

|                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                              |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Form 5500</b><br><br>Department of the Treasury<br>Internal Revenue Service<br><br>Department of Labor<br>Employee Benefits Security<br>Administration<br><br>Pension Benefit Guaranty Corporation | <b>Annual Return/Report of Employee Benefit Plan</b><br>This form is required to be filed for employee benefit plans under sections 104 and 4065 of the Employee Retirement Income Security Act of 1974 (ERISA) and sections 6057(b) and 6058(a) of the Internal Revenue Code (the Code).<br><br><p style="text-align: center;">▶ <b>Complete all entries in accordance with the instructions to the Form 5500.</b></p> | OMB Nos. 1210-0110<br>1210-0089<br><br><div style="text-align: center; font-size: 1.5em; font-weight: bold;">2017</div><br><br><b>This Form is Open to Public Inspection</b> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                                                                                                                  |                                                                                                                                                                                                                                                                                                                                           |
|------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Part I</b>                                                                                                    | <b>Annual Report Identification Information</b>                                                                                                                                                                                                                                                                                           |
| For calendar plan year 2017 or fiscal plan year beginning <u>01/01/2017</u> and ending <u>12/31/2017</u>         |                                                                                                                                                                                                                                                                                                                                           |
| <b>A</b> This return/report is for:                                                                              | <input type="checkbox"/> a multiemployer plan <input type="checkbox"/> a multiple-employer plan (Filers checking this box must attach a list of participating employer information in accordance with the form instructions.)<br><input checked="" type="checkbox"/> a single-employer plan <input type="checkbox"/> a DFE (specify) ____ |
| <b>B</b> This return/report is:                                                                                  | <input type="checkbox"/> the first return/report <input type="checkbox"/> the final return/report<br><input type="checkbox"/> an amended return/report <input type="checkbox"/> a short plan year return/report (less than 12 months)                                                                                                     |
| <b>C</b> If the plan is a collectively-bargained plan, check here. . . . . ▶ <input checked="" type="checkbox"/> |                                                                                                                                                                                                                                                                                                                                           |
| <b>D</b> Check box if filing under:                                                                              | <input checked="" type="checkbox"/> Form 5558 <input type="checkbox"/> automatic extension <input type="checkbox"/> the DFVC program<br><input type="checkbox"/> special extension (enter description)                                                                                                                                    |

|                                                                                                                                                                                                                                                                                                                                                              |                                                                |                                                                                      |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|--------------------------------------------------------------------------------------|--|
| <b>Part II</b>                                                                                                                                                                                                                                                                                                                                               | <b>Basic Plan Information</b> —enter all requested information |                                                                                      |  |
| <b>1a</b> Name of plan<br><u>THE RESTATED PENSION PLAN FOR HOURLY-RATED EMPLOYEES OF AMG VANADIUM, INC.</u>                                                                                                                                                                                                                                                  | <b>1b</b> Three-digit plan number (PN) ▶                       | <div style="border: 1px solid black; padding: 2px; display: inline-block;">001</div> |  |
| <b>2a</b> Plan sponsor's name (employer, if for a single-employer plan)<br>Mailing address (include room, apt., suite no. and street, or P.O. Box)<br>City or town, state or province, country, and ZIP or foreign postal code (if foreign, see instructions)<br><br><u>AMG VANADIUM LLC</u><br><br><u>60790 SOUTHGATE RD.</u><br><u>CAMBRIDGE, OH 43725</u> |                                                                | <b>1c</b> Effective date of plan<br><u>06/10/1987</u>                                |  |
|                                                                                                                                                                                                                                                                                                                                                              |                                                                | <b>2b</b> Employer Identification Number (EIN)<br><u>20-2931565</u>                  |  |
|                                                                                                                                                                                                                                                                                                                                                              |                                                                | <b>2c</b> Plan Sponsor's telephone number<br><u>610-293-2502</u>                     |  |
|                                                                                                                                                                                                                                                                                                                                                              |                                                                | <b>2d</b> Business code (see instructions)<br><u>331110</u>                          |  |

**Caution: A penalty for the late or incomplete filing of this return/report will be assessed unless reasonable cause is established.**

Under penalties of perjury and other penalties set forth in the instructions, I declare that I have examined this return/report, including accompanying schedules, statements and attachments, as well as the electronic version of this return/report, and to the best of my knowledge and belief, it is true, correct, and complete.

|                  |                                                   |            |                                                              |
|------------------|---------------------------------------------------|------------|--------------------------------------------------------------|
| <b>SIGN HERE</b> | Filed with authorized/valid electronic signature. | 09/18/2018 | MICHAEL CONNOR                                               |
|                  | Signature of plan administrator                   | Date       | Enter name of individual signing as plan administrator       |
| <b>SIGN HERE</b> | Filed with authorized/valid electronic signature. | 09/18/2018 | MICHAEL CONNOR                                               |
|                  | Signature of employer/plan sponsor                | Date       | Enter name of individual signing as employer or plan sponsor |
| <b>SIGN HERE</b> |                                                   |            |                                                              |
|                  | Signature of DFE                                  | Date       | Enter name of individual signing as DFE                      |

For Paperwork Reduction Act Notice, see the Instructions for Form 5500.

Form 5500 (2017)  
v. 170203

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>3a</b> Plan administrator's name and address <input checked="" type="checkbox"/> Same as Plan Sponsor                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>3b</b> Administrator's EIN<br><br><b>3c</b> Administrator's telephone number<br><br><div style="background-color: #cccccc; height: 40px; width: 100%;"></div>                                                               |
| <b>4</b> If the name and/or EIN of the plan sponsor or the plan name has changed since the last return/report filed for this plan, enter the plan sponsor's name, EIN, the plan name and the plan number from the last return/report:<br><b>a</b> Sponsor's name<br><b>c</b> Plan Name <b>RESTATED PENSION PLAN FOR HOURLY-RATED EMPLOYEES OF AMG VANADIUM LLC</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | <b>4b</b> EIN<br><br><b>4d</b> PN                                                                                                                                                                                              |
| <b>5</b> Total number of participants at the beginning of the plan year                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>5</b> 67                                                                                                                                                                                                                    |
| <b>6</b> Number of participants as of the end of the plan year unless otherwise stated (welfare plans complete only lines <b>6a(1)</b> , <b>6a(2)</b> , <b>6b</b> , <b>6c</b> , and <b>6d</b> ).<br><br><b>a(1)</b> Total number of active participants at the beginning of the plan year .....<br><b>a(2)</b> Total number of active participants at the end of the plan year .....<br><br><b>b</b> Retired or separated participants receiving benefits .....<br><b>c</b> Other retired or separated participants entitled to future benefits .....<br><b>d</b> Subtotal. Add lines <b>6a(2)</b> , <b>6b</b> , and <b>6c</b> .....<br><b>e</b> Deceased participants whose beneficiaries are receiving or are entitled to receive benefits. ....<br><b>f</b> Total. Add lines <b>6d</b> and <b>6e</b> .....<br><br><b>g</b> Number of participants with account balances as of the end of the plan year (only defined contribution plans complete this item) .....<br><b>h</b> Number of participants who terminated employment during the plan year with accrued benefits that were less than 100% vested ..... | <div style="background-color: #cccccc; height: 20px; width: 100%;"></div><br><b>6a(1)</b> 40<br><b>6a(2)</b> 39<br><b>6b</b> 57<br><b>6c</b> 24<br><b>6d</b> 120<br><b>6e</b> 9<br><b>6f</b> 129<br><b>6g</b> 0<br><b>6h</b> 0 |
| <b>7</b> Enter the total number of employers obligated to contribute to the plan (only multiemployer plans complete this item) .....                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <b>7</b>                                                                                                                                                                                                                       |
| <b>8a</b> If the plan provides pension benefits, enter the applicable pension feature codes from the List of Plan Characteristics Codes in the instructions:<br>1B 3H<br><br><b>b</b> If the plan provides welfare benefits, enter the applicable welfare feature codes from the List of Plan Characteristics Codes in the instructions:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                |

|                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>9a</b> Plan funding arrangement (check all that apply)<br><b>(1)</b> <input checked="" type="checkbox"/> Insurance<br><b>(2)</b> <input type="checkbox"/> Code section 412(e)(3) insurance contracts<br><b>(3)</b> <input type="checkbox"/> Trust<br><b>(4)</b> <input type="checkbox"/> General assets of the sponsor | <b>9b</b> Plan benefit arrangement (check all that apply)<br><b>(1)</b> <input checked="" type="checkbox"/> Insurance<br><b>(2)</b> <input type="checkbox"/> Code section 412(e)(3) insurance contracts<br><b>(3)</b> <input type="checkbox"/> Trust<br><b>(4)</b> <input type="checkbox"/> General assets of the sponsor |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

**10** Check all applicable boxes in 10a and 10b to indicate which schedules are attached, and, where indicated, enter the number attached. (See instructions)

**a Pension Schedules**

- (1)** ☒ **R** (Retirement Plan Information)
- (2)** ☐ **MB** (Multiemployer Defined Benefit Plan and Certain Money Purchase Plan Actuarial Information) - signed by the plan actuary
- (3)** ☒ **SB** (Single-Employer Defined Benefit Plan Actuarial Information) - signed by the plan actuary

**b General Schedules**

- (1)** ☐ **H** (Financial Information)
- (2)** ☒ **I** (Financial Information – Small Plan)
- (3)** ☒ 1 **A** (Insurance Information)
- (4)** ☐ **C** (Service Provider Information)
- (5)** ☒ **D** (DFE/Participating Plan Information)
- (6)** ☐ **G** (Financial Transaction Schedules)

**Part III Form M-1 Compliance Information (to be completed by welfare benefit plans)**

**11a** If the plan provides welfare benefits, was the plan subject to the Form M-1 filing requirements during the plan year? (See instructions and 29 CFR 2520.101-2.) ..... ☐ Yes ☐ No

If "Yes" is checked, complete lines 11b and 11c.

**11b** Is the plan currently in compliance with the Form M-1 filing requirements? (See instructions and 29 CFR 2520.101-2.) ..... ☐ Yes ☐ No

**11c** Enter the Receipt Confirmation Code for the 2017 Form M-1 annual report. If the plan was not required to file the 2017 Form M-1 annual report, enter the Receipt Confirmation Code for the most recent Form M-1 that was required to be filed under the Form M-1 filing requirements. (Failure to enter a valid Receipt Confirmation Code will subject the Form 5500 filing to rejection as incomplete.)

Receipt Confirmation Code \_\_\_\_\_

|                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                           |                                                                                           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| <b>SCHEDULE A</b><br><b>(Form 5500)</b><br>Department of the Treasury<br>Internal Revenue Service<br><br>Department of Labor<br>Employee Benefits Security Administration<br><br>Pension Benefit Guaranty Corporation | <b>Insurance Information</b><br><br>This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA).<br><br>▶ <b>File as an attachment to Form 5500.</b><br><br>▶ Insurance companies are required to provide the information pursuant to ERISA section 103(a)(2). | OMB No. 1210-0110<br><br><b>2017</b><br><br><b>This Form is Open to Public Inspection</b> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|

|                                                                                                     |                                                             |
|-----------------------------------------------------------------------------------------------------|-------------------------------------------------------------|
| For calendar plan year 2017 or fiscal plan year beginning 01/01/2017 and ending 12/31/2017          |                                                             |
| <b>A</b> Name of plan<br>THE RESTATED PENSION PLAN FOR HOURLY-RATED EMPLOYEES OF AMG VANADIUM, INC. | <b>B</b> Three-digit plan number (PN) ▶ 001                 |
| <b>C</b> Plan sponsor's name as shown on line 2a of Form 5500<br>AMG VANADIUM LLC                   | <b>D</b> Employer Identification Number (EIN)<br>20-2931565 |

|               |                                                                                                                                                                                                                                                     |
|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Part I</b> | <b>Information Concerning Insurance Contract Coverage, Fees, and Commissions</b> Provide information for each contract on a separate Schedule A. Individual contracts grouped as a unit in Parts II and III can be reported on a single Schedule A. |
|---------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                                |
|--------------------------------|
| <b>1</b> Coverage Information: |
|--------------------------------|

|                                                                          |
|--------------------------------------------------------------------------|
| <b>(a)</b> Name of insurance carrier<br>PRINCIPAL LIFE INSURANCE COMPANY |
|--------------------------------------------------------------------------|

| (b) EIN    | (c) NAIC code | (d) Contract or identification number | (e) Approximate number of persons covered at end of policy or contract year | Policy or contract year |            |
|------------|---------------|---------------------------------------|-----------------------------------------------------------------------------|-------------------------|------------|
|            |               |                                       |                                                                             | (f) From                | (g) To     |
| 42-0127290 | 61271         | 530029                                | 129                                                                         | 02/01/2017              | 12/31/2017 |

|                                                                                                                                                                                                   |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>2</b> Insurance fee and commission information. Enter the total fees and total commissions paid. List in line 3 the agents, brokers, and other persons in descending order of the amount paid. |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                                                  |                                           |
|--------------------------------------------------|-------------------------------------------|
| <b>(a)</b> Total amount of commissions paid<br>0 | <b>(b)</b> Total amount of fees paid<br>0 |
|--------------------------------------------------|-------------------------------------------|

|                                                                                                              |
|--------------------------------------------------------------------------------------------------------------|
| <b>3</b> Persons receiving commissions and fees. (Complete as many entries as needed to report all persons). |
|--------------------------------------------------------------------------------------------------------------|

|                                                                                                         |
|---------------------------------------------------------------------------------------------------------|
| <b>(a)</b> Name and address of the agent, broker, or other person to whom commissions or fees were paid |
|---------------------------------------------------------------------------------------------------------|

| (b) Amount of sales and base commissions paid | Fees and other commissions paid |             | (e) Organization code |
|-----------------------------------------------|---------------------------------|-------------|-----------------------|
|                                               | (c) Amount                      | (d) Purpose |                       |
|                                               |                                 |             |                       |

|                                                                                                         |
|---------------------------------------------------------------------------------------------------------|
| <b>(a)</b> Name and address of the agent, broker, or other person to whom commissions or fees were paid |
|---------------------------------------------------------------------------------------------------------|

| (b) Amount of sales and base commissions paid | Fees and other commissions paid |             | (e) Organization code |
|-----------------------------------------------|---------------------------------|-------------|-----------------------|
|                                               | (c) Amount                      | (d) Purpose |                       |
|                                               |                                 |             |                       |

