ALLEGHENY TECHNOLOGIES INC

Form 11-K June 10, 2016

UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

FORM 11-K

ANNUAL REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

ANNUAL REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 [NO \circ FEE REQUIRED]

FOR THE FISCAL YEAR ENDED DECEMBER 31, 2015

..TRANSITION REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 [NO FEE REQUIRED]

FOR THE TRANSITION PERIOD FROM TO

COMMISSION FILE NUMBER 1-12001

ATI LADISH HOURLY EMPLOYEES

SAVINGS AND DEFERRAL INVESTMENT PLAN

(Title of Plan)

ALLEGHENY TECHNOLOGIES INCORPORATED

(Name of Issuer of securities held pursuant to the Plan)

1000 Six PPG Place, Pittsburgh, Pennsylvania 15222-5479

(Address of Plan and principal executive offices of Issuer)

AUDITED FINANCIAL STATEMENTS

ATI Ladish Hourly Employees Savings and Deferral Investment Plan As of December 31, 2015 and 2014 and for the Year Ended December 31, 2015 With Report of Independent Registered Public Accounting Firm

ATI LADISH HOURLY EMPLOYEES SAVINGS AND DEFERRAL INVESTMENT PLAN Audited Financial Statements As of December 31, 2015 and 2014 and for the Year Ended December 31, 2015

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Report of Independent Registered Public Accounting Firm Allegheny Technologies Incorporated Pittsburgh, Pennsylvania

We have audited the accompanying statements of net assets available for benefits of the ATI Ladish Hourly Employees Savings and Deferral Investment Plan (the Plan) as of December 31, 2015 and 2014, and the related statement of changes in net assets available for benefits for the year ended December 31, 2015. These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The plan is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the net assets available for benefits of the Plan as of December 31, 2015 and 2014, and the changes in its net assets available for benefits for the year ended December 31, 2015, in conformity with accounting principles generally accepted in the United States of America.

/s/ Schneider Downs & Co., Inc. Pittsburgh, Pennsylvania June 10, 2016

ATI LADISH HOURLY EMPLOYEES SAVINGS AND DEFERRAL INVESTMENT PLAN Statements of Net Assets Available for Benefits

	December 31	
	2015	2014
Investments at fair value:		
Interest in Allegheny Technologies Incorporated Master Trust	\$19,690,190	\$23,287,981
Total investments at fair value	19,690,190	23,287,981
Investments at contract value:		
Interest in Allegheny Technologies Incorporated Master Trust	3,200,577	3,775,003
Total investments at contract value	3,200,577	3,775,003
Employee contributions receivable		39,929
Employer contributions receivable		6,995
	_	46,924
Net assets available for benefits	\$22,890,767	\$27,109,908
See accompanying notes.		

ATI LADISH HOURLY EMPLOYEES SAVINGS AND DEFERRAL INVESTMENT PLAN

Statement of Changes in Net Assets Available for Benefits

	Year Ended December 31, 2015
Additions to net assets attributed to:	
Contributions:	
Employee	\$1,113,916
Employer	175,565
Rollovers	45,538
Total contributions	1,335,019
Investment income:	
Net investment income from Plan interest in Allegheny Technologies Incorporated Master Trust	548,348
Other income	4,733
Total investment income	553,081
Total additions	1,888,100
Deductions from net assets attributed to:	
Benefits paid to participants	(3,249,801)
Administrative expenses	(280)
Total deductions	(3,250,081)
Net decrease in net assets available for benefits prior to transfers	(1,361,981)
Transfers out of Plan	(2,857,160)
Net decrease in net assets available for benefits	(4,219,141)
Net assets available for benefits at beginning of year	27,109,908
Net assets available for benefits at end of year	\$22,890,767
See accompanying notes.	

ATI LADISH HOURLY EMPLOYEES SAVINGS AND DEFERRAL INVESTMENT PLAN Notes to Financial Statements December 31, 2015

1. Description of the Plan

The following description of the ATI Ladish Hourly Employees Savings and Deferral Investment Plan (the Plan) provides only general information. The Plan agreement should be referred to for a more complete description of the Plan's provisions.

