranty is secured by the property described in any collateral security documents which the Guarantor executes and delivers to the Bank and by such other collateral as previously may have been or may in the future be granted to the Bank to secure any Obligations of the Guarantor to the Bank.

9. **Costs.** To the extent that the Bank incurs any costs or expenses in protecting or enforcing its rights under the Obligations or this Guaranty, including reasonable attorneys' fees and the costs and expenses of litigation, such costs and expenses will be due on demand, will be included in the Obligations and will bear interest from the incurring or payment thereof at the Default Rate (as defined in any of the Obligations).

10. **Postponement of Subrogation.** Until the Obligations are indefeasibly paid in full, expire, are terminated and are not subject to any right of revocation or rescission, the Guarantor postpones and subordinates in favor of the Bank or its designee (and any assignee or potential assignee) any and all rights which the Guarantor may have to (a) assert any claim whatsoever against the Borrower based on subrogation, exoneration, reimbursement, or indemnity or any right of recourse to security for the Obligations with respect to payments made hereunder, and (b) any realization on any property of the Borrower, including participation in any marshalling of the Borrower's assets.

11. **Power to Confess Judgment.** The Guarantor hereby irrevocably authorizes any attorney-at-law, including an attorney employed by or retained and paid by the Bank, to appear in any court of record in or of the State of Ohio, or in any other state or territory of the United States, at any time after the Obligations become due, whether by acceleration or otherwise, to waive the issuing and service of process and to confess a judgment against the Guarantor in favor of the Bank, and/or any assignee or

3

holder hereof for the amount of the Obligations then appearing due from the Guarantor under this Guaranty, together with costs of suit and thereupon to release all errors and waive all right of appeal or stays of execution in any court of record. The Guarantor hereby expressly (i) waives any conflict of interest of the attorney(s) retained by the Bank to confess judgment against the Guarantor upon this Guaranty, and (ii) consents to the receipt by such attorney(s) of a reasonable legal fee from the Bank for legal services rendered for confessing judgment against the Guarantor upon this Guaranty. A copy of this Guaranty, certified by the Bank, may be filed in each such proceeding in place of filing the original as a warrant of attorney.

12. **Notices.** All notices, demands, requests, consents, approvals and other communications required or permitted hereunder ("Notices") must be in writing and will be effective upon receipt. Notices may be given in any manner to which the Bank and the Guarantor may separately agree, including electronic mail. Without limiting the foregoing, first-class mail, facsimile transmission and commercial courier service are hereby agreed to as acceptable methods for giving Notices. Regardless of the manner in which provided, Notices may be sent to addresses for the Bank and the Guarantor as set forth above or to such other address as either may give to the other in writing for such purpose in accordance with this section.

13. **Preservation of Rights.** No delay or omission on the Bank's part to exercise any right or power arising hereunder will impair any such right or power or be considered a waiver of any such right or power, nor will the Bank's action or inaction impair any such right or power. The Bank's rights and remedies hereunder are cumulative and not exclusive of any other rights or remedies which the Bank may have under other agreements, at law or in equity. The Bank may proceed in any order against the Borrower, the Guarantor or any obligor of, or any collateral securing, the Obligations.

14. **Illegality.** If any provision contained in this Guaranty should be invalid, illegal or unenforceable in any respect, it shall not affect or impair the validity, legality and enforceability of the remaining provisions of this Guaranty.

15. **Changes in Writing.** No modification, amendment or waiver of, or consent to any departure by the Guarantor from, any provision of this Guaranty will be effective unless made in a writing signed by the Bank, and then such waiver or consent shall be effective only in the specific instance and for the purpose for which given. No notice to or demand on the Guarantor will entitle the Guarantor to any other or further notice or demand in the same, similar or other circumstance.

16. **Entire Agreement.** This Guaranty (including the documents and instruments referred to herein) constitutes the entire agreement and supersedes all other prior agreements and understandings, both written and oral, between the Guarantor and the Bank with respect to the subject matter hereof; provided, however, that this Guaranty is in addition to, and not in substitution for, any other guarantees from the Guarantor to the Bank.

17. **Successors and Assigns.** This Guaranty will be binding upon and inure to the benefit of the Guarantor and the Bank and their respective heirs, executors, administrators, successors and assigns; provided, however, that the Guarantor may not assign this Guaranty in whole or in part without the Bank's prior written consent and the Bank at any time may assign this Guaranty in whole or in part.

18. **Interpretation.** In this Guaranty, unless the Bank and the Guarantor otherwise agree in writing, the singular includes the plural and the plural the singular; references to statutes are to be construed as including all statutory provisions consolidating, amending or replacing the statute referred to; the word "or" shall be deemed to include "and/or", the words "including", "includes" and "include" shall be deemed to be followed by the words "without limitation"; and references to sections or exhibits are to those of this Guaranty. Section headings in this Guaranty are included for convenience of reference only and shall not constitute a part of this Guaranty for any other purpose. ; If this Guaranty is executed by more than one party as Guarantor, the obligations of such persons or entities will be joint and several.

4

19. **Indemnity.** The Guarantor agrees to indemnify each of the Bank, each legal entity, if any, who controls, is controlled by or is under common control with the Bank and each of their respective directors, officers and employees (the "**Indemnified Parties**"), and to defend and hold each Indemnified Party harmless from and against, any and all claims, damages, losses, liabilities and expenses (including all reasonable fees and charges of internal or external counsel with whom any Indemnified Party may consult and all expenses of litigation and preparation therefor) which any Indemnified Party incurs or are asserted against any Indemnified Party by any person, entity or governmental authority (including any person or entity claiming derivatively on behalf of the Guarantor), in connection with or arising out of or relating to the matters referred to in this Guaranty, whether (a) arising from or incurred in connection with any breach of a representation, warranty or covenant by the Guarantor, or (b) arising out of or resulting from any suit, action, claim, proceeding or governmental investigation, pending or threatened, whether based on statute, regulation or order, or tort, or contract or otherwise, before any court or governmental authority; provided, however, that the foregoing indemnity agreement shall not apply to any claims, damages, losses, liabilities and expenses attributable to an Indemnified Party's gross negligence or willful misconduct. The indemnity agreement contained in this Section shall survive the termination of this Guaranty and assignment of any rights hereunder. The Guarantor may participate at its expense in the defense of any such claim.

20. **Governing Law and Jurisdiction.** This Guaranty has been delivered to and accepted by the Bank and will be deemed to be made in the State where the Bank's office indicated above is located. **THIS GUARANTY WILL BE INTERPRETED AND THE RIGHTS AND LIABILITIES OF THE BANK AND THE GUARANTOR DETERMINED IN ACCORDANCE WITH THE LAWS OF THE STATE WHERE THE BANK'S OFFICE INDICATED ABOVE IS LOCATED, EXCLUDING ITS CONFLICT OF LAWS RULES.** The Guarantor hereby irrevocably consents to the exclusive jurisdiction of any state or federal court in the county or judicial district where the Bank's office indicated above is located; provided that nothing contained in this Guaranty will prevent the Bank from bringing any action, enforcing any award or judgment or exercising any rights against the Guarantor individually, against any security or against any property of the Guarantor within any other county, state or other foreign or domestic jurisdiction. The Guarantor acknowledges and agrees that the venue provided above is the most convenient forum for both the Bank and the Guarantor. The Guarantor waives any objection to venue and any objection based on a more convenient forum in any action instituted under this Guaranty.

21. **Equal Credit Opportunity Act.** If the Guarantor is not an "applicant for credit" under Section 202.2 (e) of the Equal Credit Opportunity Act of 1974 ("ECO"), the Guarantor acknowledges that (i) this Guaranty has been executed to provide credit support for the Obligations, and (ii) the Guarantor was not required to execute this Guaranty in violation of Section 202.7(d) of the ECOA.

REMAINDER OF PAGE INTENTIONALLY LEFT BLANK

5

22. **WAIVER OF JURY TRIAL.** THE GUARANTOR IRREVOCABLY WAIVES ANY AND ALL RIGHT THE GUARANTOR MAY HAVE TO A TRIAL BY JURY IN ANY ACTION, PROCEEDING OR CLAIM OF ANY NATURE RELATING TO THIS GUARANTY, ANY DOCUMENTS EXECUTED IN CONNECTION WITH THIS GUARANTY OR ANY TRANSACTION CONTEMPLATED IN ANY OF SUCH DOCUMENTS. THE GUARANTOR ACKNOWLEDGES THAT THE FOREGOING WAIVER IS KNOWING AND VOLUNTARY.

The Guarantor acknowledges that it has read and understood all the provisions of this Guaranty, including the confession of judgment and waiver of jury trial, and has been advised by counsel as necessary or appropriate.

WITNESS the due execution hereof, as of the date first written above, with the intent to be legally bound hereby.

WARNING-BY SIGNING THIS PAPER YOU GIVE UP YOUR RIGHT TO NOTICE AND COURT TRIAL. IF YOU DO NOT PAY ON TIME A COURT JUDGMENT MAY BE TAKEN AGAINST YOU WITHOUT YOUR PRIOR KNOWLEDGE AND THE POWERS OF A COURT CAN BE

USED TO COLLECT FROM YOU REGARDLESS OF ANY CLAIMS YOU MAY HAVE AGAINST THE CREDITOR WHETHER FOR RETURNED GOODS, FAULTY GOODS, FAILURE ON HIS PART TO COMPLY WITH THE AGREEMENT, OR ANY OTHER CAUSE.