---

**(a)** Name and address of the agent, broker, or other person to whom commissions or fees were paid

---

| <b>(b)</b> Amount of sales and base commissions paid | Fees and other commissions paid |                    | <b>(e)</b><br>Organization code |
|------------------------------------------------------|---------------------------------|--------------------|---------------------------------|
|                                                      | <b>(c)</b> Amount               | <b>(d)</b> Purpose |                                 |
|                                                      |                                 |                    |                                 |

---

**(a)** Name and address of the agent, broker, or other person to whom commissions or fees were paid

---

| <b>(b)</b> Amount of sales and base commissions paid | Fees and other commissions paid |                    | <b>(e)</b><br>Organization code |
|------------------------------------------------------|---------------------------------|--------------------|---------------------------------|
|                                                      | <b>(c)</b> Amount               | <b>(d)</b> Purpose |                                 |
|                                                      |                                 |                    |                                 |

---

**(a)** Name and address of the agent, broker, or other person to whom commissions or fees were paid

---

| <b>(b)</b> Amount of sales and base commissions paid | Fees and other commissions paid |                    | <b>(e)</b><br>Organization code |
|------------------------------------------------------|---------------------------------|--------------------|---------------------------------|
|                                                      | <b>(c)</b> Amount               | <b>(d)</b> Purpose |                                 |
|                                                      |                                 |                    |                                 |

---

**(a)** Name and address of the agent, broker, or other person to whom commissions or fees were paid

---

| <b>(b)</b> Amount of sales and base commissions paid | Fees and other commissions paid |                    | <b>(e)</b><br>Organization code |
|------------------------------------------------------|---------------------------------|--------------------|---------------------------------|
|                                                      | <b>(c)</b> Amount               | <b>(d)</b> Purpose |                                 |
|                                                      |                                 |                    |                                 |

---

**(a)** Name and address of the agent, broker, or other person to whom commissions or fees were paid

---

| <b>(b)</b> Amount of sales and base commissions paid | Fees and other commissions paid |                    | <b>(e)</b><br>Organization code |
|------------------------------------------------------|---------------------------------|--------------------|---------------------------------|
|                                                      | <b>(c)</b> Amount               | <b>(d)</b> Purpose |                                 |
|                                                      |                                 |                    |                                 |

**Part II Investment and Annuity Contract Information**

Where individual contracts are provided, the entire group of such individual contracts with each carrier may be treated as a unit for purposes of this report.

|                                                                                                        |          |         |
|--------------------------------------------------------------------------------------------------------|----------|---------|
| <b>4</b> Current value of plan's interest under this contract in the general account at year end ..... | <b>4</b> | 0       |
| <b>5</b> Current value of plan's interest under this contract in separate accounts at year end .....   | <b>5</b> | 6858449 |

**6** Contracts With Allocated Funds:**a** State the basis of premium rates ▶

|                                                                                                                                                                                                                |           |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|--|
| <b>b</b> Premiums paid to carrier .....                                                                                                                                                                        | <b>6b</b> |  |
| <b>c</b> Premiums due but unpaid at the end of the year .....                                                                                                                                                  | <b>6c</b> |  |
| <b>d</b> If the carrier, service, or other organization incurred any specific costs in connection with the acquisition or retention of the contract or policy, enter amount. ....<br>Specify nature of costs ▶ | <b>6d</b> |  |

**e** Type of contract: (1) ☐ individual policies (2) ☐ group deferred annuity  
(3) ☐ other (specify) ▶

**f** If contract purchased, in whole or in part, to distribute benefits from a terminating plan, check here ▶ ☐**7** Contracts With Unallocated Funds (Do not include portions of these contracts maintained in separate accounts)

**a** Type of contract: (1) ☐ deposit administration (2) ☐ immediate participation guarantee  
(3) ☐ guaranteed investment (4) ☐ other ▶

|                                                                                                         |              |   |
|---------------------------------------------------------------------------------------------------------|--------------|---|
| <b>b</b> Balance at the end of the previous year .....                                                  | <b>7b</b>    |   |
| <b>c</b> Additions: (1) Contributions deposited during the year .....                                   | <b>7c(1)</b> |   |
| (2) Dividends and credits .....                                                                         | <b>7c(2)</b> |   |
| (3) Interest credited during the year .....                                                             | <b>7c(3)</b> |   |
| (4) Transferred from separate account .....                                                             | <b>7c(4)</b> |   |
| (5) Other (specify below) .....                                                                         | <b>7c(5)</b> |   |
| ▶                                                                                                       |              |   |
| (6) Total additions .....                                                                               | <b>7c(6)</b> |   |
| <b>d</b> Total of balance and additions (add lines <b>7b</b> and <b>7c(6)</b> ) .....                   | <b>7d</b>    |   |
| <b>e</b> Deductions:                                                                                    |              |   |
| (1) Disbursed from fund to pay benefits or purchase annuities during year .....                         | <b>7e(1)</b> |   |
| (2) Administration charge made by carrier .....                                                         | <b>7e(2)</b> |   |
| (3) Transferred to separate account .....                                                               | <b>7e(3)</b> |   |
| (4) Other (specify below) .....                                                                         | <b>7e(4)</b> |   |
| ▶                                                                                                       |              |   |
| (5) Total deductions .....                                                                              | <b>7e(5)</b> |   |
| <b>f</b> Balance at the end of the current year (subtract line <b>7e(5)</b> from line <b>7d</b> ) ..... | <b>7f</b>    | 0 |

**Part III Welfare Benefit Contract Information**

If more than one contract covers the same group of employees of the same employer(s) or members of the same employee organizations(s), the information may be combined for reporting purposes if such contracts are experience-rated as a unit. Where contracts cover individual employees, the entire group of such individual contracts with each carrier may be treated as a unit for purposes of this report.

**8** Benefit and contract type (check all applicable boxes)

- a** ☐ Health (other than dental or vision)     
 **b** ☐ Dental     
 **c** ☐ Vision     
 **d** ☐ Life insurance  
**e** ☐ Temporary disability (accident and sickness)     
 **f** ☐ Long-term disability     
 **g** ☐ Supplemental unemployment     
 **h** ☐ Prescription drug  
**i** ☐ Stop loss (large deductible)     
 **j** ☐ HMO contract     
 **k** ☐ PPO contract     
 **l** ☐ Indemnity contract  
**m** ☐ Other (specify) ▶

**9** Experience-rated contracts:

|                                                                                                                                                    |                 |                 |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-----------------|--|
| <b>a</b> Premiums: (1) Amount received .....                                                                                                       | <b>9a(1)</b>    |                 |  |
| (2) Increase (decrease) in amount due but unpaid .....                                                                                             | <b>9a(2)</b>    |                 |  |
| (3) Increase (decrease) in unearned premium reserve .....                                                                                          | <b>9a(3)</b>    |                 |  |
| (4) Earned ((1) + (2) - (3)) .....                                                                                                                 |                 | <b>9a(4)</b>    |  |
| <b>b</b> Benefit charges (1) Claims paid .....                                                                                                     | <b>9b(1)</b>    |                 |  |
| (2) Increase (decrease) in claim reserves .....                                                                                                    | <b>9b(2)</b>    |                 |  |
| (3) Incurred claims (add (1) and (2)) .....                                                                                                        |                 | <b>9b(3)</b>    |  |
| (4) Claims charged .....                                                                                                                           |                 | <b>9b(4)</b>    |  |
| <b>c</b> Remainder of premium: (1) Retention charges (on an accrual basis) --                                                                      |                 |                 |  |
| (A) Commissions .....                                                                                                                              | <b>9c(1)(A)</b> |                 |  |
| (B) Administrative service or other fees .....                                                                                                     | <b>9c(1)(B)</b> |                 |  |
| (C) Other specific acquisition costs .....                                                                                                         | <b>9c(1)(C)</b> |                 |  |
| (D) Other expenses .....                                                                                                                           | <b>9c(1)(D)</b> |                 |  |
| (E) Taxes .....                                                                                                                                    | <b>9c(1)(E)</b> |                 |  |
| (F) Charges for risks or other contingencies .....                                                                                                 | <b>9c(1)(F)</b> |                 |  |
| (G) Other retention charges .....                                                                                                                  | <b>9c(1)(G)</b> |                 |  |
| (H) Total retention .....                                                                                                                          |                 | <b>9c(1)(H)</b> |  |
| (2) Dividends or retroactive rate refunds. (These amounts were <input type="checkbox"/> paid in cash, or <input type="checkbox"/> credited.) ..... |                 | <b>9c(2)</b>    |  |
| <b>d</b> Status of policyholder reserves at end of year: (1) Amount held to provide benefits after retirement .....                                |                 | <b>9d(1)</b>    |  |
| (2) Claim reserves .....                                                                                                                           |                 | <b>9d(2)</b>    |  |
| (3) Other reserves .....                                                                                                                           |                 | <b>9d(3)</b>    |  |
| <b>e</b> Dividends or retroactive rate refunds due. (Do not include amount entered in line 9c(2).) .....                                           |                 | <b>9e</b>       |  |

**10** Nonexperience-rated contracts:

|                                                                                                                                                                                                                                 |            |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--|
| <b>a</b> Total premiums or subscription charges paid to carrier .....                                                                                                                                                           | <b>10a</b> |  |
| <b>b</b> If the carrier, service, or other organization incurred any specific costs in connection with the acquisition or retention of the contract or policy, other than reported in Part I, line 2 above, report amount. .... | <b>10b</b> |  |

Specify nature of costs.

**Part IV Provision of Information**

**11** Did the insurance company fail to provide any information necessary to complete Schedule A? ..... ☐ Yes ☒ No

**12** If the answer to line 11 is "Yes," specify the information not provided. ▶

|                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                   |                                                                                                |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| <div>SCHEDULE SB<br/>(Form 5500)<br/><br/>Department of the Treasury<br/>Internal Revenue Service<br/><br/>Department of Labor<br/>Employee Benefits Security Administration<br/><br/>Pension Benefit Guaranty Corporation</div> | <div>Single-Employer Defined Benefit Plan<br/>Actuarial Information</div> <div>This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6059 of the Internal Revenue Code (the Code).</div> <div>▶ File as an attachment to Form 5500 or 5500-SF.</div> | <div>OMB No. 1210-0110</div> <div>2017</div> <div>This Form is Open to Public Inspection</div> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|

For calendar plan year 2017 or fiscal plan year beginning 01/01/2017 and ending 12/31/2017

▶ Round off amounts to nearest dollar.  
▶ Caution: A penalty of \$1,000 will be assessed for late filing of this report unless reasonable cause is established.

|                                                                                                     |                                                             |
|-----------------------------------------------------------------------------------------------------|-------------------------------------------------------------|
| <b>A</b> Name of plan<br>THE RESTATED PENSION PLAN FOR HOURLY-RATED EMPLOYEES OF AMG VANADIUM, INC. | <b>B</b> Three-digit plan number (PN) ▶ 001                 |
| <b>C</b> Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF<br>AMG VANADIUM LLC        | <b>D</b> Employer Identification Number (EIN)<br>20-2931565 |

|                                                                                                                                           |                                                                                                                                                         |
|-------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>E</b> Type of plan: <input checked="" type="checkbox"/> Single <input type="checkbox"/> Multiple-A <input type="checkbox"/> Multiple-B | <b>F</b> Prior year plan size: <input type="checkbox"/> 100 or fewer <input checked="" type="checkbox"/> 101-500 <input type="checkbox"/> More than 500 |
|-------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|

|               |                          |
|---------------|--------------------------|
| <b>Part I</b> | <b>Basic Information</b> |
|---------------|--------------------------|

|                                                                                                                                                                                                                 |                            |                           |                          |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|---------------------------|--------------------------|
| <b>1</b> Enter the valuation date: Month 01 Day 01 Year 2017                                                                                                                                                    |                            |                           |                          |
| <b>2</b> Assets:                                                                                                                                                                                                |                            |                           |                          |
| <b>a</b> Market value .....                                                                                                                                                                                     | <b>2a</b>                  | 6318304                   |                          |
| <b>b</b> Actuarial value .....                                                                                                                                                                                  | <b>2b</b>                  | 6425625                   |                          |
| <b>3</b> Funding target/participant count breakdown                                                                                                                                                             | (1) Number of participants | (2) Vested Funding Target | (3) Total Funding Target |
| <b>a</b> For retired participants and beneficiaries receiving payment .....                                                                                                                                     | 67                         | 3312848                   | 3312849                  |
| <b>b</b> For terminated vested participants .....                                                                                                                                                               | 25                         | 446156                    | 446156                   |
| <b>c</b> For active participants .....                                                                                                                                                                          | 40                         | 1128054                   | 1365108                  |
| <b>d</b> Total .....                                                                                                                                                                                            | 132                        | 4887058                   | 5124113                  |
| <b>4</b> If the plan is in at-risk status, check the box and complete lines (a) and (b)..... <input type="checkbox"/>                                                                                           |                            |                           |                          |
| <b>a</b> Funding target disregarding prescribed at-risk assumptions .....                                                                                                                                       | <b>4a</b>                  |                           |                          |
| <b>b</b> Funding target reflecting at-risk assumptions, but disregarding transition rule for plans that have been in at-risk status for fewer than five consecutive years and disregarding loading factor ..... | <b>4b</b>                  |                           |                          |
| <b>5</b> Effective interest rate .....                                                                                                                                                                          | <b>5</b>                   | 5.88 %                    |                          |
| <b>6</b> Target normal cost .....                                                                                                                                                                               | <b>6</b>                   | 146295                    |                          |