General: The Plan is a defined contribution plan that includes all Cudahy Forgings Division (CFD) hourly employees of ATI Ladish LLC (the Company), who are covered by a collective bargaining agreement that permits participation in the Plan. The plan also included various salaried employees of the Company who transferred into the ATI 401(k) Savings Plan effective November 30, 2015. The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974 (ERISA), as amended.

Plan administration: The Plan Sponsor is Allegheny Technologies Incorporated (ATI, the Plan Sponsor). Mercer Trust Company is the trustee for the Plan and is responsible for administering, investing and the safekeeping of all the Plan's assets.

Participant accounts: Separate accounts are maintained for each participating employee. Trustee fees and asset management fees charged by the Plan's trustee, Mercer Trust Company, for the administration of all funds are charged against net assets available for benefits of the respective fund. Certain other expenses of administering the Plan are paid by the Plan Sponsor.

Participant contributions: Amounts up to 50% of a participant's compensation, as defined in the Plan agreement, can be contributed in any combination of after-tax and before-tax contributions. Before-tax contributions result in a reduction of the participant's income for purposes of Federal and state income taxes, while after-tax contributions do not result in any reduction. The Plan permits after-tax Roth 401(k) deferrals. Participant contributions are limited to \$18,000 in 2015. Catch up contributions of \$6,000 were available to participants 50 years or older. Participants are allowed to rollover existing qualified retirement funds into the Plan. The Plan allows employees to contribute a portion of eligible wages each pay period through payroll deductions subject to Internal Revenue Code limitations.

Company contributions: The Company only makes contributions to all bargaining unit employees included in the International Federation of Professional and Technical Engineers #92 (IFPTE), as a result of contract negotiations. The Company has agreed to make contributions into the participants' accounts for all hours worked, including holiday and vacation hours, up to a maximum of forty hours per week. The Company contribution was \$1.00 per hour up to August 18, 2015, at which time the renegotiated collective bargaining agreement increased the rate to \$1.10 per hour. In addition, all IFPTE employees hired on or after August 20, 2012 receive an additional \$0.50 per hour effective August 18, 2014.

Vesting: The balance in a participant's account relating to employer contributions and associated earnings becomes 20% vested for each year of credited service and are fully vested after five years of Company service. In the event of termination prior to 100% vesting, the non-vested portion is forfeited. Participant contributions and associated earnings are fully vested at all times. Participant accounts are 100% vested upon disability or death.

Forfeitures: Forfeitures are used to reduce future Company contributions.

Investment options: Unless otherwise specified by the participant, contributions are made to the QDIA (Qualified Default Investment Alternative), The Vanguard Target Retirement Fund that most closely matches the participants 65th birthday date (e.g. Vanguard Target Retirement 2030 Fund). The Plan allows participants to direct their contributions, and contributions made on their behalf to any of the Plan's investment alternatives.

Payment of benefits: Participants, while employed, may withdraw all or a portion of their after-tax contributions and may also withdraw all or a portion of their before-tax contributions in the event of demonstrated financial hardship, as defined by the Plan. In-service distributions will only be permitted if the participant is 100% vested in the amounts being withdrawn and a participant may take no more than two in-service distributions in a Plan year and the distribution amount may not be less than \$1,000. After attainment of age 59½, a participant is not limited to the

number of in-service distributions taken within the Plan year or the amount of such distributions. Payments of benefits are available by request upon termination due to retirement, disability, death, or other voluntary or involuntary termination of employment. Distributions of account balances are made as lump-sum or installment payments.

Participant loans are not permitted under the Plan.

2. Significant Accounting Policies

Use of Estimates and Basis of Accounting

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the financial statements, accompanying notes and supplemental schedules. Actual results could differ from those estimates. The financial statements are prepared under the accrual basis of accounting.

Investment Valuation

Certain assets of the Plan have been commingled in the Allegheny Technologies Incorporated Master Trust (the Master Trust) with the assets of various ATI sponsored defined contribution plans for investment and administrative purposes. The investment in the Master Trust represents the Plan's interest in the net assets of the Master Trust, and is stated at fair value or for fully benefit-responsive investment contracts, at contract value. Contract value is the relevant measurement attributable to fully benefit-responsive investment contracts because contract value is the amount participants would received if they were to initiate permitted transactions under the terms of the Plan. The contract value represents contributions plus earnings, less participant withdrawals and administrative expenses.