WITNESS / ATTEST:

NORTHERN TECHNOLOGIES HOLDING COMPANY, LLC

Print Name: _____
Title: _____
(Include title only if an officer of entity signing to the right)

By: /s/ Matthew Wolsfeld

Print Name: Matthew Wolsfeld
Title: CFO

Loan Agreement



THIS LOAN AGREEMENT (the “**Agreement**”), is entered into as of January 10, 2011, between **NORTHERN TECHNOLOGIES HOLDING COMPANY, LLC** (the “**Borrower**”), with an address at 4201 Woodland Road, Circle Pines, Minnesota 55014, and **PNC BANK, NATIONAL ASSOCIATION, successor to NATIONAL CITY BANK** (the “**Bank**”), with an address at 1900 East 9th Street, Cleveland, Ohio 45202. This Agreement amends, restates and replaces (but does not constitute a novation of or affect the status of any liens or security interests granted pursuant to) the existing Commercial Note Addendum dated May 3, 2006, made by the Borrower for the benefit of the Bank (as successor to National City Bank) (the “**Existing Note Addendum**”), and the Borrower’s execution of this agreement constitutes a ratification and confirmation of all liens and security interests granted under or pursuant to the Existing Note Addendum.

The Borrower and the Bank, with the intent to be legally bound, agree as follows:

1. Loan. The Bank has made or may make one or more loans (collectively, the “**Loan**”) to the Borrower subject to the terms and conditions and in reliance upon the representations and warranties of the Borrower set forth in this Agreement. The Loan is or will be evidenced by a promissory note or notes of the Borrower and all renewals, extensions, amendments and restatements thereof (if one or more, collectively, the “**Note**”) acceptable to the Bank, which shall set forth the interest rate, repayment and other provisions, the terms of which are incorporated into this Agreement by reference.

2. Security. The security for repayment of the Loan shall include but not be limited to the collateral, guaranties and other documents heretofore, contemporaneously or hereafter executed and delivered to the Bank (the “**Security Documents**”), which shall secure repayment of the Loan, the Note and all other loans, advances, debts, liabilities, obligations, covenants and duties owing by the Borrower to the Bank or to any other direct or indirect subsidiary of The PNC Financial Services Group, Inc., of any kind or nature, present or future (including any interest accruing thereon after maturity, or after the filing of any petition in bankruptcy, or the commencement of any insolvency, reorganization or like proceeding relating to the Borrower, whether or not a claim for post-filing or post-petition interest is allowed in such proceeding), whether direct or indirect (including those acquired by assignment or participation), absolute or contingent, joint or several, due or to become due, now existing or hereafter arising, whether or not (i) evidenced by any note, guaranty or other instrument, (ii) arising under any agreement, instrument or document, (iii) for the payment of money, (iv) arising by reason of an extension of credit, opening of a letter of credit, loan, equipment lease or guarantee, (v) under any interest or currency swap, future, option or other interest rate protection or similar agreement, (vi) under or by reason of any foreign currency transaction, forward, option or other similar transaction providing for the purchase of one currency in exchange for the sale of another currency, or in any other manner, or (vii) arising out of overdrafts on deposit or other accounts or out of electronic funds transfers (whether by wire transfer or through automated clearing houses or otherwise) or out of the return unpaid of, or other failure of the Bank to receive final payment for, any check, item, instrument, payment order or other deposit or credit to a deposit or other account, or out of the Bank’s non-receipt of or inability to collect funds or otherwise not being made whole in connection with depository or other similar arrangements; and any amendments, extensions, renewals and increases of or to any of the foregoing, and all costs and expenses of the Bank incurred in the documentation, negotiation, modification, enforcement, collection and otherwise in connection with any of the foregoing, including reasonable attorneys’ fees and expenses (hereinafter referred to collectively as the “**Obligations**”). Without limiting the generality of the foregoing, the Borrower hereby acknowledges and agrees that the following Security Documents secure the Obligations as of the date hereof: (i) Mortgage, dated May 3, 2006, made by the Borrower for the benefit of the Bank (as successor to National City Bank) and recorded on June 6, 2006 in the Clerk’s Office in and for Anoka County, Minnesota as Document No. 488081.017; (ii) Assignment of Rents dated May 3, 2006, made by the Borrower for the benefit of the Bank (as successor to National City Bank) and recorded on June 6, 2006 in the Clerk’s Office in and for Anoka County, Minnesota as Document No. 488081.018; and (iii) Amended and Restated Guaranty and Suretyship Agreement, dated as of the date hereof, made by Northern Technologies

Form 7G - Multistate Rev. 1/02

International Corporation (“**NTIC**”). Unless expressly provided to the contrary in documentation for any other loan or loans, it is the express intent of the Bank and the Borrower that all Obligations including those included in the Loan be cross-collateralized and cross-defaulted, such that collateral securing any of the Obligations shall secure repayment of all Obligations and a default under any Obligation shall be a default under all Obligations.

This Agreement, the Note, the Security Documents and all other agreements and documents executed and/or delivered pursuant hereto, as each may be amended, modified, extended or renewed from time to time, are collectively referred to as the “**Loan Documents.**” Capitalized terms not defined herein shall have the meanings ascribed to them in the Loan Documents.

3. Representations and Warranties. The Borrower hereby makes the following representations and warranties, which shall be continuing in nature and remain in full force and effect until the Obligations are paid in full, and which shall be true and correct except as otherwise set forth on the Addendum attached hereto and incorporated herein by reference (the “**Addendum**”):

3.1. Existence, Power and Authority. Except for the Borrower being in good standing with the State of Minnesota which Borrower shall cause to occur post-closing in accordance with the provision of Section 4.9 hereof, the Borrower is duly organized, validly existing and in good standing under the laws of the State of its incorporation or organization and has the power and authority to own and operate its assets and to conduct its business as now or proposed to be carried on, and is duly qualified, licensed and in good standing to do business in all jurisdictions where its ownership of property or the nature of its business requires such qualification or licensing except where the failure to be so qualified or licensed could not reasonably be expected to have a material adverse effect. The Borrower is duly authorized to execute and deliver the Loan Documents, all necessary action to authorize the execution and delivery of the Loan Documents has been properly taken, and the Borrower is and will continue to be duly authorized to borrow under this Agreement and to perform all of the other terms and provisions of the Loan Documents.

3.2. Financial Statements. If the Borrower is not a natural person, it has delivered or caused to be delivered to the Bank its most recent balance sheet, income statement and statement of cash flows, or if the Borrower is a natural person, its personal financial statement and tax returns (as applicable, the “**Historical Financial Statements**”). The Historical Financial Statements are true, complete and accurate in all material respects and fairly present the financial condition, assets and liabilities, whether accrued, absolute, contingent or otherwise and the results of the Borrower’s operations for the period specified therein. The Historical Financial Statements have been prepared in accordance with generally accepted accounting principles (“**GAAP**”) consistently applied from period to period, subject in the case of interim statements to normal year-end adjustments and to any comments and notes acceptable to the Bank in its sole discretion.

3.3. No Material Adverse Change. Since the date of the most recent Financial Statements, the Borrower has not suffered any damage, destruction or loss, and no event or condition has occurred or exists, in each case which has resulted or could reasonably result in a material adverse change in its business, assets, operations, condition (financial or otherwise) or results of operation. As used in this Agreement, “**Financial Statements**” means NTIC’s consolidated balance sheets, income statements and statements of cash flows for the year, month or quarter together with year-to-date figures and comparative figures for the corresponding periods of the prior year.

3.4. Binding Obligations. The Borrower has full power and authority to enter into the transactions provided for in this Agreement and has been duly authorized to do so by appropriate action of its Board of Directors if the Borrower is a corporation, all its general partners if the Borrower is a partnership or otherwise as may be required by law, charter, other organizational documents or agreements; and the Loan Documents, when executed and delivered by the Borrower, will constitute the legal, valid and binding obligations of the Borrower enforceable in accordance with their terms subject to limitations as to enforceability which might result from bankruptcy, insolvency, moratorium and other similar laws affecting creditors’ rights generally and subject to limitations on the availability of equitable remedies.

2

3.5. No Defaults or Violations. There does not exist any Event of Default under this Agreement or any default or violation by the Borrower of or under any of the terms, conditions or obligations of: (i) its partnership agreement if the Borrower is a partnership, its articles or certificate of incorporation, regulations or bylaws if the Borrower is a corporation or its other organizational documents as applicable; (ii) any indenture, mortgage, deed of trust, franchise, permit, contract, agreement, or other instrument to which it is a party or by which it is bound which could reasonably be expected to cause a material adverse effect; or (iii) any law, ordinance, regulation, ruling, order, injunction, decree, condition or other requirement applicable to or imposed upon it by any law, the action of any court or any governmental authority or agency which could reasonably be expected to cause a material adverse effect; and the consummation of this Agreement and the transactions set forth herein will not result in any such default or violation or Event of Default.

3.6. Title to Assets. The Borrower has good and marketable title to the assets reflected on the most recent Financial Statements, free and clear of all liens and encumbrances, except for (i) current taxes and assessments not yet due and payable, (ii) assets disposed of by the Borrower in the ordinary course of business since the date of the most recent Financial Statements, and (iii) those liens or encumbrances, if any, specified on the Addendum.

3.7. Litigation. There are no actions, suits, proceedings or governmental investigations pending or, to the knowledge of the Borrower, threatened against the Borrower, which could reasonably result in a material adverse change in its business, assets, operations, condition (financial or otherwise) or results of operations and there is no basis known to the Borrower for any action, suit, proceeding or investigation which could reasonably result in such a material adverse change. All pending and threatened litigation against the Borrower is listed on the Addendum.