**Statement by Enrolled Actuary**  
To the best of my knowledge, the information supplied in this schedule and accompanying schedules, statements and attachments, if any, is complete and accurate. Each prescribed assumption was applied in accordance with applicable law and regulations. In my opinion, each other assumption is reasonable (taking into account the experience of the plan and reasonable expectations) and such other assumptions, in combination, offer my best estimate of anticipated experience under the plan.

|                                          |              |                                        |
|------------------------------------------|--------------|----------------------------------------|
| <b>SIGN HERE</b>                         |              |                                        |
| Signature of actuary                     | 08/28/2018   | Date                                   |
| DAVID A. STOCKLAS                        | 17-05460     | Most recent enrollment number          |
| PRINCIPAL FINANCIAL GROUP                | 412-394-9380 | Telephone number (including area code) |
| PO BOX 9394<br>DES MOINES, IA 50306-9394 | Firm name    |                                        |
| Address of the firm                      |              |                                        |

If the actuary has not fully reflected any regulation or ruling promulgated under the statute in completing this schedule, check the box and see instructions ☐

**Part II Beginning of Year Carryover and Prefunding Balances**

|                                                                                                                                                                      | (a) Carryover balance | (b) Prefunding balance |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------------------|
| <b>7</b> Balance at beginning of prior year after applicable adjustments (line 13 from prior year) .....                                                             | 0                     | 0                      |
| <b>8</b> Portion elected for use to offset prior year's funding requirement (line 35 from prior year) .....                                                          | 0                     | 0                      |
| <b>9</b> Amount remaining (line 7 minus line 8) .....                                                                                                                | 0                     | 0                      |
| <b>10</b> Interest on line 9 using prior year's actual return of <u>8.45</u> % .....                                                                                 | 0                     | 0                      |
| <b>11</b> Prior year's excess contributions to be added to prefunding balance:                                                                                       |                       |                        |
| <b>a</b> Present value of excess contributions (line 38a from prior year) .....                                                                                      |                       | 0                      |
| <b>b(1)</b> Interest on the excess, if any, of line 38a over line 38b from prior year Schedule SB, using prior year's effective interest rate of <u>6.08</u> % ..... |                       | 0                      |
| <b>b(2)</b> Interest on line 38b from prior year Schedule SB, using prior year's actual return .....                                                                 |                       | 0                      |
| <b>c</b> Total available at beginning of current plan year to add to prefunding balance .....                                                                        |                       | 0                      |
| <b>d</b> Portion of (c) to be added to prefunding balance .....                                                                                                      |                       | 0                      |
| <b>12</b> Other reductions in balances due to elections or deemed elections .....                                                                                    | 0                     | 0                      |
| <b>13</b> Balance at beginning of current year (line 9 + line 10 + line 11d – line 12) .....                                                                         | 0                     | 0                      |

**Part III Funding Percentages**

|                                                                                                                                                                            |           |         |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|---------|
| <b>14</b> Funding target attainment percentage .....                                                                                                                       | <b>14</b> | 125.39% |
| <b>15</b> Adjusted funding target attainment percentage .....                                                                                                              | <b>15</b> | 125.39% |
| <b>16</b> Prior year's funding percentage for purposes of determining whether carryover/prefunding balances may be used to reduce current year's funding requirement ..... | <b>16</b> | 132.64% |
| <b>17</b> If the current value of the assets of the plan is less than 70 percent of the funding target, enter such percentage. ....                                        | <b>17</b> | %       |

**Part IV Contributions and Liquidity Shortfalls****18** Contributions made to the plan for the plan year by employer(s) and employees:

| (a) Date<br>(MM-DD-YYYY) | (b) Amount paid by<br>employer(s) | (c) Amount paid by<br>employees | (a) Date<br>(MM-DD-YYYY) | (b) Amount paid by<br>employer(s) | (c) Amount paid by<br>employees |
|--------------------------|-----------------------------------|---------------------------------|--------------------------|-----------------------------------|---------------------------------|
|                          |                                   |                                 |                          |                                   |                                 |
|                          |                                   |                                 |                          |                                   |                                 |
|                          |                                   |                                 |                          |                                   |                                 |
|                          |                                   |                                 |                          |                                   |                                 |
|                          |                                   |                                 |                          |                                   |                                 |
|                          |                                   |                                 |                          |                                   |                                 |
|                          |                                   |                                 |                          |                                   |                                 |
| <b>Totals ▶</b>          |                                   |                                 | <b>18(b)</b>             | 0                                 | <b>18(c)</b> 0                  |

**19** Discounted employer contributions – see instructions for small plan with a valuation date after the beginning of the year:

|                                                                                                                         |            |   |
|-------------------------------------------------------------------------------------------------------------------------|------------|---|
| <b>a</b> Contributions allocated toward unpaid minimum required contributions from prior years. ....                    | <b>19a</b> | 0 |
| <b>b</b> Contributions made to avoid restrictions adjusted to valuation date .....                                      | <b>19b</b> | 0 |
| <b>c</b> Contributions allocated toward minimum required contribution for current year adjusted to valuation date ..... | <b>19c</b> | 0 |

**20** Quarterly contributions and liquidity shortfalls:

- a** Did the plan have a "funding shortfall" for the prior year? ..... ☐ Yes ☒ No
- b** If line 20a is "Yes," were required quarterly installments for the current year made in a timely manner? ..... ☐ Yes ☐ No
- c** If line 20a is "Yes," see instructions and complete the following table as applicable:

| Liquidity shortfall as of end of quarter of this plan year |         |         |         |
|------------------------------------------------------------|---------|---------|---------|
| (1) 1st                                                    | (2) 2nd | (3) 3rd | (4) 4th |
|                                                            |         |         |         |

**Part V Assumptions Used to Determine Funding Target and Target Normal Cost**

|                                                 |                                                           |                                                |                                     |                                                     |
|-------------------------------------------------|-----------------------------------------------------------|------------------------------------------------|-------------------------------------|-----------------------------------------------------|
| <b>21</b> Discount rate:                        |                                                           |                                                |                                     |                                                     |
| <b>a</b> Segment rates:                         | 1st segment:<br>4.16 %                                    | 2nd segment:<br>5.72 %                         | 3rd segment:<br>6.48 %              | <input type="checkbox"/> N/A, full yield curve used |
| <b>b</b> Applicable month (enter code) .....    |                                                           |                                                |                                     | <b>21b</b> 0                                        |
| <b>22</b> Weighted average retirement age ..... |                                                           |                                                |                                     | <b>22</b> 63                                        |
| <b>23</b> Mortality table(s) (see instructions) | <input checked="" type="checkbox"/> Prescribed - combined | <input type="checkbox"/> Prescribed - separate | <input type="checkbox"/> Substitute |                                                     |

**Part VI Miscellaneous Items**

|                                                                                                                                                                        |                                                                     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| <b>24</b> Has a change been made in the non-prescribed actuarial assumptions for the current plan year? If "Yes," see instructions regarding required attachment ..... | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| <b>25</b> Has a method change been made for the current plan year? If "Yes," see instructions regarding required attachment .....                                      | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| <b>26</b> Is the plan required to provide a Schedule of Active Participants? If "Yes," see instructions regarding required attachment .....                            | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| <b>27</b> If the plan is subject to alternative funding rules, enter applicable code and see instructions regarding attachment .....                                   | <b>27</b>                                                           |

**Part VII Reconciliation of Unpaid Minimum Required Contributions For Prior Years**

|                                                                                                                                      |           |   |
|--------------------------------------------------------------------------------------------------------------------------------------|-----------|---|
| <b>28</b> Unpaid minimum required contributions for all prior years .....                                                            | <b>28</b> | 0 |
| <b>29</b> Discounted employer contributions allocated toward unpaid minimum required contributions from prior years (line 19a) ..... | <b>29</b> | 0 |
| <b>30</b> Remaining amount of unpaid minimum required contributions (line 28 minus line 29) .....                                    | <b>30</b> | 0 |

**Part VIII Minimum Required Contribution For Current Year**

|                                                                                                                                                                                      |                     |                    |               |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------------|---------------|
| <b>31</b> Target normal cost and excess assets (see instructions):                                                                                                                   |                     |                    |               |
| <b>a</b> Target normal cost (line 6) .....                                                                                                                                           | <b>31a</b>          | 146295             |               |
| <b>b</b> Excess assets, if applicable, but not greater than line 31a .....                                                                                                           | <b>31b</b>          | 146295             |               |
| <b>32</b> Amortization installments:                                                                                                                                                 | Outstanding Balance | Installment        |               |
| <b>a</b> Net shortfall amortization installment .....                                                                                                                                | 0                   | 0                  |               |
| <b>b</b> Waiver amortization installment .....                                                                                                                                       | 0                   | 0                  |               |
| <b>33</b> If a waiver has been approved for this plan year, enter the date of the ruling letter granting the approval (Month _____ Day _____ Year _____) and the waived amount ..... | <b>33</b>           |                    |               |
| <b>34</b> Total funding requirement before reflecting carryover/prefunding balances (lines 31a - 31b + 32a + 32b - 33) .....                                                         | <b>34</b>           | 0                  |               |
|                                                                                                                                                                                      | Carryover balance   | Prefunding balance | Total balance |
| <b>35</b> Balances elected for use to offset funding requirement .....                                                                                                               | 0                   | 0                  | 0             |
| <b>36</b> Additional cash requirement (line 34 minus line 35) .....                                                                                                                  | <b>36</b>           | 0                  |               |
| <b>37</b> Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c) .....                                                  | <b>37</b>           | 0                  |               |
| <b>38</b> Present value of excess contributions for current year (see instructions)                                                                                                  |                     |                    |               |
| <b>a</b> Total (excess, if any, of line 37 over line 36) .....                                                                                                                       | <b>38a</b>          | 0                  |               |
| <b>b</b> Portion included in line 38a attributable to use of prefunding and funding standard carryover balances .....                                                                | <b>38b</b>          | 0                  |               |
| <b>39</b> Unpaid minimum required contribution for current year (excess, if any, of line 36 over line 37) .....                                                                      | <b>39</b>           | 0                  |               |
| <b>40</b> Unpaid minimum required contributions for all years .....                                                                                                                  | <b>40</b>           | 0                  |               |

**Part IX Pension Funding Relief Under Pension Relief Act of 2010 (See Instructions)**

|                                                                                                |                                         |                                   |                                                             |
|------------------------------------------------------------------------------------------------|-----------------------------------------|-----------------------------------|-------------------------------------------------------------|
| <b>41</b> If an election was made to use PRA 2010 funding relief for this plan:                |                                         |                                   |                                                             |
| <b>a</b> Schedule elected .....                                                                | <input type="checkbox"/> 2 plus 7 years | <input type="checkbox"/> 15 years |                                                             |
| <b>b</b> Eligible plan year(s) for which the election in line 41a was made .....               | <input type="checkbox"/> 2008           | <input type="checkbox"/> 2009     | <input type="checkbox"/> 2010 <input type="checkbox"/> 2011 |
| <b>42</b> Amount of acceleration adjustment .....                                              | <b>42</b>                               |                                   |                                                             |
| <b>43</b> Excess installment acceleration amount to be carried over to future plan years ..... | <b>43</b>                               |                                   |                                                             |

|                                                                                                                                                                                                               |                                                                                                                                                                                                                              |                                                                                                                                                                                    |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>SCHEDULE D</b><br><b>(Form 5500)</b><br><br><small>Department of the Treasury<br/>Internal Revenue Service</small><br><br><small>Department of Labor<br/>Employee Benefits Security Administration</small> | <b>DFE/Participating Plan Information</b><br><br>This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA).<br><br><b>► File as an attachment to Form 5500.</b> | OMB No. 1210-0110<br><br><div style="border: 1px solid black; padding: 5px; font-size: 1.2em; font-weight: bold;">2017</div><br><br><b>This Form is Open to Public Inspection.</b> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