Master Trust assets as well as income/losses are allocated among the participating plans by assigning to each plan those transactions (primarily contributions, benefit payments, and plan-specific expenses) that can be specifically identified and by allocating among all plans, in proportion to the fair value of the assets assigned to each plan, income and expenses resulting from the collective investment of the assets of the Master Trust.

Payment of Benefits

Benefits are recorded when paid.

Recent Accounting Pronouncements

In May 2015, the Financial Accounting Standards Board (FASB) issued ASU 2015-07, "Fair Value Measurement (Topic 820): Disclosures for Investments in Certain Entities That Calculate Net Asset Value per Share (or Its Equivalent)." This FASB pronouncement removes the requirement to categorize within the fair value hierarchy all investments for which fair value is measured using the net asset value per share as a practical expedient. ASU 2015-07 also removes the requirement to make certain disclosures for all investments that are eligible to be measured at fair value using the net asset value per share as a practical expedient, and is effective for public businesses beginning after December 15, 2015, with early adoption permitted. ASU 2015-07 requires retrospective application by removing investments measured using net asset value as a practical expedient from the fair value hierarchy in all periods presented. The Plan has elected to early adopt this ASU in the current year and as such, these financial statements have revised disclosures to reflect this adoption.

In July 2015, the FASB issued Accounting Standards Update (ASU) 2015-12, "Plan Accounting: Defined Benefit Pension Plans (Topic 960), Defined Contribution Pension Plans (Topic 962), Health and Welfare Benefit Plans (Topic 965): (Part I) Fully Benefit-Responsive Investment Contracts, (Part II) Plan Investment Disclosures, (Part III) Measurement Date Practical Expedient (consensuses of Emerging Issues Task Force)." These FASB pronouncements attempt to reduce complexity in employee benefit plan accounting. Such changes include: (1) measuring and presenting fully benefit-responsive investment contracts at contract value; (2) eliminating various requirements for plan investment disclosures, such as net appreciation/depreciation by general investment type and individual investments that represent 5% or more of net assets; and (3) a practical expedient that permits a plan to measure investments as of a month-end date closest to the plan's fiscal year-end. ASU 2015-12 is effective for the Plan beginning after December 15, 2015, with early adoption permitted and retrospective application required. The Plan has elected to early adopt Parts I and II of this ASU in the current year and as such, these financial statements reflect this adoption.

3. Investments

The assets of the Plan along with the assets of various other ATI sponsored plans are part of the Master Trust. The Plan's interest in the net assets of the Master Trust was approximately 2% and 3% at December 31, 2015 and 2014, respectively. The Plan also permits self-directed investments in registered investment companies that are maintained in accounts separate from the Master Trust.

The Plan's approximate share of the various investment types at fair value held by the Master Trust at December 31, 2015 and 2014 was as follows:

The Plan's approximate share of the various investment types at contract value held by the Master Trust at December 31, 2015 and 2014 was as follows:

20152014

Synthetic investment contracts 2 % 2 % Guaranteed investment contracts 2 % 2 %

The following table is a summary, at fair value, of the net assets of the Master Trust by investment type as of December 31, 2015 and 2014:

 Common collective trusts
 2015
 2014

 Common collective trusts
 \$463,917,622\$426,729,102

 Registered investment companies
 228,064,975
 287,768,013

 Corporate common stock
 37,937,779
 79,471,712

 Other
 786,109
 1,018,588

 Total investments held by the Master Trust at fair value
 \$730,706,485\$794,987,415

The following table is a summary, at contract value, of the net assets of the Master Trust by investment type as of December 31, 2015 and 2014:

 2015
 2014

 Synthetic investment contracts
 \$162,965,928\$165,415,452

 Guaranteed investment contracts
 33,537,563
 36,938,462

 Total investments held by the Master Trust at contract value
 \$196,503,491\$202,353,914

Investment income (loss) attributable to the Master Trust for the year ended December 31, 2015 was as follows:

Net depreciation in fair value of investments \$(52,372,705) Income from investments at contract value 4,453,219