3.8. Tax Returns. The Borrower has filed all returns and reports that are required to be filed by it in connection with any federal, state or local tax, duty or charge levied, assessed or imposed upon it or its property or withheld by it, including income, unemployment, social security and similar taxes, and has paid (or has properly extended the date for payment of) all such federal, state and other material taxes, except those which are being contested in good faith by appropriate proceedings diligently conducted and for which reserve or other provision has been made therefor in accordance with GAAP.

3.9. Employee Benefit Plans. Each employee benefit plan as to which the Borrower may have any liability complies in all material respects with all applicable provisions of the Employee Retirement Income Security Act of 1974 (as amended from time to time, “**ERISA**”), including minimum funding requirements, and (i) no Prohibited Transaction (as defined under ERISA) has occurred with respect to any such plan, (ii) no Reportable Event (as defined under Section 4043 of ERISA) has occurred with respect to any such plan which would cause the Pension Benefit Guaranty Corporation to institute proceedings under Section 4042 of ERISA, (iii) the Borrower has not withdrawn from any such plan or initiated steps to do so, and (iv) no steps have been taken to terminate any such plan.

3.10. Environmental Matters. The Borrower is in compliance, in all material respects, with all Environmental Laws (as hereinafter defined), including, without limitation, all Environmental Laws in jurisdictions in which the Borrower owns or operates, or has owned or operated, a facility or site, stores, collateral, arranges or has arranged for disposal or treatment of hazardous substances, solid waste or other waste, accepts or has accepted for transport any hazardous substances, solid waste or other wastes or holds or has held any interest in real property or otherwise. Except as otherwise disclosed on the Addendum, no litigation or proceeding arising under, relating to or in connection with any Environmental Law is pending or, to the best of the Borrower’s knowledge, threatened against the Borrower, any real property which the Borrower holds or has held an interest or any past or present operation of the Borrower. No release, threatened release or disposal of hazardous waste, solid waste or other wastes is occurring, or to the best of the Borrower’s knowledge has occurred, on, under or to any real property in which the Borrower holds or has held any interest or performs or has performed any of its operations, in violation of any Environmental Law. As used in this Section, “**litigation or**

3

proceeding” means any demand, claim notice, suit, suit in equity, action, administrative action, investigation or inquiry whether brought by a governmental authority or other person, and “**Environmental Laws**” means all provisions of laws, statutes, ordinances, rules, regulations, permits, licenses, judgments, writs, injunctions, decrees, orders, awards and standards promulgated by any governmental authority concerning health, safety and protection of, or regulation of the discharge of substances into, the environment.

3.11. Intellectual Property. The Borrower owns or is licensed to use all patents, patent rights, trademarks, trade names, service marks, copyrights, intellectual property, technology, know-how and processes necessary for the conduct of its business as currently conducted that are material to the condition (financial or otherwise), business or operations of the Borrower.

3.12. Regulatory Matters. No part of the proceeds of the Loan will be used for “purchasing” or “carrying” any “margin stock” within the respective meanings of each of the quoted terms under Regulation U of the Board of Governors of the Federal Reserve System as now and from time to time in effect or for any purpose which violates the provisions of the Regulations of such Board of Governors.

3.13. Solvency. As of the date hereof and after giving effect to the transactions contemplated by the Loan Documents, (i) the aggregate value of the Borrower’s assets will exceed its liabilities (including contingent, subordinated, unmatured and unliquidated liabilities), (ii) the Borrower will

have sufficient cash flow to enable it to pay its debts as they become due, and (iii) the Borrower will not have unreasonably small capital for the business in which it is engaged.

3.14. Disclosure. None of the Loan Documents contains or will contain any untrue statement of material fact or omits or will omit to state a material fact necessary in order to make the statements contained in this Agreement or the Loan Documents not misleading. There is no fact known to the Borrower which materially adversely affects or, so far as the Borrower can now reasonably foresee, will materially adversely affect the business, assets, operations, condition (financial or otherwise) or results of operation of the Borrower and which has not otherwise been fully set forth in this Agreement or in the Loan Documents.

4. Affirmative Covenants. The Borrower agrees that from the date of execution of this Agreement until all Obligations have been paid in full and any commitments of the Bank to the Borrower have been terminated, the Borrower will:

4.1. Books and Records. Maintain books and records in accordance with GAAP and give representatives of the Bank access thereto at all reasonable times and at reasonable intervals, including permission to examine, copy and make abstracts from any of such books and records and such other information as the Bank may from time to time reasonably request, and upon the Bank's reasonable request, the Borrower will make available to the Bank for examination copies of any reports, statements and returns which the Borrower may make to or file with any federal, state or local governmental department, bureau or agency.

4.2. Incorporation of Representations, Warranties and Covenants by Reference. Cause NTIC to comply with any and all representations, warranties and affirmative, negative and financial covenants applicable to NTIC which may be set forth in that certain Loan Agreement, dated January , 2011, between NTIC and the Bank (the "**NTIC Loan Agreement**"), which are hereby incorporated herein by this reference as if set forth herein at length, as any of the foregoing may be amended or supplemented from time to time (the "**Incorporated Provisions**"). Any amendments, modifications, waivers or other changes in the terms of any of the Incorporated Provisions shall automatically constitute an amendment to this Agreement without any need for further action or documentation. If the NTIC Loan Agreement terminates or otherwise ceases to be in full force and effect at any time and for any reason, whether by voluntary termination, upon default, acceleration, at maturity or otherwise (a "**Termination**"), all of the Incorporated Provisions of the NTIC Loan Agreement shall survive the Termination and shall continue in full force and effect as a part of this Agreement. At any time after a Termination, the Borrower shall promptly upon the Bank's request execute and deliver to the Bank a supplement to this Agreement, which supplement will expressly incorporate into this Agreement all or any number of the

4

Incorporated Provisions of the terminated NTIC Loan Agreement as the Bank in its sole discretion shall select, as such Incorporated Provisions are in effect immediately prior to the date of Termination.

4.3. Payment of Taxes and Other Charges. Pay and discharge when due all indebtedness and all taxes, assessments, charges, levies and other liabilities imposed upon the Borrower, its income, profits, property or business, except those which currently are being contested in good faith by appropriate proceedings and for which the Borrower shall have set aside adequate reserves or made other adequate provision with respect thereto acceptable to the Bank in its reasonable discretion.

4.4. Maintenance of Existence, Operation and Assets. Do all things necessary to (i) maintain, renew and keep in full force and effect its organizational existence and all rights, permits and franchises necessary to enable it to continue its business as currently conducted; (ii) continue in operation in substantially the same manner as at present; (iii) keep its properties in good operating condition and repair (subject to normal wear and tear); and (iv) make all necessary and proper repairs, renewals, replacements, additions and improvements thereto as determined in the Borrower's reasonable business judgment.

4.5. Insurance. Maintain, with financially sound and reputable insurers, insurance with respect to its property and business against such casualties and contingencies, of such types and in such amounts, as is customary for established companies engaged in the same or similar business and similarly situated. In the event of a conflict between the provisions of this Section and the terms of any Security Documents relating to insurance, the provisions in the Security Documents will control.

4.6. Compliance with Laws. Comply with all laws applicable to the Borrower and to the operation of its business (including without limitation any statute, ordinance, rule or regulation relating to employment practices, pension benefits or environmental, occupational and health standards and controls), the failure to comply with which could reasonably be expected to cause a material adverse effect.

4.7. Bank Accounts. Establish and maintain at the Bank the Borrower's primary depository accounts.

4.8. Additional Reports. Provide prompt written notice to the Bank of the occurrence of any of the following (together with a description of the action which the Borrower proposes to take with respect thereto): (i) any Event of Default or any event, act or condition which, with the passage of time or the giving of notice, or both, would constitute an Event of Default (a "**Default**"), (ii) any litigation filed by or against the Borrower requesting monetary damages in excess of \$200,000.00, (iii) any Reportable Event or Prohibited Transaction with respect to any Employee Benefit Plan(s) (as defined in ERISA) or (iv) any event which could reasonably be expected to result in a material adverse change in the business, assets, operations, condition (financial or otherwise) or results of operation of the Borrower.

4.9. Good Standing. Within 30 days of the date hereof, take such steps necessary to cause the Borrower to be in good standing with the State of Minnesota and promptly provide the Bank with evidence reasonably satisfactory to it that the Borrower has complied with the provisions of this Section 4.9.

5. Negative Covenants. The Borrower covenants and agrees that from the date of this Agreement until all Obligations have been paid in full and any commitments of the Bank to the Borrower have been terminated, except as set forth in the Addendum, the Borrower will not, without the Bank's prior written consent:

5.1. Indebtedness. Create, incur, assume or suffer to exist any indebtedness for borrowed money other than: (i) the Loan and any subsequent indebtedness to the Bank; and (ii) open account trade debt incurred in the ordinary course of business and not past due.

5.2. Liens and Encumbrances. Except as provided in Section 3.6, create, assume, incur or permit to exist any mortgage, pledge, encumbrance, security interest, lien or charge of any kind upon any of its

5

property, now owned or hereafter acquired, or acquire or agree to acquire any kind of property subject to any conditional sales or other title retention agreement.

5.3. Guarantees. Guarantee, endorse or become contingently liable for the obligations of any person, firm, corporation or other entity, except in connection with the endorsement and deposit of checks in the ordinary course of business for collection.

5.4. Loans or Advances. Purchase or hold beneficially any stock, other securities or evidences of indebtedness of, or make or have outstanding, any loans or advances to, or otherwise extend credit to, or make any investment or acquire any interest whatsoever in, any other person, firm, corporation or other entity, except investments disclosed on the Borrower's Historical Financial Statements or acceptable to the Bank in its sole discretion.