For calendar plan year 2017 or fiscal plan year beginning 01/01/2017 and ending 12/31/2017

|                                                                                                            |                                                                    |            |
|------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|------------|
| <b>A</b> Name of plan<br><u>THE RESTATED PENSION PLAN FOR HOURLY-RATED EMPLOYEES OF AMG VANADIUM, INC.</u> | <b>B</b> Three-digit plan number (PN)                              | <u>001</u> |
| <b>C</b> Plan or DFE sponsor's name as shown on line 2a of Form 5500<br><u>AMG VANADIUM LLC</u>            | <b>D</b> Employer Identification Number (EIN)<br><u>20-2931565</u> |            |

|        |                                                                                                                                                                                  |
|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Part I | <b>Information on interests in MTIAs, CCTs, PSAs, and 103-12 IEs (to be completed by plans and DFEs)</b><br>(Complete as many entries as needed to report all interests in DFEs) |
|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                                                                                           |                               |                                                                                                                    |  |  |
|-------------------------------------------------------------------------------------------|-------------------------------|--------------------------------------------------------------------------------------------------------------------|--|--|
| <b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE: <u>PRIN MIDCAP VALUE III SA-Z</u>          |                               |                                                                                                                    |  |  |
| <b>b</b> Name of sponsor of entity listed in (a): <u>PRINCIPAL LIFE INSURANCE COMPANY</u> |                               |                                                                                                                    |  |  |
| <b>c</b> EIN-PN <u>42-0127290-022</u>                                                     | <b>d</b> Entity code <u>P</u> | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) <u>135427</u>  |  |  |
| <b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE: <u>PRIN INTL EMERG MARKETS SA-Z</u>        |                               |                                                                                                                    |  |  |
| <b>b</b> Name of sponsor of entity listed in (a): <u>PRINCIPAL LIFE INSURANCE COMPANY</u> |                               |                                                                                                                    |  |  |
| <b>c</b> EIN-PN <u>42-0127290-013</u>                                                     | <b>d</b> Entity code <u>P</u> | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) <u>146124</u>  |  |  |
| <b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE: <u>PRIN INTL SMALLCAP SEP ACCT-Z</u>       |                               |                                                                                                                    |  |  |
| <b>b</b> Name of sponsor of entity listed in (a): <u>PRINCIPAL LIFE INSURANCE COMPANY</u> |                               |                                                                                                                    |  |  |
| <b>c</b> EIN-PN <u>42-0127290-014</u>                                                     | <b>d</b> Entity code <u>P</u> | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) <u>147551</u>  |  |  |
| <b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE: <u>PRIN LGCAP VALUE SEP ACCT-Z</u>         |                               |                                                                                                                    |  |  |
| <b>b</b> Name of sponsor of entity listed in (a): <u>PRINCIPAL LIFE INSURANCE COMPANY</u> |                               |                                                                                                                    |  |  |
| <b>c</b> EIN-PN <u>42-0127290-019</u>                                                     | <b>d</b> Entity code <u>P</u> | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) <u>0</u>       |  |  |
| <b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE: <u>PRINCIPAL U.S. PROPERTY SA-Z</u>        |                               |                                                                                                                    |  |  |
| <b>b</b> Name of sponsor of entity listed in (a): <u>PRINCIPAL LIFE INSURANCE COMPANY</u> |                               |                                                                                                                    |  |  |
| <b>c</b> EIN-PN <u>42-0127290-027</u>                                                     | <b>d</b> Entity code <u>P</u> | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) <u>412594</u>  |  |  |
| <b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE: <u>PRIN CORE PLUS BOND SEP ACCT-Z</u>      |                               |                                                                                                                    |  |  |
| <b>b</b> Name of sponsor of entity listed in (a): <u>PRINCIPAL LIFE INSURANCE COMPANY</u> |                               |                                                                                                                    |  |  |
| <b>c</b> EIN-PN <u>42-0127290-005</u>                                                     | <b>d</b> Entity code <u>P</u> | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) <u>1389619</u> |  |  |
| <b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE: <u>PRIN LGCP S&amp;P 500 INDEX SA-Z</u>    |                               |                                                                                                                    |  |  |
| <b>b</b> Name of sponsor of entity listed in (a): <u>PRINCIPAL LIFE INSURANCE COMPANY</u> |                               |                                                                                                                    |  |  |
| <b>c</b> EIN-PN <u>42-0127290-016</u>                                                     | <b>d</b> Entity code <u>P</u> | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) <u>391119</u>  |  |  |

|                                                                                    |                        |                                                                                                     |        |
|------------------------------------------------------------------------------------|------------------------|-----------------------------------------------------------------------------------------------------|--------|
| <b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE: PRIN MIDCAP GROWTH III SA-Z         |                        |                                                                                                     |        |
| <b>b</b> Name of sponsor of entity listed in (a): PRINCIPAL LIFE INSURANCE COMPANY |                        |                                                                                                     |        |
| <b>c</b> EIN-PN 42-0127290-026                                                     | <b>d</b> Entity code P | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) | 137372 |
| <b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE: PRIN SMCAP GROWTH I SEP ACCT-Z      |                        |                                                                                                     |        |
| <b>b</b> Name of sponsor of entity listed in (a): PRINCIPAL LIFE INSURANCE COMPANY |                        |                                                                                                     |        |
| <b>c</b> EIN-PN 42-0127290-070                                                     | <b>d</b> Entity code P | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) | 65402  |
| <b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE: PRIN LARGE CAP GROWTH I SA-Z        |                        |                                                                                                     |        |
| <b>b</b> Name of sponsor of entity listed in (a): PRINCIPAL LIFE INSURANCE COMPANY |                        |                                                                                                     |        |
| <b>c</b> EIN-PN 42-0127290-066                                                     | <b>d</b> Entity code P | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) | 932854 |
| <b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE: PRIN SMCAP VALUE II SEP ACCT-Z      |                        |                                                                                                     |        |
| <b>b</b> Name of sponsor of entity listed in (a): PRINCIPAL LIFE INSURANCE COMPANY |                        |                                                                                                     |        |
| <b>c</b> EIN-PN 42-0127290-096                                                     | <b>d</b> Entity code P | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) | 64132  |
| <b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE: PRIN HIGH YIELD I SEP ACCT-Z        |                        |                                                                                                     |        |
| <b>b</b> Name of sponsor of entity listed in (a): PRINCIPAL LIFE INSURANCE COMPANY |                        |                                                                                                     |        |
| <b>c</b> EIN-PN 42-0127290-101                                                     | <b>d</b> Entity code P | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) | 268029 |
| <b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE: PRINCIPAL OVERSEAS SEP ACCT-Z       |                        |                                                                                                     |        |
| <b>b</b> Name of sponsor of entity listed in (a): PRINCIPAL LIFE INSURANCE COMPANY |                        |                                                                                                     |        |
| <b>c</b> EIN-PN 42-0127290-116                                                     | <b>d</b> Entity code P | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) | 829732 |
| <b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE: PRIN EQUITY INCOME SA-Z             |                        |                                                                                                     |        |
| <b>b</b> Name of sponsor of entity listed in (a): PRINCIPAL LIFE INSURANCE COMPANY |                        |                                                                                                     |        |
| <b>c</b> EIN-PN 42-0127290-120                                                     | <b>d</b> Entity code P | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) | 932123 |
| <b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE: PRIN BOND MARKET INDEX SA-Z         |                        |                                                                                                     |        |
| <b>b</b> Name of sponsor of entity listed in (a): PRINCIPAL LIFE INSURANCE COMPANY |                        |                                                                                                     |        |
| <b>c</b> EIN-PN 42-0127290-122                                                     | <b>d</b> Entity code P | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) | 460056 |
| <b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE: PRINCIPAL DIV REAL ASSET SA-Z       |                        |                                                                                                     |        |
| <b>b</b> Name of sponsor of entity listed in (a): PRINCIPAL LIFE INSURANCE COMPANY |                        |                                                                                                     |        |
| <b>c</b> EIN-PN 42-0127290-123                                                     | <b>d</b> Entity code P | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) | 138173 |
| <b>a</b> Name of MTIA, CCT, PSA, or 103-12 IE: PRIN GLOBAL MULTI-STR SA-Z          |                        |                                                                                                     |        |
| <b>b</b> Name of sponsor of entity listed in (a): PRINCIPAL LIFE INSURANCE COMPANY |                        |                                                                                                     |        |
| <b>c</b> EIN-PN 42-0127290-132                                                     | <b>d</b> Entity code P | <b>e</b> Dollar value of interest in MTIA, CCT, PSA, or 103-12 IE at end of year (see instructions) | 408143 |

**Part II Information on Participating Plans (to be completed by DFEs)**

(Complete as many entries as needed to report all participating plans)

**a** Plan name**b** Name of  
plan sponsor**c** EIN-PN**a** Plan name**b** Name of  
plan sponsor**c** EIN-PN**a** Plan name**b** Name of  
plan sponsor**c** EIN-PN**a** Plan name**b** Name of  
plan sponsor**c** EIN-PN**a** Plan name**b** Name of  
plan sponsor**c** EIN-PN**a** Plan name**b** Name of  
plan sponsor**c** EIN-PN**a** Plan name**b** Name of  
plan sponsor**c** EIN-PN**a** Plan name**b** Name of  
plan sponsor**c** EIN-PN**a** Plan name**b** Name of  
plan sponsor**c** EIN-PN**a** Plan name**b** Name of  
plan sponsor**c** EIN-PN**a** Plan name**b** Name of  
plan sponsor**c** EIN-PN**a** Plan name**b** Name of  
plan sponsor**c** EIN-PN

|                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                         |                                                                                           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| <b>SCHEDULE I</b><br><b>(Form 5500)</b><br><br>Department of the Treasury<br>Internal Revenue Service<br><br>Department of Labor<br>Employee Benefits Security Administration<br><br>Pension Benefit Guaranty Corporation | <b>Financial Information—Small Plan</b><br><br>This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA), and section 6058(a) of the Internal Revenue Code (the Code).<br><br>► <b>File as an attachment to Form 5500.</b> | OMB No. 1210-0110<br><br><b>2017</b><br><br><b>This Form is Open to Public Inspection</b> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|

|                                                                                                     |                                                             |
|-----------------------------------------------------------------------------------------------------|-------------------------------------------------------------|
| For calendar plan year 2017 or fiscal plan year beginning 01/01/2017 and ending 12/31/2017          |                                                             |
| <b>A</b> Name of plan<br>THE RESTATED PENSION PLAN FOR HOURLY-RATED EMPLOYEES OF AMG VANADIUM, INC. | <b>B</b> Three-digit plan number (PN) ► 001                 |
| <b>C</b> Plan sponsor's name as shown on line 2a of Form 5500<br>AMG VANADIUM LLC                   | <b>D</b> Employer Identification Number (EIN)<br>20-2931565 |

Complete Schedule I if the plan covered fewer than 100 participants as of the beginning of the plan year. You may also complete Schedule I if you are filing as a small plan under the 80-120 participant rule (see instructions). Complete Schedule H if reporting as a large plan or DFE.

|               |                                         |
|---------------|-----------------------------------------|
| <b>Part I</b> | <b>Small Plan Financial Information</b> |
|---------------|-----------------------------------------|

Report below the current value of assets and liabilities, income, expenses, transfers and changes in net assets during the plan year. Combine the value of plan assets held in more than one trust. Do not enter the value of the portion of an insurance contract that guarantees during this plan year to pay a specific dollar benefit at a future date. Include all income and expenses of the plan including any trust(s) or separately maintained fund(s) and any payments/receipts to/from insurance carriers. **Round off amounts to the nearest dollar.**

|                                                                                     |              |                              |                        |
|-------------------------------------------------------------------------------------|--------------|------------------------------|------------------------|
| <b>1 Plan Assets and Liabilities:</b>                                               |              | <b>(a) Beginning of Year</b> | <b>(b) End of Year</b> |
| <b>a</b> Total plan assets .....                                                    | <b>1a</b>    | 6318304                      | 6858449                |
| <b>b</b> Total plan liabilities .....                                               | <b>1b</b>    | 0                            | 0                      |
| <b>c</b> Net plan assets (subtract line 1b from line 1a) .....                      | <b>1c</b>    | 6318304                      | 6858449                |
| <b>2 Income, Expenses, and Transfers for this Plan Year:</b>                        |              | <b>(a) Amount</b>            | <b>(b) Total</b>       |
| <b>a</b> Contributions received or receivable:                                      |              |                              |                        |
| <b>(1)</b> Employers .....                                                          | <b>2a(1)</b> | 0                            |                        |
| <b>(2)</b> Participants .....                                                       | <b>2a(2)</b> | 0                            |                        |
| <b>(3)</b> Others (including rollovers) .....                                       | <b>2a(3)</b> | 0                            |                        |
| <b>b</b> Noncash contributions .....                                                | <b>2b</b>    | 0                            |                        |
| <b>c</b> Other income .....                                                         | <b>2c</b>    | 908749                       |                        |
| <b>d</b> Total income (add lines 2a(1), 2a(2), 2a(3), 2b, and 2c) .....             | <b>2d</b>    |                              | 908749                 |
| <b>e</b> Benefits paid (including direct rollovers) .....                           | <b>2e</b>    | 313934                       |                        |
| <b>f</b> Corrective distributions (see instructions) .....                          | <b>2f</b>    | 0                            |                        |
| <b>g</b> Certain deemed distributions of participant loans (see instructions) ..... | <b>2g</b>    | 0                            |                        |
| <b>h</b> Administrative service providers (salaries, fees, and commissions) .....   | <b>2h</b>    | 54670                        |                        |
| <b>i</b> Other expenses .....                                                       | <b>2i</b>    | 0                            |                        |
| <b>j</b> Total expenses (add lines 2e, 2f, 2g, 2h, and 2i) .....                    | <b>2j</b>    |                              | 368604                 |
| <b>k</b> Net income (loss) (subtract line 2j from line 2d) .....                    | <b>2k</b>    |                              | 540145                 |
| <b>l</b> Transfers to (from) the plan (see instructions) .....                      | <b>2l</b>    |                              | 0                      |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                             |           |            |           |               |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|------------|-----------|---------------|
| <b>3 Specific Assets:</b> If the plan held assets at any time during the plan year in any of the following categories, check "Yes" and enter the current value of any assets remaining in the plan as of the end of the plan year. Allocate the value of the plan's interest in a commingled trust containing the assets of more than one plan on a line-by-line basis unless the trust meets one of the specific exceptions described in the instructions. |           | <b>Yes</b> | <b>No</b> | <b>Amount</b> |
| <b>a</b> Partnership/joint venture interests .....                                                                                                                                                                                                                                                                                                                                                                                                          | <b>3a</b> |            | X         |               |
| <b>b</b> Employer real property .....                                                                                                                                                                                                                                                                                                                                                                                                                       | <b>3b</b> |            | X         |               |
| <b>c</b> Real estate (other than employer real property) .....                                                                                                                                                                                                                                                                                                                                                                                              | <b>3c</b> |            | X         |               |
| <b>d</b> Employer securities .....                                                                                                                                                                                                                                                                                                                                                                                                                          | <b>3d</b> |            | X         |               |
| <b>e</b> Participant loans .....                                                                                                                                                                                                                                                                                                                                                                                                                            | <b>3e</b> |            | X         |               |
| <b>f</b> Loans (other than to participants) .....                                                                                                                                                                                                                                                                                                                                                                                                           | <b>3f</b> |            | X         |               |
| <b>g</b> Tangible personal property .....                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>3g</b> |            | X         |               |