Expenses

Administrative expenses and other, net (1,635,038)
Total investment loss \$(49,554,524)

The BNY Mellon Stable Value Fund (the Fund) investment alternative invests in guaranteed investment contracts (GICs), a pooled separate account, actively managed structured or synthetic investment contracts (SICs), and a common collective trust (CCT). The GICs are promises by a bank or insurance company to repay principal plus a fixed rate of return through contract maturity. SICs differ from GICs in that there are specific assets supporting the SICs and these assets are owned by the Plan. The bank or insurance company issues a wrapper contract that allows participant-directed transactions to be made at contract value. The assets supporting the SICs are comprised of government agency bonds, corporate bonds, residential mortgage backed securities, asset-backed securities (ABOs), common collective trusts (CCT), and collateralized mortgage obligations (CMOs).

Interest crediting rates on the GICs in the Fund are determined at the time of purchase. Such interest rates are reviewed and may be reset on a quarterly basis. Interest crediting rates on the SICs are either: (1) set at the time of purchase for a fixed term and crediting rate, or (3) set at the time of purchase and reset monthly within a "constant duration." A constant duration contract may specify a duration of 2.5 years, and the crediting rate is adjusted monthly based upon quarterly rebalancing of eligible 2.5 year duration investment instruments at the time of each resetting; in effect the contract never matures.

Although it is management's intention to hold the investment contracts in the Fund until maturity, certain investment contracts provide for adjustments to contract value for withdrawals made prior to maturity. If the Plan were deemed to be in violation of ERISA or lose its tax exempt status, among other events, the issuers of the fully responsive investment contracts would have the ability to terminate the contracts and settle at an amount different from contract value.

Certain investments are subject to restrictions or limitations if the Plan Sponsor decided to entirely exit an investment. Investments in registered investment companies and the Fund may require at least 30 days prior notice to completely withdraw from the investments. The targeted date fund investments held in common collective trusts currently do not require the prior approval of the investment manager if the Plan Sponsor decides to entirely exit these investments, but prior trade date notification is necessary to effect timely securities settlement or delivery of an investment's liquidation and transfer to another investment. The Plan had no unfunded commitments as of December 31, 2015 and 2014.

4. Fair Value Measurement

In accordance with accounting standards, fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The accounting standards establish a three-level hierarchy for fair value measurements based upon the transparency of inputs to the valuation of an asset or liability as of the measurement date.

Determination of Fair Value

Fair value is based upon quoted market prices, where available. If listed prices or quotes are not available, fair value is based upon models that primarily use, as inputs, market-based or independently sourced market parameters, including yield curves, interest rates, volatilities, equity or debt prices, foreign exchange rates and credit curves. In addition to market information, models may also incorporate transaction details, such as maturity. Valuation adjustments, such as liquidity valuation adjustments, may be necessary when the Plan is unable to observe a recent market price for a financial instrument that trades in inactive (or less active) markets. Liquidity adjustments are not taken for positions classified within Level 1 (as defined below) of the fair value hierarchy.

The methods described below may produce a fair value calculation that may not be indicative of net realizable value or reflective of future fair values. Furthermore, while the Plan believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different estimate of fair value at the reporting date. There have been no changes in the methodologies used at December 31, 2015 and 2014.

Valuation Hierarchy

The three levels of inputs to measure fair value are as follows:

Level 1 – Quoted prices in active markets for identical assets and liabilities.

Level 2 – Observable inputs other than quoted prices included in Level 1, such as quoted prices for similar assets and liabilities in active markets; quoted prices for identical assets and liabilities in markets that are not active; or other inputs that are observable or can be corroborated by observable market data.

Level 3 – Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets and liabilities. This includes certain pricing models, discounted cash flow methodologies and similar techniques that use significant unobservable inputs.

A financial instrument's categorization within the valuation hierarchy is based upon the lowest level of input that is significant to the fair value measurement.

Valuation Methodologies

The valuation methodologies used for assets and liabilities measured at fair value, including their general classification based on the fair value hierarchy, include the following:

Cash and cash equivalents – Where the net asset value (NAV) is a quoted price in a market that is active, it is classified within Level 1 of the valuation hierarchy. In certain cases, NAV is a quoted price in a market that is not active, or is based on quoted prices for similar assets and liabilities in active markets, and these investments are classified within Level 2 of the valuation hierarchy.