5.5. Merger or Transfer of Assets. Liquidate or dissolve, or merge or consolidate with or into any person, firm, corporation or other entity, or sell, lease, transfer or otherwise dispose of all or any substantial part of its property, assets, operations or business, whether now owned or hereafter acquired.

5.6. Change in Business. Make or permit, and cause each Guarantor under the Security Documents not to make or permit, any change in its form of organization or, the nature of its business in any material manner as carried on as of the date hereof. Notwithstanding the foregoing, the Borrower shall be permitted, upon thirty (30) days' prior written notice to the Bank, to convert from a limited liability company to another form of entity (the "**Conversion**"); provided, that (i) no Event of Default exists under the Loan Documents at the time of such Conversion and (ii) the Borrower shall promptly provide the Bank, (a) a certified copy of the amendment to its organizational documents effecting the Conversion, (b) any and all other amendments and/or restatements to the Borrower's organizational documents resulting from the Conversion, (c) the Borrower shall have provided the Bank with all information necessary for the Bank to prepare and file such amendments to its UCC Financing Statements as the Bank deems appropriate to reflect the Conversion of the Borrower, (d) any and all other documentation and related information reasonably requested by the Bank with respect to the Conversion and (e) if reasonably requested by the Bank, the Borrower shall enter into such amendments and modifications to this Agreement and the other Loan Documents (as necessary), as the Bank shall reasonably require. In furtherance of the foregoing, upon the effectiveness of the Conversion, each reference to the Borrower in the Loan Documents shall automatically be deemed to refer to the Borrower's name post-Conversion without further action of any of the parties.

5.7. Dividends. Declare or pay any dividends on or make any distribution with respect to any class of its equity or ownership interest, or purchase, redeem, retire or otherwise acquire any of its equity, provided, however, that so long as the Borrower remains an S corporation, a partnership or a limited liability company, it may make distributions to its shareholders, partners or members, as the case may be, in an amount equal to the federal and state income tax of such principals of the Borrower attributable to the earning of the Borrower.

5.8. Acquisitions. Make acquisitions of all or substantially all of the property or assets of any person, firm, corporation or other entity.

6. Events of Default. The occurrence of any of the following will be deemed to be an **Event of Default**:

6.1. Covenant Default. The Borrower shall default in the performance of any of the covenants or agreements contained in this Agreement; provided, however, that, no such failure to observe or perform any such covenant or other agreement (excluding financial covenants, financial reporting covenants, and negative covenants) shall constitute an Event of Default unless such failure continues for a period of 10 days after the earlier to occur of (a) the date when the Borrower becomes aware of such failure and (b) the date when the Bank gives written notice to the Borrower of such failure

6

6.2. Breach of Warranty. Any Financial Statement, representation, warranty or certificate made or furnished by the Borrower to the Bank in connection with this Agreement shall be false, incorrect or incomplete in any material respect when made.

6.3. Other Default. The occurrence of an Event of Default as defined in the Note or any of the Loan Documents.

Upon the occurrence and during the continuance of an Event of Default, the Bank will have all rights and remedies specified in the Note and the Loan Documents and all rights and remedies (which are cumulative and not exclusive) available under applicable law or in equity.

7. Conditions. The Bank's obligation to make any advance under the Loan is subject to the conditions that as of the date of the advance:

7.1. No Event of Default. No Event of Default or event which with the passage of time, the giving of notice or both would constitute an Event of Default shall have occurred and be continuing;

7.2. Authorization Documents. The Bank shall have received certified copies of resolutions of the board of directors, the general partners or the members or managers of any partnership, corporation or limited liability company that executes this Agreement, the Note or any of the other Loan Documents; or other proof of authorization satisfactory to the Bank; and

7.3. Receipt of Loan Documents. The Bank shall have received the Loan Documents and such other instruments and documents which the Bank may reasonably request in connection with the transactions provided for in this Agreement, which may include an opinion of counsel in form and substance satisfactory to the Bank for any party executing any of the Loan Documents.

7.4. Fee. Payment to the Bank of a document preparation fee in the amount of \$250.00.

8. Expenses. The Borrower agrees to pay the Bank, upon the execution of this Agreement, and otherwise on demand, all reasonable costs and expenses incurred by the Bank in connection with the preparation, negotiation and delivery of this Agreement and the other Loan Documents, and any

modifications thereto, and the collection of all of the Obligations, including but not limited to enforcement actions, relating to the Loan, whether through judicial proceedings or otherwise, or in defending or prosecuting any actions or proceedings arising out of or relating to this Agreement, including reasonable fees and expenses of counsel (which may include costs of in-house counsel), expenses for auditors, appraisers and environmental consultants, lien searches, recording and filing fees and taxes.

9. Increased Costs. On written demand, together with written evidence of the justification therefor, the Borrower agrees to pay the Bank all direct costs incurred and any losses suffered or payments made by the Bank as a consequence of making the Loan by reason of any change in law or regulation, or the interpretation thereof, imposing any reserve, deposit, allocation of capital or similar requirement (including without limitation, Regulation D of the Board of Governors of the Federal Reserve System) on the Bank, its holding company or any of their respective assets as the Bank reasonably and in good faith determines. The Bank agrees that, as promptly as practicable after becoming aware of the occurrence of any event or the existence of a condition that would entitle the Bank to receive payments under this Section 9, the Bank will, to the extent not inconsistent with internal policies of the Bank and any applicable legal or regulatory restrictions take reasonable means to reduce any additional amounts that would otherwise be payable to the Bank under this Section 9.

7

10. Miscellaneous.

10.1. Notices: All notices, demands, requests, consents, approvals and other communications required or permitted hereunder (“Notices”) must be in writing and will be effective upon receipt. Notices may be given in any manner to which the parties may separately agree, including electronic mail. Without limiting the foregoing, first-class mail, facsimile transmission and commercial courier service are hereby agreed to as acceptable methods for giving Notices. Regardless of the manner in which provided, Notices may be sent to a party’s address as set forth above or to such other address as any party may give to the other in writing for such purpose in accordance with this section.

10.2. Preservation of Rights. No delay or omission on the Bank’s part to exercise any right or power arising hereunder will impair any such right or power or be considered a waiver of any such right or power, nor will the Bank’s action or inaction impair any such right or power. The Bank’s rights and remedies hereunder are cumulative and not exclusive of any other rights or remedies which the Bank may have under other agreements, at law or in equity.

10.3. Illegality. If any provision contained in this Agreement should be invalid, illegal or unenforceable in any respect, it shall not affect or impair the validity, legality and enforceability of the remaining provisions of this Agreement.

10.4. Changes in Writing. No modification, amendment or waiver of, or consent to any departure by the Borrower from, any provision of this Agreement will be effective unless made in a writing signed by the party to be charged, and then such waiver or consent shall be effective only in the specific instance and for the purpose for which given. No notice to or demand on the Borrower will entitle the Borrower to any other or further notice or demand in the same, similar or other circumstance.

10.5. Entire Agreement. This Agreement (including the documents and instruments referred to herein) constitutes the entire agreement and supersedes all other prior agreements and understandings, both written and oral, between the parties with respect to the subject matter hereof, including but not limited to the Existing Note Addendum.

10.6. Counterparts. This Agreement may be signed in any number of counterpart copies and by the parties hereto on separate counterparts, but all such copies shall constitute one and the same instrument. Delivery of an executed counterpart of a signature page to this Agreement by facsimile transmission shall be effective as delivery of a manually executed counterpart. Any party so executing this Agreement by facsimile transmission shall promptly deliver a manually executed counterpart, provided that any failure to do so shall not affect the validity of the counterpart executed by facsimile transmission.

10.7. Successors and Assigns. This Agreement will be binding upon and inure to the benefit of the Borrower and the Bank and their respective heirs, executors, administrators, successors and assigns; provided, however, that the Borrower may not assign this Agreement in whole or in part without the Bank’s prior written consent and the Bank at any time may assign this Agreement in whole or in part.

10.8. Interpretation. In this Agreement, unless the Bank and the Borrower otherwise agree in writing, the singular includes the plural and the plural the singular; words importing any gender include the other genders; references to statutes are to be construed as including all statutory provisions consolidating, amending or replacing the statute referred to; the word “or” shall be deemed to include “and/or”, the words “including”, “includes” and “include” shall be deemed to be followed by the words “without limitation”; references to articles, sections (or subdivisions of sections) or exhibits are to those of this Agreement; and references to agreements and other contractual instruments shall be deemed to include all subsequent amendments and other modifications to such instruments, but only to the extent such amendments and other modifications are not prohibited by the terms of this Agreement. Section headings in this Agreement are included for convenience of reference only and shall not constitute a part of this Agreement for any other purpose. Unless otherwise specified in this Agreement, all accounting terms shall be interpreted and all accounting determinations shall be made in accordance with GAAP.

8

If this Agreement is executed by more than one party as Borrower, the obligations of such persons or entities will be joint and several.

10.9. No Consequential Damages, Etc. The Bank will not be responsible for any consequential, incidental, special, or punitive damages that may be incurred or alleged by any person or entity, including the Borrower and any Guarantor, as a result of this Agreement, the other Loan Documents, the transactions contemplated hereby or thereby, or the use of the proceeds of the Loan.

10.10. Assignments and Participations. At any time, without any notice to the Borrower, the Bank may sell, assign, transfer, negotiate, grant participations in, or otherwise dispose of all or any part of the Bank’s interest in the Loan. The Borrower hereby authorizes the Bank to provide, without any notice to the Borrower, any information concerning the Borrower, including information pertaining to the Borrower’s financial condition, business operations or general creditworthiness, to any person or entity which may succeed to or participate in all or any part of the Bank’s interest in the

Loan (it being understood that such persons and/or entities to whom such disclosure is made will be informed of the confidential nature of such information and instructed to keep such information confidential).