**Part II Compliance Questions**

| 4 During the plan year:                                                                                                                                                                                                                                                                    | Yes | No | Amount |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|----|--------|
| <b>a</b> Was there a failure to transmit to the plan any participant contributions within the time period described in 29 CFR 2510.3-102? Continue to answer "Yes" for any prior year failures until fully corrected. (See instructions and DOL's Voluntary Fiduciary Correction Program.) |     |    |        |
| <b>4a</b>                                                                                                                                                                                                                                                                                  |     | X  | 0      |
| <b>b</b> Were any loans by the plan or fixed income obligations due the plan in default as of the close of plan year or classified during the year as uncollectible? Disregard participant loans secured by the participant's account balance.                                             |     |    |        |
| <b>4b</b>                                                                                                                                                                                                                                                                                  |     | X  | 0      |
| <b>c</b> Were any leases to which the plan was a party in default or classified during the year as uncollectible?                                                                                                                                                                          |     |    |        |
| <b>4c</b>                                                                                                                                                                                                                                                                                  |     | X  | 0      |
| <b>d</b> Were there any nonexempt transactions with any party-in-interest? (Do not include transactions reported on line 4a.)                                                                                                                                                              |     |    |        |
| <b>4d</b>                                                                                                                                                                                                                                                                                  |     | X  | 0      |
| <b>e</b> Was the plan covered by a fidelity bond?                                                                                                                                                                                                                                          |     |    |        |
| <b>4e</b>                                                                                                                                                                                                                                                                                  |     | X  | 0      |
| <b>f</b> Did the plan have a loss, whether or not reimbursed by the plan's fidelity bond, that was caused by fraud or dishonesty?                                                                                                                                                          |     |    |        |
| <b>4f</b>                                                                                                                                                                                                                                                                                  |     | X  |        |
| <b>g</b> Did the plan hold any assets whose current value was neither readily determinable on an established market nor set by an independent third party appraiser?                                                                                                                       |     |    |        |
| <b>4g</b>                                                                                                                                                                                                                                                                                  |     | X  |        |
| <b>h</b> Did the plan receive any noncash contributions whose value was neither readily determinable on an established market nor set by an independent third party appraiser?                                                                                                             |     |    |        |
| <b>4h</b>                                                                                                                                                                                                                                                                                  |     | X  |        |
| <b>i</b> Did the plan at any time hold 20% or more of its assets in any single security, debt, mortgage, parcel of real estate, or partnership/joint venture interest?                                                                                                                     |     |    |        |
| <b>4i</b>                                                                                                                                                                                                                                                                                  |     | X  | 0      |
| <b>j</b> Were all the plan assets either distributed to participants or beneficiaries, transferred to another plan, or brought under the control of the PBGC?                                                                                                                              |     |    |        |
| <b>4j</b>                                                                                                                                                                                                                                                                                  |     | X  |        |
| <b>k</b> Are you claiming a waiver of the annual examination and report of an independent qualified public accountant (IQPA) under 29 CFR 2520.104-46? If "No," attach an IQPA's report or 2520.104-50 statement. (See instructions on waiver eligibility and conditions.)                 |     |    |        |
| <b>4k</b>                                                                                                                                                                                                                                                                                  | X   |    |        |
| <b>l</b> Has the plan failed to provide any benefit when due under the plan?                                                                                                                                                                                                               |     |    |        |
| <b>4l</b>                                                                                                                                                                                                                                                                                  |     | X  |        |
| <b>m</b> If this is an individual account plan, was there a blackout period? (See instructions and 29 CFR 2520.101-3.)                                                                                                                                                                     |     |    |        |
| <b>4m</b>                                                                                                                                                                                                                                                                                  |     | X  |        |
| <b>n</b> If 4m was answered "Yes," check the "Yes" box if you either provided the required notice or one of the exceptions to providing the notice applied under 29 CFR 2520.101-3                                                                                                         |     |    |        |
| <b>4n</b>                                                                                                                                                                                                                                                                                  |     |    |        |

**5a** Has a resolution to terminate the plan been adopted during the plan year or any prior plan year? ..... ☐ Yes ☒ No  
 If "Yes," enter the amount of any plan assets that reverted to the employer this year 0.

**5b** If, during this plan year, any assets or liabilities were transferred from this plan to another plan(s), identify the plan(s) to which assets or liabilities were transferred. (See instructions.)

| 5b(1) Name of plan(s) | 5b(2) EIN(s) | 5b(3) PN(s) |
|-----------------------|--------------|-------------|
|                       |              |             |
|                       |              |             |
|                       |              |             |

**5c** If the plan is a defined benefit plan, is it covered under the PBGC insurance program (See ERISA section 4021.)? ..... ☒ Yes ☐ No ☐ Not determined.  
 If "Yes" is checked, enter the My PAA confirmation number from the PBGC premium filing for this plan year 4107986. (See instructions.)

|                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                                                                                  |                                                                                                 |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| <div>SCHEDULE R<br/>(Form 5500)<br/><br/>Department of the Treasury<br/>Internal Revenue Service<br/><br/>Department of Labor<br/>Employee Benefits Security Administration<br/><br/>Pension Benefit Guaranty Corporation</div>                                                                                                    | <div>Retirement Plan Information</div> <div>This schedule is required to be filed under sections 104 and 4065 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6058(a) of the Internal Revenue Code (the Code).</div> <div>▶ File as an attachment to Form 5500.</div> | <div>OMB No. 1210-0110</div> <div>2017</div> <div>This Form is Open to Public Inspection.</div> |
| For calendar plan year 2017 or fiscal plan year beginning 01/01/2017 and ending 12/31/2017                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                  |                                                                                                 |
| A Name of plan<br>THE RESTATED PENSION PLAN FOR HOURLY-RATED EMPLOYEES OF AMG VANADIUM, INC.                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                  | B Three-digit plan number (PN) ▶ 001                                                            |
| C Plan sponsor's name as shown on line 2a of Form 5500<br>AMG VANADIUM LLC                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                                                  | D Employer Identification Number (EIN)<br>20-2931565                                            |
| Part I                                                                                                                                                                                                                                                                                                                             | Distributions                                                                                                                                                                                                                                                                                    |                                                                                                 |
| All references to distributions relate only to payments of benefits during the plan year.                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                  |                                                                                                 |
| 1 Total value of distributions paid in property other than in cash or the forms of property specified in the instructions                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                  | 1 0                                                                                             |
| 2 Enter the EIN(s) of payor(s) who paid benefits on behalf of the plan to participants or beneficiaries during the year (if more than two, enter EINs of the two payors who paid the greatest dollar amounts of benefits):<br><br>EIN(s): 42-0127290 94-1737782                                                                    |                                                                                                                                                                                                                                                                                                  |                                                                                                 |
| Profit-sharing plans, ESOPs, and stock bonus plans, skip line 3.                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                  |                                                                                                 |
| 3 Number of participants (living or deceased) whose benefits were distributed in a single sum, during the plan year                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                  | 3 1                                                                                             |
| Part II                                                                                                                                                                                                                                                                                                                            | Funding Information (If the plan is not subject to the minimum funding requirements of section 412 of the Internal Revenue Code or ERISA section 302, skip this Part.)                                                                                                                           |                                                                                                 |
| 4 Is the plan administrator making an election under Code section 412(d)(2) or ERISA section 302(d)(2)? Yes No <input checked="" type="checkbox"/> N/A<br>If the plan is a defined benefit plan, go to line 8.                                                                                                                     |                                                                                                                                                                                                                                                                                                  |                                                                                                 |
| 5 If a waiver of the minimum funding standard for a prior year is being amortized in this plan year, see instructions and enter the date of the ruling letter granting the waiver. Date: Month Day Year<br>If you completed line 5, complete lines 3, 9, and 10 of Schedule MB and do not complete the remainder of this schedule. |                                                                                                                                                                                                                                                                                                  |                                                                                                 |
| 6 a Enter the minimum required contribution for this plan year (include any prior year accumulated funding deficiency not waived)                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                  | 6a                                                                                              |
| b Enter the amount contributed by the employer to the plan for this plan year                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                  | 6b                                                                                              |
| c Subtract the amount in line 6b from the amount in line 6a. Enter the result (enter a minus sign to the left of a negative amount)                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                  | 6c                                                                                              |
| If you completed line 6c, skip lines 8 and 9.                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                  |                                                                                                 |
| 7 Will the minimum funding amount reported on line 6c be met by the funding deadline? Yes No <input type="checkbox"/> N/A                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                  |                                                                                                 |
| 8 If a change in actuarial cost method was made for this plan year pursuant to a revenue procedure or other authority providing automatic approval for the change or a class ruling letter, does the plan sponsor or plan administrator agree with the change? Yes No <input checked="" type="checkbox"/> N/A                      |                                                                                                                                                                                                                                                                                                  |                                                                                                 |
| Part III                                                                                                                                                                                                                                                                                                                           | Amendments                                                                                                                                                                                                                                                                                       |                                                                                                 |
| 9 If this is a defined benefit pension plan, were any amendments adopted during this plan year that increased or decreased the value of benefits? If yes, check the appropriate box. If no, check the "No" box. Increase Decrease Both <input checked="" type="checkbox"/> No                                                      |                                                                                                                                                                                                                                                                                                  |                                                                                                 |
| Part IV                                                                                                                                                                                                                                                                                                                            | ESOPs (see instructions). If this is not a plan described under section 409(a) or 4975(e)(7) of the Internal Revenue Code, skip this Part.                                                                                                                                                       |                                                                                                 |
| 10 Were unallocated employer securities or proceeds from the sale of unallocated securities used to repay any exempt loan? Yes No                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                  |                                                                                                 |
| 11 a Does the ESOP hold any preferred stock? Yes No                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                                                                  |                                                                                                 |
| b If the ESOP has an outstanding exempt loan with the employer as lender, is such loan part of a "back-to-back" loan? (See instructions for definition of "back-to-back" loan.) Yes No                                                                                                                                             |                                                                                                                                                                                                                                                                                                  |                                                                                                 |
| 12 Does the ESOP hold any stock that is not readily tradable on an established securities market? Yes No                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                  |                                                                                                 |
| For Paperwork Reduction Act Notice, see the Instructions for Form 5500.                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                  |                                                                                                 |
| Schedule R (Form 5500) 2017 v. 170203                                                                                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                  |                                                                                                 |

**Part V Additional Information for Multiemployer Defined Benefit Pension Plans**

**13** Enter the following information for each employer that contributed more than 5% of total contributions to the plan during the plan year (measured in dollars). See instructions. *Complete as many entries as needed to report all applicable employers.*

**a** Name of contributing employer

**b** EIN

**c** Dollar amount contributed by employer

**d** Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month \_\_\_\_\_ Day \_\_\_\_\_ Year \_\_\_\_\_

**e** Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) \_\_\_\_\_

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): \_\_\_\_\_

**a** Name of contributing employer

**b** EIN

**c** Dollar amount contributed by employer

**d** Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month \_\_\_\_\_ Day \_\_\_\_\_ Year \_\_\_\_\_

**e** Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) \_\_\_\_\_

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): \_\_\_\_\_

**a** Name of contributing employer

**b** EIN

**c** Dollar amount contributed by employer

**d** Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month \_\_\_\_\_ Day \_\_\_\_\_ Year \_\_\_\_\_

**e** Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) \_\_\_\_\_

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): \_\_\_\_\_

**a** Name of contributing employer

**b** EIN

**c** Dollar amount contributed by employer

**d** Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month \_\_\_\_\_ Day \_\_\_\_\_ Year \_\_\_\_\_

**e** Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) \_\_\_\_\_

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): \_\_\_\_\_

**a** Name of contributing employer

**b** EIN

**c** Dollar amount contributed by employer

**d** Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month \_\_\_\_\_ Day \_\_\_\_\_ Year \_\_\_\_\_

**e** Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) \_\_\_\_\_

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): \_\_\_\_\_

**a** Name of contributing employer

**b** EIN

**c** Dollar amount contributed by employer

**d** Date collective bargaining agreement expires (If employer contributes under more than one collective bargaining agreement, check box ☐ and see instructions regarding required attachment. Otherwise, enter the applicable date.) Month \_\_\_\_\_ Day \_\_\_\_\_ Year \_\_\_\_\_

**e** Contribution rate information (If more than one rate applies, check this box ☐ and see instructions regarding required attachment. Otherwise, complete lines 13e(1) and 13e(2).)