Corporate common stocks – These investments are valued at the closing price reported on the major market on which the individual securities are traded. Common stock is classified within Level 1 of the valuation hierarchy.

Common collective trust funds – These investments are investment vehicles valued using the NAV, as a practical expedient, provided by the administrator of the fund. The NAV is based on the value of the underlying assets owned by the fund, minus its liabilities, and then divided by the number of shares outstanding.

Registered investment companies – These investments are public investment vehicles valued using the NAV provided by the administrator of the fund. The NAV is based on the value of the underlying assets owned by the fund, minus its liabilities, and then divided by the number of shares outstanding. Where the NAV is a quoted price in a market that is active, it is classified within Level 1 of the valuation hierarchy.

The following tables present the financial instruments of the Master Trust at fair value by caption on the statements of net assets available for benefits and by category of the valuation hierarchy (as described above) as of December 31, 2015 and 2014. The Master Trust had no assets classified within Level 2 or Level 3 of the valuation hierarchy. There were no reclassifications of assets between levels of the fair value hierarchy for the periods presented.

Master Trust assets measured at fair value on a recurring basis:

December 31, 2015	Level 1	Total
Interest in registered investment companies	\$228,064,975	\$228,064,975
Corporate common stock	37,937,779	37,937,779
Other	786,109	786,109
Other investments measured at net asset value (a)	_	463,917,622
	\$266,788,863	\$730,706,485
December 31, 2014	Level 1	Total
Interest in registered investment companies	\$287,768,013	\$287,768,013
Corporate common stock	79,471,712	79,471,712
Other	1,018,588	1,018,588
Other investments measured at net asset value (a)	_	426,729,102
	\$368,258,313	\$794,987,415

(a) In accordance with ASU 2015-07, certain investments that are measured at fair value using the net asset value per share (or its equivalent) practical expedient have not been classified in the fair value hierarchy. The fair value amounts presented in this table are intended to permit reconciliation of the fair value hierarchy to the amounts presented in Note 3 and to the statement of assets available for benefits.

5. Income Tax Status

The Plan obtained its latest determination letter dated January 25, 2016, in which the Internal Revenue Service stated the Plan, as then designed, was in compliance with the applicable requirements of the Internal Revenue Code. Therefore, no provision for income taxes has been included in the Plan's financial statements.

The Plan administrator has analyzed the tax positions taken by the Plan, and has concluded that as of December 31, 2015 and 2014, there are no uncertain positions taken or expected to be taken. The earliest tax year open to U.S. Federal examination is 2012.

6. Plan Termination

Although it has not expressed any intent to do so, the employing companies have the right under the Plan to discontinue their contributions at any time and to terminate their respective participation in the Plan subject to the provisions of ERISA. However, no such action may deprive any participant or beneficiary under the Plan of any vested right. In the event of Plan termination, participants would become 100% vested in their employer contributions.

7. Risks and Uncertainties

The Plan invests in various investment securities. Investment securities are exposed to various risk such as interest rate, market, and credit risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect participants' account balances and the amounts reported in the statements of net assets available for benefits.

8. Party-In-Interest Transactions

At December 31, 2015 and 2014, the Plan held 11,293 and 9,279 shares, respectively, of common stock of ATI, the sponsoring employer, with a fair value of \$150,220 and \$368,714, respectively. The shares held by the Plan at December 31, 2015 and 2014 reflect the Plan's interest in the Master Trust. During the years ended December 31, 2015 and 2014, the Plan recorded investment losses of \$186,772 and \$31,184, respectively, related to its investment in the common stock of ATI.

SIGNATURES

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

ALLEGHENY TECHNOLOGIES INCORPORATED

ATI LADISH HOURLY EMPLOYEES SAVINGS AND DEFERRAL INVESTMENT PLAN

Date: June 10, 2016 By: /s/ Karl D. Schwartz

Karl D. Schwartz

Vice President, Controller and Chief Accounting Officer (Principal Accounting Officer and Duly Authorized Officer)