10.11. Governing Law and Jurisdiction. This Agreement has been delivered to and accepted by the Bank and will be deemed to be made in the State where the Bank's office indicated above is located. **THIS AGREEMENT WILL BE INTERPRETED AND THE RIGHTS AND LIABILITIES OF THE PARTIES HERETO DETERMINED IN ACCORDANCE WITH THE LAWS OF THE STATE WHERE THE BANK'S OFFICE INDICATED ABOVE IS LOCATED, EXCLUDING ITS CONFLICT OF LAWS RULES.** The Borrower hereby irrevocably consents to the exclusive jurisdiction of any state or federal court in the county or judicial district where the Bank's office indicated above is located; provided that nothing contained in this Agreement will prevent the Bank from bringing any action, enforcing any award or judgment or exercising any rights against the Borrower individually, against any security or against any property of the Borrower within any other county, state or other foreign or domestic jurisdiction. The Bank and the Borrower agree that the venue provided above is the most convenient forum for both the Bank and the Borrower. The Borrower waives any objection to venue and any objection based on a more convenient forum in any action instituted under this Agreement.

10.12. WAIVER OF JURY TRIAL. EACH OF THE BORROWER AND THE BANK IRREVOCABLY WAIVES ANY AND ALL RIGHT IT MAY HAVE TO A TRIAL BY JURY IN ANY ACTION, PROCEEDING OR CLAIM OF ANY NATURE RELATING TO THIS AGREEMENT, ANY DOCUMENTS EXECUTED IN CONNECTION WITH THIS AGREEMENT OR ANY TRANSACTION CONTEMPLATED IN ANY OF SUCH DOCUMENTS. THE BORROWER AND THE BANK ACKNOWLEDGE THAT THE FOREGOING WAIVER IS KNOWING AND VOLUNTARY.

The Borrower acknowledges that it has read and understood all the provisions of this Agreement, including the waiver of jury trial, and has been advised by counsel as necessary or appropriate.

WITNESS the due execution hereof, as of the date first written above.

WITNESS / ATTEST:

NORTHERN TECHNOLOGIES HOLDING COMPANY, LLC

By: /s/ Matthew Wolsfeld

Print Name: _____

Print Name: Matthew Wolsfeld

Title: _____

Title: CFO

(Include title only if an officer of entity signing to the right)

PNC BANK, NATIONAL ASSOCIATION

By: /s/ Pamela LeRose

Pamela LeRose
Vice President

ADDENDUM to that certain Loan Agreement dated January , 2011 between **NORTHERN TECHNOLOGIES HOLDING COMPANY, LLC** as the Borrower and PNC Bank, National Association, as the Bank. Capitalized terms used in this Addendum and not otherwise defined shall have the meanings given them in the Agreement. Section numbers below refer to the sections of the Agreement.

3.6 Title to Assets. Describe additional liens and encumbrances below:

None.

3.7 Litigation. Describe pending and threatened litigation, investigations, proceedings, etc. below:

None.



Loan Agreement

THIS LOAN AGREEMENT (the “**Agreement**”), is entered into as of January 10, 2011, between **NORTHERN TECHNOLOGIES INTERNATIONAL CORPORATION** (the “**Borrower**”), with an address at 4201 Woodland Road, Circle Pines, Minnesota 55014, and **PNC BANK, NATIONAL ASSOCIATION** (the “**Bank**”), with an address at 1900 East 9th Street, Cleveland, Ohio 45202.

The Borrower and the Bank, with the intent to be legally bound, agree as follows:

1. Loan. The Bank has made or may make one or more loans (collectively, the “**Loan**”) to the Borrower subject to the terms and conditions and in reliance upon the representations and warranties of the Borrower set forth in this Agreement. The Loan is or will be evidenced by a promissory note or notes of the Borrower and all renewals, extensions, amendments and restatements thereof (if one or more, collectively, the “**Note**”) acceptable to the Bank, which shall set forth the interest rate, repayment and other provisions, the terms of which are incorporated into this Agreement by reference, as supplemented by the Sweep Rider (as defined below) with respect to the Line of Credit (as defined below). As of the date hereof, the Loan governed by this Agreement shall include the following:

1.1. Committed Line of Credit. A committed revolving line of credit under which the Borrower may request and the Bank, subject to the terms and conditions of this Agreement, will make advances to the Borrower from time to time until the Expiration Date, in an aggregate principal amount at any time outstanding not to exceed **\$3,000,000.00** (the “**Line of Credit**”). The “**Expiration Date**” means January 10, 2012, or such later date as may be designated by the Bank by written notice from the Bank to the Borrower. Advances under the Line of Credit will be used for working capital or other general corporate purposes of the Borrower.

1.1.1. Working Cash® Feature. The Line of Credit includes an investment and borrowing sweep feature on the terms and conditions of that certain Working Cash®, Line of Credit, Investment Sweep Rider (the “**Sweep Rider**”), to be executed and delivered by the Borrower to the Bank in form and substance satisfactory to the Bank, the terms of which are hereby incorporated in this Agreement by reference. The Sweep Rider will remain in effect until such time (if any) as it is terminated in accordance with its terms.

1.1.2. Letter of Credit Subfacility. The Borrower may request that the Bank, in lieu of cash advances, issue standby letters of credit (individually, a “**Letter of Credit**” and collectively the “**Letters of Credit**”) under the Line of Credit in face amount in the aggregate at any time outstanding not to exceed \$1,200,000.00; provided, however, that after giving effect to the face amount of such Letter of Credit, the sum of the aggregate outstanding principal advances under the Line of Credit and the aggregate face amount of all Letters of Credit issued and outstanding shall not exceed the Line of Credit. The availability of advances under the Line of Credit shall be reduced by the face amount of each Letter of Credit issued and outstanding (whether or not drawn). For purposes of this Agreement, the “**face amount**” of any Letter of Credit shall include any automatic increases in face amount under the terms of such Letter of Credit, whether or not any such increase in face amount has become effective. Unless otherwise consented to by the Bank in writing, each Letter of Credit shall have an expiry date which is not later than twelve (12) months following the Expiration Date (the “**Final LC Expiration Date**”). Each payment by the Bank under a Letter of Credit shall constitute an advance of principal under the Line of Credit and shall be evidenced by the Note evidencing the Line of Credit. The Letters of Credit shall be governed by the terms of this Agreement and by one or more reimbursement agreements, in form and content satisfactory to the Bank, executed by the Borrower in favor of the Bank (collectively, the “**Reimbursement Agreement**”). Each request for the issuance of a Letter of Credit must be accompanied by the Borrower’s execution of an application on the Bank’s standard forms (each, an “**Application**”), together with all supporting documentation. Each Letter of Credit will be issued in the

Form 7G - Multistate Rev. 1/02

Bank’s sole discretion and in a form acceptable to the Bank. This Agreement is not a pre-advice for the issuance of a letter of credit and is not irrevocable.

The Borrower shall pay the Bank’s standard issuance fee on the face amount of each Letter of Credit upon issuance, together with such other customary fees and expenses therefor as shall be required by the Bank. In addition, the Borrower shall pay to the Bank a fee (the “**Letter of Credit Commission**”), calculated daily (on the basis of a year of 360 days), equal to the amount available to be drawn at such time under all Letters of Credit issued under the Line of Credit (including any amounts drawn thereunder and not reimbursed, regardless of the existence or satisfaction of any conditions or limitations on drawing) on each day multiplied by one hundred fifty (150) basis points (1.50%). The Letter of Credit Commission shall be payable quarterly in arrears beginning on March 31, 2011, and continuing on the first day of each fiscal quarter thereafter and on the Final LC Expiration Date. Notwithstanding the foregoing, after the occurrence and during the continuance of an Event of Default, the Letter of Credit Commission, as calculated above, shall be increased by three percent (3.0%) per annum.

2. Security. The security for repayment of the Loan shall include but not be limited to the collateral, guaranties and other documents heretofore, contemporaneously or hereafter executed and delivered to the Bank (the “**Security Documents**”), which shall secure repayment of the Loan, the Note and all other loans, advances, debts, liabilities, obligations, covenants and duties owing by the Borrower to the Bank or to any other direct or indirect subsidiary of The PNC Financial Services Group, Inc., of any kind or nature, present or future (including any interest accruing thereon after maturity, or after the filing of any petition in bankruptcy, or the commencement of any insolvency, reorganization or like proceeding relating to the Borrower, whether or not a claim for post-filing or post-petition interest is allowed in such proceeding), whether direct or indirect (including those acquired by assignment or participation), absolute or contingent, joint or several, due or to become due, now existing or hereafter arising, whether or not (i) evidenced by any note, guaranty or other instrument, (ii) arising under any agreement, instrument or document, (iii) for the payment of money, (iv) arising by reason of an extension of credit, opening of a letter of credit, loan, equipment lease or guarantee, (v) under any interest or currency swap, future, option or other interest rate protection or similar agreement, (vi) under or by reason of any foreign currency transaction, forward, option or other similar transaction providing for the purchase of one currency in exchange for the sale of another currency, or in any other manner, or (vii) arising out of overdrafts on deposit or other accounts or out of electronic funds transfers (whether by wire transfer or through automated clearing houses or otherwise) or out of the return unpaid of, or other failure of the Bank to receive final payment for, any check, item, instrument, payment order or other deposit or credit to a deposit or other account, or out of the Bank’s non-receipt of or inability to collect funds or otherwise not being made whole in connection with depository or other similar arrangements; and any amendments, extensions, renewals and increases of or to any of the foregoing, and all costs and expenses of the Bank incurred in the documentation, negotiation, modification,

enforcement, collection and otherwise in connection with any of the foregoing, including reasonable attorneys' fees and expenses (hereinafter referred to collectively as the "**Obligations**"). Unless expressly provided to the contrary in documentation for any other loan or loans, it is the express intent of the Bank and the Borrower that all Obligations including those included in the Loan be cross-collateralized and cross-defaulted, such that collateral securing any of the Obligations shall secure repayment of all Obligations and a default under any Obligation shall be a default under all Obligations.