(1) Contribution rate (in dollars and cents) \_\_\_\_\_

(2) Base unit measure: ☐ Hourly ☐ Weekly ☐ Unit of production ☐ Other (specify): \_\_\_\_\_

- 14** Enter the number of participants on whose behalf no contributions were made by an employer as an employer of the participant for:

|                                                                          |            |  |
|--------------------------------------------------------------------------|------------|--|
| <b>a</b> The current year .....                                          | <b>14a</b> |  |
| <b>b</b> The plan year immediately preceding the current plan year ..... | <b>14b</b> |  |
| <b>c</b> The second preceding plan year .....                            | <b>14c</b> |  |

- 15** Enter the ratio of the number of participants under the plan on whose behalf no employer had an obligation to make an employer contribution during the current plan year to:

|                                                                                                       |            |  |
|-------------------------------------------------------------------------------------------------------|------------|--|
| <b>a</b> The corresponding number for the plan year immediately preceding the current plan year ..... | <b>15a</b> |  |
| <b>b</b> The corresponding number for the second preceding plan year .....                            | <b>15b</b> |  |

- 16** Information with respect to any employers who withdrew from the plan during the preceding plan year:

|                                                                                                                                                                        |            |  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|--|
| <b>a</b> Enter the number of employers who withdrew during the preceding plan year .....                                                                               | <b>16a</b> |  |
| <b>b</b> If line 16a is greater than 0, enter the aggregate amount of withdrawal liability assessed or estimated to be assessed against such withdrawn employers ..... | <b>16b</b> |  |

- 17** If assets and liabilities from another plan have been transferred to or merged with this plan during the plan year, check box and see instructions regarding supplemental information to be included as an attachment. .... ☐

**Part VI Additional Information for Single-Employer and Multiemployer Defined Benefit Pension Plans**

- 18** If any liabilities to participants or their beneficiaries under the plan as of the end of the plan year consist (in whole or in part) of liabilities to such participants and beneficiaries under two or more pension plans as of immediately before such plan year, check box and see instructions regarding supplemental information to be included as an attachment .... ☐

- 19** If the total number of participants is 1,000 or more, complete lines (a) through (c)

- a** Enter the percentage of plan assets held as:  
 Stock: \_\_\_\_\_% Investment-Grade Debt: \_\_\_\_\_% High-Yield Debt: \_\_\_\_\_% Real Estate: \_\_\_\_\_% Other: \_\_\_\_\_%
- b** Provide the average duration of the combined investment-grade and high-yield debt:  
☐ 0-3 years ☐ 3-6 years ☐ 6-9 years ☐ 9-12 years ☐ 12-15 years ☐ 15-18 years ☐ 18-21 years ☐ 21 years or more
- c** What duration measure was used to calculate line 19(b)?  
☐ Effective duration ☐ Macaulay duration ☐ Modified duration ☐ Other (specify): \_\_\_\_\_

## SCHEDULE H, line 4j - SCHEDULE OF REPORTABLE TRANSACTIONS

## SCHEDULE H, line 4j - SCHEDULE OF REPORTABLE TRANSACTIONS

T R P P H-R E  
 AMG V, I.  
 EIN 20 2931565  
 PLAN NUMBER 001  
 PLAN YEAR 01/01/2017 TO 12/31/2017

| DESCRIPTION OF ASSET                                        | (A)<br>Total Number<br>of Purchases | (B)<br>Total Number<br>of Sales | (C)<br>Total Value of Purchases | (D)<br>Total Value of Sales | (E)<br>Net Gain/(Loss) |
|-------------------------------------------------------------|-------------------------------------|---------------------------------|---------------------------------|-----------------------------|------------------------|
| Pooled Separate Accounts<br>PRINCIPAL BOND MARKET INDEX SE  | 4                                   |                                 | \$ 519,686.10                   |                             | \$ 0.00                |
| Pooled Separate Accounts<br>PRINCIPAL BOND MARKET INDEX SE  |                                     | 26                              |                                 | \$ 72,052.47                | \$ 1,237.60            |
| Pooled Separate Accounts<br>PRINCIPAL CORE PLUS BOND SEPAR  | 6                                   |                                 | \$ 1,549,998.43                 |                             | \$ 0.00                |
| Pooled Separate Accounts<br>PRINCIPAL CORE PLUS BOND SEPAR  |                                     | 26                              |                                 | \$ 216,157.58               | \$ 5,031.04            |
| Pooled Separate Accounts<br>PRINCIPAL U.S. PROPERTY SEPARA  | 4                                   |                                 | \$ 388,243.68                   |                             | \$ 0.00                |
| Pooled Separate Accounts<br>PRINCIPAL EQUITY INCOME SEPARA  | 4                                   |                                 | \$ 872,902.41                   |                             | \$ 0.00                |
| Pooled Separate Accounts<br>PRINCIPAL EQUITY INCOME SEPARA  |                                     | 1                               |                                 | \$ 33,841.18                | \$ 1,606.69            |
| Pooled Separate Accounts<br>PRINCIPAL LARGE CAP S&P 500 IND | 3                                   |                                 | \$ 373,561.54                   |                             | \$ 0.00                |
| Pooled Separate Accounts<br>PRINCIPAL LARGE CAP S&P 500 IND |                                     | 1                               |                                 | \$ 35,426.82                | \$ 1,881.00            |
| Pooled Separate Accounts<br>PRINCIPAL LARGE CAP VALUE SEPAR | 3                                   |                                 | \$ 437,968.69                   |                             | \$ 0.00                |
| Pooled Separate Accounts<br>PRINCIPAL LARGE CAP VALUE SEPAR |                                     | 2                               |                                 | \$ 469,781.43               | \$ 31,812.74           |
| Pooled Separate Accounts<br>PRINCIPAL LARGE CAP GROWTH I SE | 3                                   |                                 | \$ 875,937.41                   |                             | \$ 0.00                |
| Pooled Separate Accounts<br>PRINCIPAL LARGE CAP GROWTH I SE |                                     | 1                               |                                 | \$ 126,164.81               | \$ 12,117.76           |
| Pooled Separate Accounts<br>PRINCIPAL OVERSEAS SEPARATE AC  | 4                                   |                                 | \$ 722,874.84                   |                             | \$ 0.00                |
| Pooled Separate Accounts<br>PRINCIPAL GLOBAL MULTI-STRATEG  | 4                                   |                                 | \$ 390,286.28                   |                             | \$ 0.00                |

\* Schedule is prepared using the alternative way of reporting (iii) series transactions under DOL Regulation 2520.103-6(d)(2).



**SCHEDULE H, line 4i - SCHEDULE OF ASSETS (HELD AT END OF YEAR)**

T R P P H-R E  
 I.  
 EIN 20 2931565  
 PLAN NUMBER 001  
 PLAN YEAR 01/01/2017 TO 12/31/2017

| (A) | (B)<br>Identity of issuer, borrower,<br>lessor or similar party. | (C)<br>Description of investment including maturity date,<br>rate of interest, collateral, par or maturity value. | (D)<br>Cost     | (E)<br>Current Value |
|-----|------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|-----------------|----------------------|
| *   | Principal Life Insurance Company                                 | Pooled Separate Accounts<br>PRIN BOND MARKET INDEX SA-Z                                                           | \$ 448,871.23   | \$ 460,056.22        |
| *   | Principal Life Insurance Company                                 | Pooled Separate Accounts<br>PRIN CORE PLUS BOND SEP ACCT-Z                                                        | \$ 1,338,871.89 | \$ 1,389,618.57      |
| *   | Principal Life Insurance Company                                 | Pooled Separate Accounts<br>PRIN EQUITY INCOME SA-Z                                                               | \$ 840,667.92   | \$ 932,123.29        |
| *   | Principal Life Insurance Company                                 | Pooled Separate Accounts<br>PRIN GLOBAL MULTI-STR SA-Z                                                            | \$ 390,286.28   | \$ 408,142.50        |
| *   | Principal Life Insurance Company                                 | Pooled Separate Accounts<br>PRIN HIGH YIELD I SEP ACCT-Z                                                          | \$ 256,907.28   | \$ 268,029.10        |
| *   | Principal Life Insurance Company                                 | Pooled Separate Accounts<br>PRIN INTL EMERG MARKETS SA-Z                                                          | \$ 119,499.74   | \$ 146,124.49        |
| *   | Principal Life Insurance Company                                 | Pooled Separate Accounts<br>PRIN INTL SMALLCAP SEP ACCT-Z                                                         | \$ 120,807.08   | \$ 147,550.86        |
| *   | Principal Life Insurance Company                                 | Pooled Separate Accounts<br>PRIN LARGECAP GROWTH I SA-Z                                                           | \$ 761,890.36   | \$ 932,854.15        |
| *   | Principal Life Insurance Company                                 | Pooled Separate Accounts<br>PRIN LGCP S&P 500 INDEX SA-Z                                                          | \$ 340,015.72   | \$ 391,119.02        |
| *   | Principal Life Insurance Company                                 | Pooled Separate Accounts<br>PRIN MIDCAP GROWTH III SA-Z                                                           | \$ 117,375.60   | \$ 137,371.76        |
| *   | Principal Life Insurance Company                                 | Pooled Separate Accounts<br>PRIN MIDCAP VALUE III SA-Z                                                            | \$ 120,595.95   | \$ 135,427.42        |
| *   | Principal Life Insurance Company                                 | Pooled Separate Accounts<br>PRIN SMCAP GROWTH I SEP ACCT-Z                                                        | \$ 54,378.96    | \$ 65,401.70         |
| *   | Principal Life Insurance Company                                 | Pooled Separate Accounts<br>PRIN SMCAP VALUE II SEP ACCT-Z                                                        | \$ 58,629.83    | \$ 64,132.28         |
| *   | Principal Life Insurance Company                                 | Pooled Separate Accounts<br>PRINCIPAL DIV REAL ASSET SA-Z                                                         | \$ 128,762.79   | \$ 138,172.57        |
| *   | Principal Life Insurance Company                                 | Pooled Separate Accounts<br>PRINCIPAL OVERSEAS SEP ACCT-Z                                                         | \$ 722,874.84   | \$ 829,731.64        |

SCHEDULE H, line 4i - SCHEDULE OF ASSETS (HELD AT END OF YEAR)

T R P P H-R E  
I.  
EIN 20 2931565  
PLAN NUMBER 001  
PLAN YEAR 01/01/2017 TO 12/31/2017

| (A) | (B)<br>Identity of issuer, borrower,<br>lessor or similar party. | (C)<br>Description of investment including maturity date,<br>rate of interest, collateral, par or maturity value. | (D)<br>Cost   | (E)<br>Current Value |
|-----|------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------|---------------|----------------------|
| *   | Principal Life Insurance Company                                 | Pooled Separate Accounts<br>PRINCIPAL U.S. PROPERTY SA-Z                                                          | \$ 388,243.68 | \$ 412,593.92        |
|     |                                                                  |                                                                                                                   |               |                      |
|     |                                                                  |                                                                                                                   |               |                      |
|     |                                                                  |                                                                                                                   |               |                      |
|     |                                                                  |                                                                                                                   |               |                      |
|     |                                                                  |                                                                                                                   |               |                      |
|     |                                                                  |                                                                                                                   |               |                      |
|     |                                                                  |                                                                                                                   |               |                      |
|     |                                                                  |                                                                                                                   |               |                      |
|     |                                                                  |                                                                                                                   |               |                      |
|     |                                                                  |                                                                                                                   |               |                      |
|     |                                                                  |                                                                                                                   |               |                      |
|     |                                                                  |                                                                                                                   |               |                      |
|     |                                                                  |                                                                                                                   |               |                      |
|     |                                                                  |                                                                                                                   |               |                      |
|     |                                                                  |                                                                                                                   |               |                      |
|     |                                                                  |                                                                                                                   |               |                      |
|     |                                                                  |                                                                                                                   |               |                      |