This Agreement, the Note, the Security Documents and all other agreements and documents executed and/or delivered pursuant hereto, as each may be amended, modified, extended or renewed from time to time, are collectively referred to as the "**Loan Documents**." Capitalized terms not defined herein shall have the meanings ascribed to them in the Loan Documents.

3. Representations and Warranties. The Borrower hereby makes the following representations and warranties, which shall be continuing in nature and remain in full force and effect until the Obligations are paid in full, and which shall be true and correct except as otherwise set forth on the Addendum attached hereto and incorporated herein by reference (the "**Addendum**");

2

3.1. Existence, Power and Authority. If not a natural person, the Borrower is duly organized, validly existing and in good standing under the laws of the State of its incorporation or organization and has the power and authority to own and operate its assets and to conduct its business as now or proposed to be carried on, and is duly qualified, licensed and in good standing to do business in all jurisdictions where its ownership of property or the nature of its business requires such qualification or licensing except where the failure to be so qualified or licensed could not reasonably be expected to have a material adverse effect. The Borrower is duly authorized to execute and deliver the Loan Documents, all necessary action to authorize the execution and delivery of the Loan Documents has been properly taken, and the Borrower is and will continue to be duly authorized to borrow under this Agreement and to perform all of the other terms and provisions of the Loan Documents.

3.2. Financial Statements. If the Borrower is not a natural person, it has delivered or caused to be delivered to the Bank its most recent balance sheet, income statement and statement of cash flows, or if the Borrower is a natural person, its personal financial statement and tax returns (as applicable, the "**Historical Financial Statements**"). The Historical Financial Statements are true, complete and accurate in all material respects and fairly present the financial condition, assets and liabilities, whether accrued, absolute, contingent or otherwise and the results of the Borrower's operations for the period specified therein. The Historical Financial Statements have been prepared in accordance with generally accepted accounting principles ("**GAAP**") consistently applied from period to period, subject in the case of interim statements to normal year-end adjustments and to any comments and notes acceptable to the Bank in its sole discretion.

3.3. No Material Adverse Change. Since the date of the most recent Financial Statements (as hereinafter defined), the Borrower has not suffered any damage, destruction or loss, and no event or condition has occurred or exists, in each case which has resulted or could reasonably result in a material adverse change in its business, assets, operations, condition (financial or otherwise) or results of operation.

3.4. Binding Obligations. The Borrower has full power and authority to enter into the transactions provided for in this Agreement and has been duly authorized to do so by appropriate action of its Board of Directors if the Borrower is a corporation, all its general partners if the Borrower is a partnership or otherwise as may be required by law, charter, other organizational documents or agreements; and the Loan Documents, when executed and delivered by the Borrower, will constitute the legal, valid and binding obligations of the Borrower enforceable in accordance with their terms subject to limitations as to enforceability which might result from bankruptcy, insolvency, moratorium, and other similar laws affecting creditors' rights generally and subject to limitations on the availability of equitable remedies.

3.5. No Defaults or Violations. There does not exist any Event of Default under this Agreement or any default or violation by the Borrower of or under any of the terms, conditions or obligations of: (i) its partnership agreement if the Borrower is a partnership, its articles or certificate of incorporation, regulations or bylaws if the Borrower is a corporation or its other organizational documents as applicable; (ii) any indenture, mortgage, deed of trust, franchise, permit, contract, agreement, or other instrument to which it is a party or by which it is bound which could reasonably be expected to cause a material adverse effect; or (iii) any law, ordinance, regulation, ruling, order, injunction, decree, condition or other requirement applicable to or imposed upon it by any law, the action of any court or any governmental authority or agency which could reasonably be expected to cause a material adverse effect; and the consummation of this Agreement and the transactions set forth herein will not result in any such default or violation or Event of Default.

3.6. Title to Assets. The Borrower has good and marketable title to the assets reflected on the most recent Financial Statements, free and clear of all liens and encumbrances, except for (i) current taxes and assessments not yet due and payable, (ii) assets disposed of by the Borrower in the ordinary course of business since the date of the most recent Financial Statements, and (iii) those liens or encumbrances, if any, specified on the Addendum.

3.7. Litigation. There are no actions, suits, proceedings or governmental investigations pending or, to the knowledge of the Borrower, threatened against the Borrower, which could reasonably result in a

3

material adverse change in its business, assets, operations, condition (financial or otherwise) or results of operations and there is no basis known to the Borrower for any action, suit, proceeding or investigation which could reasonably result in such a material adverse change. All pending and threatened litigation against the Borrower is listed on the Addendum.

3.8. Tax Returns. The Borrower has filed all returns and reports that are required to be filed by it in connection with any federal, state or local tax, duty or charge levied, assessed or imposed upon it or its property or withheld by it, including income, unemployment, social security and similar taxes, and has paid (or has properly extended the date for payment of) all such federal, state and other material taxes, except those which are being contested in good faith by appropriate proceedings diligently conducted and for which reserve or other provision has been made therefor in accordance with GAAP.

3.9. Employee Benefit Plans. Each employee benefit plan as to which the Borrower may have any liability complies in all material respects with all applicable provisions of the Employee Retirement Income Security Act of 1974 (as amended from time to time, "**ERISA**"), including minimum funding requirements, and (i) no Prohibited Transaction (as defined under ERISA) has occurred with respect to any such plan, (ii) no Reportable Event (as defined under Section 4043 of ERISA) has occurred with respect to any such plan which would cause the Pension Benefit Guaranty Corporation to

institute proceedings under Section 4042 of ERISA, (iii) the Borrower has not withdrawn from any such plan or initiated steps to do so, and (iv) no steps have been taken to terminate any such plan.

3.10. Environmental Matters. The Borrower is in compliance, in all material respects, with all Environmental Laws (as hereinafter defined), including, without limitation, all Environmental Laws in jurisdictions in which the Borrower owns or operates, or has owned or operated, a facility or site, stores, Collateral, arranges or has arranged for disposal or treatment of hazardous substances, solid waste or other waste, accepts or has accepted for transport any hazardous substances, solid waste or other wastes or holds or has held any interest in real property or otherwise. Except as otherwise disclosed on the Addendum, no litigation or proceeding arising under, relating to or in connection with any Environmental Law is pending or, to the best of the Borrower's knowledge, threatened against the Borrower, any real property which the Borrower holds or has held an interest or any past or present operation of the Borrower. No release, threatened release or disposal of hazardous waste, solid waste or other wastes is occurring, or to the best of the Borrower's knowledge has occurred, on, under or to any real property in which the Borrower holds or has held any interest or performs or has performed any of its operations, in violation of any Environmental Law. As used in this Section, "**litigation or proceeding**" means any demand, claim notice, suit, suit in equity, action, administrative action, investigation or inquiry whether brought by a governmental authority or other person, and "**Environmental Laws**" means all provisions of laws, statutes, ordinances, rules, regulations, permits, licenses, judgments, writs, injunctions, decrees, orders, awards and standards promulgated by any governmental authority concerning health, safety and protection of, or regulation of the discharge of substances into, the environment.

3.11. Intellectual Property. The Borrower owns or is licensed to use all patents, patent rights, trademarks, trade names, service marks, copyrights, intellectual property, technology, know-how and processes necessary for the conduct of its business as currently conducted that are material to the condition (financial or otherwise), business or operations of the Borrower.

3.12. Regulatory Matters. No part of the proceeds of the Loan will be used for "purchasing" or "carrying" any "margin stock" within the respective meanings of each of the quoted terms under Regulation U of the Board of Governors of the Federal Reserve System as now and from time to time in effect or for any purpose which violates the provisions of the Regulations of such Board of Governors.

3.13. Solvency. As of the date hereof and after giving effect to the transactions contemplated by the Loan Documents, (i) the aggregate value of the Borrower's assets will exceed its liabilities (including contingent, subordinated, unmatured and unliquidated liabilities), (ii) the Borrower will have sufficient cash flow to enable it to pay its debts as they become due, and (iii) the Borrower will not have unreasonably small capital for the business in which it is engaged.

4

3.14. Disclosure. None of the Loan Documents contains or will contain any untrue statement of material fact or omits or will omit to state a material fact necessary in order to make the statements contained in this Agreement or the Loan Documents not misleading. There is no fact known to the Borrower which materially adversely affects or, so far as the Borrower can now reasonably foresee, will materially adversely affect the business, assets, operations, condition (financial or otherwise) or results of operation of the Borrower and which has not otherwise been fully set forth in this Agreement or in the Loan Documents.

4. Affirmative Covenants. The Borrower agrees that from the date of execution of this Agreement until all Obligations have been paid in full and any commitments of the Bank to the Borrower have been terminated, the Borrower will:

4.1. Books and Records. Maintain books and records in accordance with GAAP and give representatives of the Bank access thereto at all reasonable times and at reasonable intervals, including permission to examine, copy and make abstracts from any of such books and records and such other information as the Bank may from time to time reasonably request, and upon the Bank's reasonable request, the Borrower will make available to the Bank for examination copies of any reports, statements and returns which the Borrower may make to or file with any federal, state or local governmental department, bureau or agency.

4.2. Interim Financial Statements; Certificate of No Default. Furnish the Bank within 60 days after the end of each quarter the Borrower's Financial Statements for such period, in reasonable detail, certified by an authorized officer of the Borrower and prepared in accordance with GAAP consistently applied from period to period. The Borrower shall also deliver a certificate as to its compliance with applicable financial covenants (containing detailed calculations of all financial covenants) for the period then ended and whether any Event of Default exists, and, if so, the nature thereof and the corrective measures the Borrower proposes to take. As used in this Agreement, "**Financial Statements**" means the Borrower's consolidated and, if required by the Bank in its reasonable discretion, consolidating balance sheets, income statements and statements of cash flows for the year, month or quarter together with year-to-date figures and comparative figures for the corresponding periods of the prior year.

4.3. Annual Financial Statements. Furnish the Borrower's Financial Statements to the Bank within 120 days after the end of each fiscal year. Those Financial Statements will be audited in accordance with GAAP by an independent certified public accountant selected by the Borrower and reasonably satisfactory to the Bank. Audited Financial Statements shall contain the unqualified opinion of an independent certified public accountant and all accountant examinations shall have been made in accordance with GAAP consistently applied from period to period.

4.4. Payment of Taxes and Other Charges. Pay and discharge when due all indebtedness and all taxes, assessments, charges, levies and other liabilities imposed upon the Borrower, its income, profits, property or business, except those which currently are being contested in good faith by appropriate proceedings and for which the Borrower shall have set aside adequate reserves or made other adequate provision with respect thereto acceptable to the Bank in its reasonable discretion.

4.5. Maintenance of Existence, Operation and Assets. Do all things necessary to (i) maintain, renew and keep in full force and effect its organizational existence and all rights, permits and franchises necessary to enable it to continue its business as currently conducted; (ii) continue in operation in substantially the same manner as at present; (iii) keep its properties in good operating condition and repair (subject to normal wear and tear); and (iv) make all necessary and proper repairs, renewals, replacements, additions and improvements thereto as determined in the Borrower's reasonable business judgment.

4.6. Insurance. Maintain, with financially sound and reputable insurers, insurance with respect to its property and business against such casualties and contingencies, of such types and in such amounts, as is customary for established companies engaged in the same or similar business and similarly situated. In the event

5

of a conflict between the provisions of this Section and the terms of any Security Documents relating to insurance, the provisions in the Security Documents will control.

4.7. Compliance with Laws. Comply with all laws applicable to the Borrower and to the operation of its business (including without limitation any statute, ordinance, rule or regulation relating to employment practices, pension benefits or environmental, occupational and health standards and controls), the failure to comply with which could reasonably be expected to cause a material adverse effect.

4.8. Bank Accounts. Establish and maintain at the Bank the Borrower's primary depository accounts.

4.9. Financial Covenants. Comply with all of the financial and other covenants, if any, set forth on the Addendum.

4.10. Additional Reports. Provide prompt written notice to the Bank of the occurrence of any of the following (together with a description of the action which the Borrower proposes to take with respect thereto): (i) any Event of Default or any event, act or condition which, with the passage of time or the giving of notice, or both, would constitute an Event of Default (a "Default"), (ii) any litigation filed by or against the Borrower requesting monetary damages in excess of \$200,000.00, (iii) any Reportable Event or Prohibited Transaction with respect to any Employee Benefit Plan(s) (as defined in ERISA) or (iv) any event which could reasonably be expected to result in a material adverse change in the business, assets, operations, condition (financial or otherwise) or results of operation of the Borrower.

5. Negative Covenants. The Borrower covenants and agrees that from the date of this Agreement until all Obligations have been paid in full and any commitments of the Bank to the Borrower have been terminated, except as set forth in the Addendum, the Borrower will not, without the Bank's prior written consent:

5.1. Indebtedness. Create, incur, assume or suffer to exist any indebtedness for borrowed money other than: (i) the Loan and any subsequent indebtedness to the Bank; and (ii) open account trade debt incurred in the ordinary course of business and not past due.

5.2. Liens and Encumbrances. Except as provided in Section 3.6, create, assume, incur or permit to exist any mortgage, pledge, encumbrance, security interest, lien or charge of any kind upon any of its property, now owned or hereafter acquired, or acquire or agree to acquire any kind of property subject to any conditional sales or other title retention agreement.

5.3. Guarantees. Guarantee, endorse or become contingently liable for the obligations of any person, firm, corporation or other entity, except (a) in connection with the endorsement and deposit of checks in the ordinary course of business for collection and (b) that certain Amended and Restated Guaranty Agreement made by the Borrower in favor of the Bank and dated as of the date hereof.

5.4. Loans or Advances. Purchase or hold beneficially any stock, other securities or evidences of indebtedness of, or make or have outstanding, any loans or advances to, or otherwise extend credit to, or make any investment or acquire any interest whatsoever in, any other person, firm, corporation or other entity, except investments disclosed on the Borrower's Historical Financial Statements or acceptable to the Bank in its sole discretion.

5.5. Merger or Transfer of Assets. Liquidate or dissolve, or merge or consolidate with or into any person, firm, corporation or other entity, or sell, lease, transfer or otherwise dispose of all or any substantial part of its property, assets, operations or business, whether now owned or hereafter acquired.

5.6. Change in Business. Make or permit any change in its form of organization or the nature of its business in any material manner as carried on as of the date hereof. Notwithstanding the foregoing, the Borrower shall be permitted, upon thirty (30) days' prior written notice to the Bank, to convert from a corporation

to another form of entity (the "**Conversion**"); provided, that (i) no Event of Default exists under the Loan Documents at the time of such Conversion and (ii) the Borrower shall promptly provide the Bank, (a) a certified copy of the amendment to its organizational documents effecting the Conversion, (b) any and all other amendments and/or restatements to the Borrower's organizational documents resulting from the Conversion, (c) the Borrower shall have provided the Bank with all information necessary for the Bank to prepare and file such amendments to its UCC Financing Statements as the Bank deems appropriate to reflect the Conversion of the Borrower, (d) any and all other documentation and related information reasonably requested by the Bank with respect to the Conversion and (e) if reasonably requested by the Bank, the Borrower shall enter into such amendments and modifications to this Agreement and the other Loan Documents (as necessary), as the Bank shall reasonably require. In furtherance of the foregoing, upon the effectiveness of the Conversion, each reference to the Borrower in the Loan Documents shall automatically be deemed to refer to the Borrower's name post-Conversion without further action of any of the parties.

5.7. Dividends. Declare or pay any dividends on or make any distribution with respect to any class of its equity or ownership interest, or purchase, redeem, retire or otherwise acquire any of its equity, provided, however, that so long as the Borrower remains an S corporation, a partnership or a limited liability company, it may make distributions to its shareholders, partners or members, as the case may be, in an amount equal to the federal and state income tax of such principals of the Borrower attributable to the earning of the Borrower.

5.8. Acquisitions. Make acquisitions of all or substantially all of the property or assets of any person, firm, corporation or other entity.

6. Events of Default. The occurrence of any of the following will be deemed to be an **Event of Default**:

6.1. Covenant Default. The Borrower shall default in the performance of any of the covenants or agreements contained in this Agreement; provided, however, that, no such failure to observe or perform any such covenant or other agreement (excluding financial covenants, financial reporting covenants, and negative covenants) shall constitute an Event of Default unless such failure continues for a period of 10 days after the earlier to occur of (a) the date when the Borrower becomes aware of such failure and (b) the date when the Bank gives written notice to the Borrower of such failure.

6.2. Breach of Warranty. Any Financial Statement, representation, warranty or certificate made or furnished by the Borrower to the Bank in connection with this Agreement shall be false, incorrect or incomplete in any material respect when made.

6.3. Other Default. The occurrence of an Event of Default as defined in the Note or any of the Loan Documents.

Upon the occurrence and during the continuance of an Event of Default, the Bank will have all rights and remedies specified in the Note and the Loan Documents and all rights and remedies (which are cumulative and not exclusive) available under applicable law or in equity.

7. Conditions. The Bank's obligation to make any advance under the Loan is subject to the conditions that as of the date of the advance:

7.1. No Event of Default. No Event of Default or event which with the passage of time, the giving of notice or both would constitute an Event of Default shall have occurred and be continuing;

7.2. Authorization Documents. The Bank shall have received certified copies of resolutions of the board of directors, the general partners or the members or managers of any partnership, corporation or limited liability company that executes this Agreement, the Note or any of the other Loan Documents; or other proof of authorization satisfactory to the Bank; and

7

7.3. Receipt of Loan Documents. The Bank shall have received the Loan Documents and such other instruments and documents which the Bank may reasonably request in connection with the transactions provided for in this Agreement, which may include an opinion of counsel in form and substance satisfactory to the Bank for any party executing any of the Loan Documents.

7.4. Fees. On the date hereof, the Borrower shall pay to the Bank a document preparation fee in the amount of \$250.00.

8. Expenses. The Borrower agrees to pay the Bank, upon the execution of this Agreement, and otherwise on demand, all reasonable costs and expenses incurred by the Bank in connection with the preparation, negotiation and delivery of this Agreement and the other Loan Documents, and any modifications thereto, and the collection of all of the Obligations, including but not limited to enforcement actions, relating to the Loan, whether through judicial proceedings or otherwise, or in defending or prosecuting any actions or proceedings arising out of or relating to this Agreement, including reasonable fees and expenses of counsel (which may include costs of in-house counsel), expenses for auditors, appraisers and environmental consultants, lien searches, recording and filing fees and taxes.