Schedule SB, Line 26 - Schedule of Active Participant Data  
Restated Pension Plan for Hourly-Rated Employees of AMG Vanadium LLC  
EIN 20-2931565 Plan No. 001

| Form 5500 - Schedule of Active Participation Data |                           |            |          |            |          | Valuation Date 01/01/2017 |          |            |          |            |          |            |          |            |          |            |          |            |          |            |
|---------------------------------------------------|---------------------------|------------|----------|------------|----------|---------------------------|----------|------------|----------|------------|----------|------------|----------|------------|----------|------------|----------|------------|----------|------------|
| Attained Age                                      | YEARS OF CREDITED SERVICE |            |          |            |          |                           |          |            |          |            |          |            |          |            |          |            |          |            |          |            |
|                                                   | Under 1                   |            | 1 to 4   |            | 5 to 9   |                           | 10 to 14 |            | 15 to 19 |            | 20 to 24 |            | 25 to 29 |            | 30 to 34 |            | 35 to 39 |            | 40 & up  |            |
|                                                   | Avg. No.                  | Avg. Comp. | Avg. No. | Avg. Comp. | Avg. No. | Avg. Comp.                | Avg. No. | Avg. Comp. | Avg. No. | Avg. Comp. | Avg. No. | Avg. Comp. | Avg. No. | Avg. Comp. | Avg. No. | Avg. Comp. | Avg. No. | Avg. Comp. | Avg. No. | Avg. Comp. |
| Under 25                                          | 0                         |            | 0        |            | 0        |                           | 0        |            | 0        |            | 0        |            | 0        |            | 0        |            | 0        |            | 0        |            |
| 25 to 29                                          | 0                         |            | 0        |            | 0        |                           | 0        |            | 0        |            | 0        |            | 0        |            | 0        |            | 0        |            | 0        |            |
| 30 to 34                                          | 0                         |            | 0        |            | 1        |                           | 0        |            | 0        |            | 0        |            | 0        |            | 0        |            | 0        |            | 0        |            |
| 35 to 39                                          | 0                         |            | 0        |            | 1        |                           | 0        |            | 0        |            | 0        |            | 0        |            | 0        |            | 0        |            | 0        |            |
| 40 to 44                                          | 0                         |            | 0        |            | 0        |                           | 5        |            | 0        |            | 0        |            | 0        |            | 0        |            | 0        |            | 0        |            |
| 45 to 49                                          | 0                         |            | 3        |            | 3        |                           | 1        |            | 0        |            | 0        |            | 3        |            | 0        |            | 0        |            | 0        |            |
| 50 to 54                                          | 0                         |            | 0        |            | 0        |                           | 1        |            | 0        |            | 2        |            | 2        |            | 0        |            | 0        |            | 0        |            |
| 55 to 59                                          | 0                         |            | 1        |            | 2        |                           | 2        |            | 0        |            | 0        |            | 3        |            | 2        |            | 1        |            | 0        |            |
| 60 to 64                                          | 0                         |            | 0        |            | 1        |                           | 3        |            | 0        |            | 0        |            | 2        |            | 0        |            | 0        |            | 0        |            |
| 65 to 69                                          | 0                         |            | 0        |            | 0        |                           | 1        |            | 0        |            | 0        |            | 0        |            | 0        |            | 0        |            | 0        |            |
| 70 & up                                           | 0                         |            | 0        |            | 0        |                           | 0        |            | 0        |            | 0        |            | 0        |            | 0        |            | 0        |            | 0        |            |

Schedule SB, Part V - Statement of Actuarial Assumptions/Methods  
Restated Pension Plan for Hourly-Rated Employees of AMG Vanadium LLC  
EIN 20-2931565 Plan No. 001

Assumptions prescribed by law

|                  |                                                                                      |
|------------------|--------------------------------------------------------------------------------------|
| <b>Mortality</b> | During benefit payment period                                                        |
|                  | IRS Prescribed Mortality - Optional Combined Table for Small Plans, male and female. |
|                  | Before benefit payment period                                                        |
|                  | IRS Prescribed Mortality - Optional Combined Table for Small Plans, male and female. |

Assumptions selected by actuary

|                         |                                                                                                                                                                                                                                                                               |
|-------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Inflation</b>        | 2.00% increase per year.                                                                                                                                                                                                                                                      |
|                         | See Long-Term Capital Market Assumptions link.                                                                                                                                                                                                                                |
| <b>Asset return</b>     | 6.50% for the current plan year.                                                                                                                                                                                                                                              |
|                         | The asset return is developed as a weighted average rate based on the target asset allocation of the plan and the long-term capital market assumptions. The calculated return is on an arithmetic mean basis. For details, see the Long-Term Capital Market Assumptions link. |
| <b>Expected expense</b> | The expected expense included in target normal cost is an estimate based on prior year expenses paid from plan assets. This is the best estimate available of upcoming year's expenses.                                                                                       |
| <b>Retirement</b>       | Rates for active participants vary based on years of service. Rates for sample years of service are shown below:                                                                                                                                                              |

| Over 30 |          |       | Over 30 |                        |                        |
|---------|----------|-------|---------|------------------------|------------------------|
| Age     | 15 years | years | Age     | 15 years               | years                  |
| 55      | 0.0%     | 5.0%  | 61      | 5.0%                   | 5.0%                   |
| 56      | 0.0%     | 5.0%  | 62      | 25.0%                  | 20.0%                  |
| 57      | 0.0%     | 5.0%  | 63      | 25.0%                  | 10.0%                  |
| 58      | 0.0%     | 5.0%  | 64      | 25.0%                  | 10.0%                  |
| 59      | 0.0%     | 5.0%  | 65      | 75.0%                  | 75.0%                  |
| 60      | 5.0%     | 5.0%  | 66-69   | 50.0%                  | 50.0%                  |
|         |          |       | 70+     | remaining participants | remaining participants |

Inactive participants are assumed to retire at age 65.

Due to our short tenure as actuaries on this plan, we don't have the plan experience necessary to set this assumption and we are relying on the assumptions set by the prior actuary. This assumption is reasonable with the plan's design and as we gain experience, we will continue to monitor and make the appropriate adjustments to this assumption in the future.

## Disability

Selected rates of disability are shown below:

| Age | Male  | Female |
|-----|-------|--------|
| 25  | 0.11% | 0.06%  |
| 35  | 0.20% | 0.17%  |
| 45  | 0.44% | 0.37%  |
| 55  | 1.29% | 0.98%  |
| 65  | 0.00% | 0.00%  |

Due to our short tenure as actuaries on this plan, we don't have the plan experience necessary to set this assumption and we are relying on the assumptions set by the prior actuary. This assumption is reasonable with the plan's design and as we gain experience, we will continue to monitor and make the appropriate adjustments to this assumption in the future

## Marriage

75% married; husbands are 3 years older than wives.

This assumption does not have material impact on the results of this report and has been selected based on our best estimate of active workforce.

## Withdrawal

Selected rates of withdrawal are shown below:

| Age | Rate of withdrawal |
|-----|--------------------|
| 25  | 3.26%              |
| 35  | 1.50%              |
| 45  | 1.00%              |
| 55  | 1.00%              |
| 65  | 0.00%              |

Due to our short tenure as actuaries on this plan, we don't have the plan experience necessary to set this assumption and we are relying on the assumptions set by the prior actuary. This assumption is reasonable with the plan's design and as we gain experience, we will continue to monitor and make the appropriate adjustments to this assumption in the future

## Form of benefit

Participants are assumed to receive their benefits on the normal form at the assumed retirement age.

Methods prescribed by law

**Liability measure**

Funding target is the present value of the benefits accrued on the valuation date.

Target Normal Cost is based on benefits expected to accrue during the current plan year and includes an estimate of plan expenses for the year.

**HCE benefit payment restrictions**

A ratio of the plan assets and accrued liability is used to determine if restrictions apply. Assets and accrued liability are as of the valuation date and are reduced by:

- any retiree benefit index or floor
- amounts for HCEs who were previously restricted
- an amount for the retiring HCE

The estimated HCE ratio illustrated in this report is based on the market value of plan assets (excluding late deposits) and funding target as of the valuation date. The funding target uses the non-stabilized interest rates as defined in IRC §430(h)(2)(C)(iv). Other assumptions or methods could be used.

Methods selected by plan sponsor

**Asset method**

The asset valuation method is prescribed by law for plans that elect to use a value other than market value.

For each of the preceding two years, an expected value of assets at the end of the year is compared to the end of year market value. The resulting gain or loss is recognized evenly over three plan years.

The expected value includes contributions, distributions, any deducted administrative expenses, and expected earnings (based on the lesser of the assumed interest rate or the maximum allowable rate). The deferred gains and losses are added to the current market value and then restricted to no more than 110% and no less than 90% of that market value.

When actual returns exceed the assumed return, the actuarial value of assets will lag below market value. The lag and the smoothing effect are limited since the value must be within 10% of market value.

**Segment rates**

24-month average with no weighting to prior law basis. Use rates where December is the last month included in the average.

**PBGC premium basis**

Variable rate premiums are calculated using census, market value of assets and the one-month average of corporate bond rates in effect on the valuation date. You elected this Standard interest method for the 01/01/2014 plan year and the method must be used for five years before a change can be made.

Schedule SB, Part V - Statement of Actuarial Assumptions/Methods  
Restated Pension Plan for Hourly-Rated Employees of AMG Vanadium LLC  
EIN 20-2931565 Plan No. 001

Methods elected by actuary

|                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Retirees</b>        | Assets and liabilities for current and future retirees are included.                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Vested benefits</b> | <p>A benefit is included in vested benefits if it meets the requirements under PBGC. The benefit is multiplied by the participant's vesting percentage applicable to each benefit on the valuation date.</p> <p>The following ancillary benefits are always treated as nonvested: disability benefits payable to retirement age unless in pay status, pre-retirement death benefits in excess of the survivor annuity death benefit and post retirement death benefits for non-retired participants except as noted in the Plan provisions.</p> |

Assumptions and methods elected by actuary - plan accounting (ASC 960)

With the exceptions below, all assumptions and methods are the same as those used in determining your plan's regular funding target and target normal cost.

|                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Mortality</b>                               | <p>Rates</p> <p>Adjusted RP-2014 total dataset mortality (baseline mortality table as of 2006 based on experience study data for private pension plans underlying RP-2014).</p> <p>Mortality improvement (MI)</p> <p>MP-2016.</p> <p>During benefit payment period</p> <p>Above table with generational MI, Annuitant, male and female.</p> <p>Before benefit payment period</p> <p>Above table with generational MI, Non-annuitant, male and female.</p> <p>The Society of Actuaries is an actuarial organization that periodically reviews mortality data and publishes mortality tables and improvement scales. This table and improvement scale is based on the most current data available published by the SOA in October 2016.</p> |
| <b>Interest rate used to value liabilities</b> | <p>4.15%</p> <p>The interest rate used is the same as the discount rate used for the ASC715 accounting results as of 12/31/2016.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

**Treatment of administrative expenses**

No adjustments are made for administrative expenses, either through a reduction in the discount rate or by calculating a present value of future expenses.

Plan sponsors may change their administrative expense handling at any time. Our approach provides consistent handling of ASC 960 liabilities from year to year, whether expenses are paid with plan assets or directly by the employer.

Note - expenses paid with plan assets are required to be included in funding normal cost. As a result, the plan is reimbursed annually through required funding. Exception – contributions are not required due to assets sufficiently in excess of liabilities to fund both expenses and normal cost. In this case, administrative expenses are taken from the excess assets.

|                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                  |                                                                                           |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| <b>SCHEDULE SB</b><br><b>(Form 5500)</b><br><br><small>Department of the Treasury<br/>Internal Revenue Service</small><br><br><small>Department of Labor<br/>Employee Benefits Security Administration</small><br><br><small>Pension Benefit Guaranty Corporation</small> | <b>Single-Employer Defined Benefit Plan</b><br><b>Actuarial Information</b><br><br>This schedule is required to be filed under section 104 of the Employee Retirement Income Security Act of 1974 (ERISA) and section 6059 of the Internal Revenue Code (the Code).<br><br><b>File as an attachment to Form 5500 or 5500-SF.</b> | OMB No. 1210-0110<br><br><b>2017</b><br><br><b>This Form is Open to Public Inspection</b> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|

For calendar plan year 2017 or fiscal plan year beginning 01/01/2017 and ending 12/31/2017

▶ Round off amounts to nearest dollar.

▶ Caution: A penalty of \$1,000 will be assessed for late filing of this report unless reasonable cause is established.

|                                                                                                                                                         |                                                             |     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------|-----|
| <b>A Name of plan</b><br>The Restated Pension Plan for Hourly-Rated Employees of AMG Vanadium, Inc.                                                     | <b>B Three-digit plan number (PN)</b> ▶                     | 001 |
| <b>C Plan sponsor's name as shown on line 2a of Form 5500 or 5500-SF</b><br>AMG Vanadium LLC                                                            | <b>D Employer Identification Number (EIN)</b><br>20-2931565 |     |
| <b>E Type of plan:</b> <input checked="" type="checkbox"/> Single <input type="checkbox"/> Multiple-A <input type="checkbox"/> Multiple-B               |                                                             |     |
| <b>F Prior year plan size:</b> <input type="checkbox"/> 100 or fewer <input checked="" type="checkbox"/> 101-500 <input type="checkbox"/> More than 500 |                                                             |     |

| Part I Basic Information |                                                                                                                                                                                                          |                            |                           |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|---------------------------|
| <b>1</b>                 | Enter the valuation date: Month <u>01</u> Day <u>01</u> Year <u>2017</u>                                                                                                                                 |                            |                           |
| <b>2</b>                 | Assets:                                                                                                                                                                                                  |                            |                           |
|                          | a Market value .....                                                                                                                                                                                     | <b>2a</b>                  | 6318304                   |
|                          | b Actuarial value .....                                                                                                                                                                                  | <b>2b</b>                  | 6425625                   |
| <b>3</b>                 | Funding target/participant count breakdown                                                                                                                                                               | (1) Number of participants | (2) Vested Funding Target |
|                          | a For retired participants and beneficiaries receiving payment .....                                                                                                                                     | 67                         | 3312848                   |
|                          | b For terminated vested participants .....                                                                                                                                                               | 25                         | 446156                    |
|                          | c For active participants .....                                                                                                                                                                          | 40                         | 1128054                   |
|                          | d Total .....                                                                                                                                                                                            | 132                        | 4887058                   |
| <b>4</b>                 | If the plan is in at-risk status, check the box and complete lines (a) and (b)..... <input type="checkbox"/>                                                                                             |                            |                           |
|                          | a Funding target disregarding prescribed at-risk assumptions .....                                                                                                                                       | <b>4a</b>                  |                           |
|                          | b Funding target reflecting at-risk assumptions, but disregarding transition rule for plans that have been in at-risk status for fewer than five consecutive years and disregarding loading factor ..... | <b>4b</b>                  |                           |
| <b>5</b>                 | Effective interest rate .....                                                                                                                                                                            | <b>5</b>                   | 5.88 %                    |
| <b>6</b>                 | Target normal cost .....                                                                                                                                                                                 | <b>6</b>                   | 146295                    |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                         |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|
| <b>Statement by Enrolled Actuary</b><br><small>To the best of my knowledge, the information supplied in this schedule and accompanying schedules, statements and attachments, if any, is complete and accurate. Each prescribed assumption was applied in accordance with applicable law and regulations. In my opinion, each other assumption is reasonable (taking into account the experience of the plan and reasonable expectations) and such other assumptions, in combination, offer my best estimate of anticipated experience under the plan.</small> |                                                                                                                         |
| <b>SIGN HERE</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | <div style="text-align: center;"> <br/>         Signature of actuary       </div>                                       |
| David A. Stocklas                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <div style="text-align: center;"> <u>8-28-2018</u><br/>         Date       </div>                                       |
| Principal Financial Group                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | <div style="text-align: center;">         1705460<br/>         Most recent enrollment number       </div>               |
| PO Box 9394 Des Moines, IA 50306-9394                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <div style="text-align: center;">         412-394-9380<br/>         Telephone number (including area code)       </div> |
| Address of the firm                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                         |