9. Increased Costs. On written demand, together with written evidence of the justification therefor, the Borrower agrees to pay the Bank all direct costs incurred and any losses suffered or payments made by the Bank as a consequence of making the Loan by reason of any change in law or regulation, or the interpretation thereof, imposing any reserve, deposit, allocation of capital or similar requirement (including without limitation, Regulation D of the Board of Governors of the Federal Reserve System) on the Bank, its holding company or any of their respective assets as the Bank reasonably and in good faith determines. The Bank agrees that, as promptly as practicable after becoming aware of the occurrence of any event or the existence of a condition that would entitle the Bank to receive payments under this Section 9, the Bank will, to the extent not inconsistent with internal policies of the Bank and any applicable legal or regulatory restrictions take reasonable measures to reduce any additional amounts that would otherwise be payable to the Bank under this Section 9.

10. Miscellaneous.

10.1. Notices: All notices, demands, requests, consents, approvals and other communications required or permitted hereunder ("Notices") must be in writing and will be effective upon receipt. Notices may be given in any manner to which the parties may separately agree, including electronic mail. Without limiting the foregoing, first-class mail, facsimile transmission and commercial courier service are hereby agreed to as acceptable methods for giving Notices. Regardless of the manner in which provided, Notices may be sent to a party's address as set forth above or to such other address as any party may give to the other in writing for such purpose in accordance with this section.

10.2. Preservation of Rights. No delay or omission on the Bank's part to exercise any right or power arising hereunder will impair any such right or power or be considered a waiver of any such right or power, nor will the Bank's action or inaction impair any such right or power. The Bank's rights and remedies hereunder are cumulative and not exclusive of any other rights or remedies which the Bank may have under other agreements, at law or in equity.

10.3. Illegality. If any provision contained in this Agreement should be invalid, illegal or unenforceable in any respect, it shall not affect or impair the validity, legality and enforceability of the remaining provisions of this Agreement.

10.4. Changes in Writing. No modification, amendment or waiver of, or consent to any departure by the Borrower from, any provision of this Agreement will be effective unless made in a writing signed by the party to be charged, and then such waiver or consent shall be effective only in the specific instance and for the purpose for which given. No notice to or demand on the Borrower will entitle the Borrower to any other or further notice or demand in the same, similar or other circumstance.

8

10.5. Entire Agreement. This Agreement (including the documents and instruments referred to herein) constitutes the entire agreement and supersedes all other prior agreements and understandings, both written and oral, between the parties with respect to the subject matter hereof.

10.6. Counterparts. This Agreement may be signed in any number of counterpart copies and by the parties hereto on separate counterparts, but all such copies shall constitute one and the same instrument. Delivery of an executed counterpart of a signature page to this Agreement by facsimile transmission shall be effective as delivery of a manually executed counterpart. Any party so executing this Agreement by facsimile transmission shall promptly deliver a manually executed counterpart, provided that any failure to do so shall not affect the validity of the counterpart executed by facsimile transmission.

10.7. Successors and Assigns. This Agreement will be binding upon and inure to the benefit of the Borrower and the Bank and their respective heirs, executors, administrators, successors and assigns; provided, however, that the Borrower may not assign this Agreement in whole or in part without the Bank's prior written consent and the Bank at any time may assign this Agreement in whole or in part.

10.8. Interpretation. In this Agreement, unless the Bank and the Borrower otherwise agree in writing, the singular includes the plural and the plural the singular; words importing any gender include the other genders; references to statutes are to be construed as including all statutory provisions consolidating, amending or replacing the statute referred to; the word "or" shall be deemed to include "and/or", the words "including", "includes" and "include" shall be deemed to be followed by the words "without limitation"; references to articles, sections (or subdivisions of sections) or exhibits are to those of this Agreement; and references to agreements and other contractual instruments shall be deemed to include all subsequent amendments and other modifications to such instruments, but only to the extent such amendments and other modifications are not prohibited by the terms of this Agreement. Section headings in this Agreement are included for convenience of reference only and shall not constitute a part of this Agreement for any other purpose. Unless otherwise specified in this Agreement, all accounting terms shall be interpreted and all accounting determinations shall be made in accordance with GAAP. If this Agreement is executed by more than one party as Borrower, the obligations of such persons or entities will be joint and several.

10.9. No Consequential Damages, Etc. The Bank will not be responsible for any consequential, incidental, special, or punitive damages that may be incurred or alleged by any person or entity, including the Borrower and any Guarantor, as a result of this Agreement, the other Loan Documents, the transactions contemplated hereby or thereby, or the use of the proceeds of the Loan.

10.10. Assignments and Participations. At any time, without any notice to the Borrower, the Bank may sell, assign, transfer, negotiate, grant participations in, or otherwise dispose of all or any part of the Bank's interest in the Loan. The Borrower hereby authorizes the Bank to provide, without any notice to the Borrower, any information concerning the Borrower, including information pertaining to the Borrower's financial condition, business operations or general creditworthiness, to any person or entity which may succeed to or participate in all or any part of the Bank's interest in the Loan (it being understood that such persons and/or entities to whom such disclosure is made will be informed of the confidential nature of such information and instructed to keep such information confidential).

10.11. Governing Law and Jurisdiction. This Agreement has been delivered to and accepted by the Bank and will be deemed to be made in the State where the Bank's office indicated above is located. **THIS AGREEMENT WILL BE INTERPRETED AND THE RIGHTS AND LIABILITIES OF THE PARTIES HERETO DETERMINED IN ACCORDANCE WITH THE LAWS OF THE STATE WHERE THE BANK'S OFFICE INDICATED ABOVE IS LOCATED, EXCLUDING ITS CONFLICT OF LAWS RULES.** The Borrower hereby irrevocably consents to the exclusive jurisdiction of any state or federal court in the county or judicial district where the Bank's office indicated above is located; provided that nothing contained in this Agreement will prevent the Bank from bringing any action, enforcing any award or judgment or exercising any rights against the Borrower individually, against any security or against any property of the Borrower within any other county, state or other foreign or domestic jurisdiction. The Bank and the Borrower agree that the venue provided above is the most convenient forum for

9

both the Bank and the Borrower. The Borrower waives any objection to venue and any objection based on a more convenient forum in any action instituted under this Agreement.

[INTENTIONALLY LEFT BLANK]

10

10.12. WAIVER OF JURY TRIAL. EACH OF THE BORROWER AND THE BANK IRREVOCABLY WAIVES ANY AND ALL RIGHT IT MAY HAVE TO A TRIAL BY JURY IN ANY ACTION, PROCEEDING OR CLAIM OF ANY NATURE RELATING TO THIS AGREEMENT, ANY DOCUMENTS EXECUTED IN CONNECTION WITH THIS AGREEMENT OR ANY TRANSACTION CONTEMPLATED IN ANY OF SUCH DOCUMENTS. THE BORROWER AND THE BANK ACKNOWLEDGE THAT THE FOREGOING WAIVER IS KNOWING AND VOLUNTARY.

The Borrower acknowledges that it has read and understood all the provisions of this Agreement, including the waiver of jury trial, and has been advised by counsel as necessary or appropriate.

WITNESS the due execution hereof, as of the date first written above.

WITNESS / ATTEST:

NORTHERN TECHNOLOGIES HOLDING COMPANY, LLC

By: /s/ Matthew Wolsfeld

Print Name: _____
Title: _____
(Include title only if an officer of entity signing to the right)

Print Name: Matthew Wolsfeld
Title: CFO

PNC BANK, NATIONAL ASSOCIATION

By: /s/ Pamela LeRose

Pamela LeRose
Vice President

ADDENDUM to that certain Loan Agreement dated January , 2011 between **NORTHERN TECHNOLOGIES INTERNATIONAL CORPORATION** as the Borrower and PNC Bank, National Association, as the Bank. Capitalized terms used in this Addendum and not otherwise defined shall have the meanings given them in the Agreement. Section numbers below refer to the sections of the Agreement.

3.6 Title to Assets. Describe additional liens and encumbrances below:

None.

3.7 Litigation. Describe pending and threatened litigation, investigations, proceedings, etc. below:

None.

CONTINUATION OF ADDENDUM

FINANCIAL COVENANTS

(1) The Borrower will maintain as of the last calendar day of each fiscal quarter, on a rolling four quarters basis, a minimum Fixed Charge Coverage Ratio of at least 1.10 to 1.00.

As used herein:

“Current Maturities” means the scheduled payments of principal on all indebtedness for borrowed money having an original term of more than one year (including but not limited to amortization of capitalized lease obligations), as shown on the Borrower’s Financial Statements as current liabilities as of one year prior to the date of determination.

“EBITDA” means net income plus interest expense plus income tax expense plus depreciation plus amortization plus other non-recurring non-cash expenses reducing net income minus non-recurring non-cash items increasing net income.

“Fixed Charge Coverage Ratio” means for any given period (i) EBITDA plus increases to paid-in capital on stockholders’ equity minus decreases to paid-in capital on stockholders’ equity, divided by (ii) the sum (without duplication) of Current Maturities plus payments made under all capital leases plus interest expense plus taxes paid in cash plus dividends and distributions plus Unfunded Capital Expenditures.

“Unfunded Capital Expenditures” means capital expenditures paid for from the Borrower’s funds other than funds borrowed as term debt to finance such capital expenditures.

All of the above financial covenants shall be computed and determined on a consolidated basis for the Borrower and its subsidiaries in accordance with GAAP applied on a consistent basis (subject to normal year-end adjustments).