**Part II Beginning of Year Carryover and Prefunding Balances**

|                                                                                                                                                                      | (a) Carryover balance | (b) Prefunding balance |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|------------------------|
| <b>7</b> Balance at beginning of prior year after applicable adjustments (line 13 from prior year) .....                                                             | 0                     | 0                      |
| <b>8</b> Portion elected for use to offset prior year's funding requirement (line 35 from prior year) .....                                                          | 0                     | 0                      |
| <b>9</b> Amount remaining (line 7 minus line 8) .....                                                                                                                | 0                     | 0                      |
| <b>10</b> Interest on line 9 using prior year's actual return of <u>8.45</u> % .....                                                                                 | 0                     | 0                      |
| <b>11</b> Prior year's excess contributions to be added to prefunding balance:                                                                                       |                       |                        |
| <b>a</b> Present value of excess contributions (line 38a from prior year) .....                                                                                      |                       | 0                      |
| <b>b(1)</b> Interest on the excess, if any, of line 38a over line 38b from prior year Schedule SB, using prior year's effective interest rate of <u>6.08</u> % ..... |                       | 0                      |
| <b>b(2)</b> Interest on line 38b from prior year Schedule SB, using prior year's actual return .....                                                                 |                       | 0                      |
| <b>c</b> Total available at beginning of current plan year to add to prefunding balance .....                                                                        |                       | 0                      |
| <b>d</b> Portion of (c) to be added to prefunding balance .....                                                                                                      |                       | 0                      |
| <b>12</b> Other reductions in balances due to elections or deemed elections .....                                                                                    | 0                     | 0                      |
| <b>13</b> Balance at beginning of current year (line 9 + line 10 + line 11d – line 12) .....                                                                         | 0                     | 0                      |

**Part III Funding Percentages**

|                                                                                                                                                                            |           |          |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|----------|
| <b>14</b> Funding target attainment percentage .....                                                                                                                       | <b>14</b> | 125.39 % |
| <b>15</b> Adjusted funding target attainment percentage .....                                                                                                              | <b>15</b> | 125.39 % |
| <b>16</b> Prior year's funding percentage for purposes of determining whether carryover/prefunding balances may be used to reduce current year's funding requirement ..... | <b>16</b> | 132.64 % |
| <b>17</b> If the current value of the assets of the plan is less than 70 percent of the funding target, enter such percentage. ....                                        | <b>17</b> | %        |

**Part IV Contributions and Liquidity Shortfalls**

| <b>18</b> Contributions made to the plan for the plan year by employer(s) and employees: |                                   |                                 |                          |                                   |                                           |
|------------------------------------------------------------------------------------------|-----------------------------------|---------------------------------|--------------------------|-----------------------------------|-------------------------------------------|
| (a) Date<br>(MM-DD-YYYY)                                                                 | (b) Amount paid by<br>employer(s) | (c) Amount paid by<br>employees | (a) Date<br>(MM-DD-YYYY) | (b) Amount paid by<br>employer(s) | (c) Amount paid by<br>employees           |
|                                                                                          |                                   |                                 |                          |                                   |                                           |
|                                                                                          |                                   |                                 |                          |                                   |                                           |
|                                                                                          |                                   |                                 |                          |                                   |                                           |
|                                                                                          |                                   |                                 |                          |                                   |                                           |
|                                                                                          |                                   |                                 |                          |                                   |                                           |
|                                                                                          |                                   |                                 |                          |                                   |                                           |
| <b>Totals ▶</b>                                                                          |                                   |                                 | <b>18(b)</b>             | 0                                 | <b>18(c)</b> style="text-align: right;">0 |

|                                                                                                                                      |                                                                     |
|--------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| <b>19</b> Discounted employer contributions – see instructions for small plan with a valuation date after the beginning of the year: |                                                                     |
| <b>a</b> Contributions allocated toward unpaid minimum required contributions from prior years. ....                                 | <b>19a</b> style="text-align: right;">0                             |
| <b>b</b> Contributions made to avoid restrictions adjusted to valuation date .....                                                   | <b>19b</b> style="text-align: right;">0                             |
| <b>c</b> Contributions allocated toward minimum required contribution for current year adjusted to valuation date .....              | <b>19c</b> style="text-align: right;">0                             |
| <b>20</b> Quarterly contributions and liquidity shortfalls:                                                                          |                                                                     |
| <b>a</b> Did the plan have a "funding shortfall" for the prior year? .....                                                           | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| <b>b</b> If line 20a is "Yes," were required quarterly installments for the current year made in a timely manner? .....              | <input type="checkbox"/> Yes <input type="checkbox"/> No            |
| <b>c</b> If line 20a is "Yes," see instructions and complete the following table as applicable:                                      |                                                                     |

## Liquidity shortfall as of end of quarter of this plan year

| (1) 1st | (2) 2nd | (3) 3rd | (4) 4th |
|---------|---------|---------|---------|
|         |         |         |         |

**Part V Assumptions Used to Determine Funding Target and Target Normal Cost**

|                                                                                                                                                                                              |                        |                        |                        |                                                     |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|------------------------|------------------------|-----------------------------------------------------|
| <b>21</b> Discount rate:                                                                                                                                                                     |                        |                        |                        |                                                     |
| <b>a</b> Segment rates:                                                                                                                                                                      | 1st segment:<br>4.16 % | 2nd segment:<br>5.72 % | 3rd segment:<br>6.48 % | <input type="checkbox"/> N/A, full yield curve used |
| <b>b</b> Applicable month (enter code) .....                                                                                                                                                 |                        |                        |                        | <b>21b</b> 0                                        |
| <b>22</b> Weighted average retirement age .....                                                                                                                                              |                        |                        |                        | <b>22</b> 63                                        |
| <b>23</b> Mortality table(s) (see instructions) <input checked="" type="checkbox"/> Prescribed - combined <input type="checkbox"/> Prescribed - separate <input type="checkbox"/> Substitute |                        |                        |                        |                                                     |

**Part VI Miscellaneous Items**

|                                                                                                                                                                        |                                                                     |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------|
| <b>24</b> Has a change been made in the non-prescribed actuarial assumptions for the current plan year? If "Yes," see instructions regarding required attachment ..... | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| <b>25</b> Has a method change been made for the current plan year? If "Yes," see instructions regarding required attachment .....                                      | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| <b>26</b> Is the plan required to provide a Schedule of Active Participants? If "Yes," see instructions regarding required attachment .....                            | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| <b>27</b> If the plan is subject to alternative funding rules, enter applicable code and see instructions regarding attachment .....                                   | <b>27</b>                                                           |

**Part VII Reconciliation of Unpaid Minimum Required Contributions For Prior Years**

|                                                                                                                                      |           |   |
|--------------------------------------------------------------------------------------------------------------------------------------|-----------|---|
| <b>28</b> Unpaid minimum required contributions for all prior years .....                                                            | <b>28</b> | 0 |
| <b>29</b> Discounted employer contributions allocated toward unpaid minimum required contributions from prior years (line 19a) ..... | <b>29</b> | 0 |
| <b>30</b> Remaining amount of unpaid minimum required contributions (line 28 minus line 29) .....                                    | <b>30</b> | 0 |

**Part VIII Minimum Required Contribution For Current Year**

|                                                                                                                                                                                      |                     |                    |               |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|--------------------|---------------|
| <b>31</b> Target normal cost and excess assets (see instructions):                                                                                                                   |                     |                    |               |
| <b>a</b> Target normal cost (line 6) .....                                                                                                                                           | <b>31a</b>          | 146295             |               |
| <b>b</b> Excess assets, if applicable, but not greater than line 31a .....                                                                                                           | <b>31b</b>          | 146295             |               |
| <b>32</b> Amortization installments:                                                                                                                                                 | Outstanding Balance | Installment        |               |
| <b>a</b> Net shortfall amortization installment .....                                                                                                                                | 0                   | 0                  |               |
| <b>b</b> Waiver amortization installment .....                                                                                                                                       | 0                   | 0                  |               |
| <b>33</b> If a waiver has been approved for this plan year, enter the date of the ruling letter granting the approval (Month _____ Day _____ Year _____) and the waived amount ..... | <b>33</b>           |                    |               |
| <b>34</b> Total funding requirement before reflecting carryover/prefunding balances (lines 31a - 31b + 32a + 32b - 33) .....                                                         | <b>34</b>           | 0                  |               |
|                                                                                                                                                                                      | Carryover balance   | Prefunding balance | Total balance |
| <b>35</b> Balances elected for use to offset funding requirement .....                                                                                                               | 0                   | 0                  | 0             |
| <b>36</b> Additional cash requirement (line 34 minus line 35) .....                                                                                                                  | <b>36</b>           | 0                  |               |
| <b>37</b> Contributions allocated toward minimum required contribution for current year adjusted to valuation date (line 19c) .....                                                  | <b>37</b>           | 0                  |               |
| <b>38</b> Present value of excess contributions for current year (see instructions)                                                                                                  |                     |                    |               |
| <b>a</b> Total (excess, if any, of line 37 over line 36) .....                                                                                                                       | <b>38a</b>          | 0                  |               |
| <b>b</b> Portion included in line 38a attributable to use of prefunding and funding standard carryover balances .....                                                                | <b>38b</b>          | 0                  |               |
| <b>39</b> Unpaid minimum required contribution for current year (excess, if any, of line 36 over line 37) .....                                                                      | <b>39</b>           | 0                  |               |
| <b>40</b> Unpaid minimum required contributions for all years .....                                                                                                                  | <b>40</b>           | 0                  |               |

**Part IX Pension Funding Relief Under Pension Relief Act of 2010 (See Instructions)**

|                                                                                                |                                                                                                                         |  |  |
|------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------|--|--|
| <b>41</b> If an election was made to use PRA 2010 funding relief for this plan:                |                                                                                                                         |  |  |
| <b>a</b> Schedule elected .....                                                                | <input type="checkbox"/> 2 plus 7 years <input type="checkbox"/> 15 years                                               |  |  |
| <b>b</b> Eligible plan year(s) for which the election in line 41a was made .....               | <input type="checkbox"/> 2008 <input type="checkbox"/> 2009 <input type="checkbox"/> 2010 <input type="checkbox"/> 2011 |  |  |
| <b>42</b> Amount of acceleration adjustment .....                                              | <b>42</b>                                                                                                               |  |  |
| <b>43</b> Excess installment acceleration amount to be carried over to future plan years ..... | <b>43</b>                                                                                                               |  |  |

Schedule SB, Line 22 - Description of Weighted Average Retirement Age  
Restated Pension Plan for Hourly-Rated Employees of AMG Vanadium LLC  
EIN 20-2931565 Plan No. 001

The weighted average retirement age is weighted by the expected percentage of active participants retiring at each age. The retirement rate reflects only those participants who meet retirement eligibility. An active participant working past assumed retirement age is expected to retire at current age.

| (1)<br>Age | (2)<br>Expected<br>Active<br>Headcount | (3)<br>Retirement<br>Rate | (4)<br>Expected<br>Retirements<br>(2)*(3) | (5)<br>Weighted<br>Age<br>(1)*(4) |
|------------|----------------------------------------|---------------------------|-------------------------------------------|-----------------------------------|
| 51         | 17.1864                                | 0.0135                    | 0.2328                                    | 11.8711                           |
| 52         | 16.6218                                | 0.0158                    | 0.2626                                    | 13.6553                           |
| 53         | 16.0256                                | 0.0185                    | 0.2972                                    | 15.7530                           |
| 54         | 18.3938                                | 0.0052                    | 0.0961                                    | 5.1874                            |
| 55         | 18.8839                                | 0.0253                    | 0.4782                                    | 26.3035                           |
| 56         | 18.9677                                | 0.0347                    | 0.6579                                    | 36.8437                           |
| 57         | 19.8728                                | 0.0159                    | 0.3166                                    | 18.0481                           |
| 58         | 21.0825                                | 0.0140                    | 0.2954                                    | 17.1340                           |
| 59         | 23.2518                                | 0.0329                    | 0.7652                                    | 45.1492                           |
| 60         | 24.9025                                | 0.0448                    | 1.1166                                    | 66.9944                           |
| 61         | 26.2154                                | 0.0409                    | 1.0735                                    | 65.4820                           |
| 62         | 25.5365                                | 0.1882                    | 4.8072                                    | 298.0439                          |
| 63         | 21.1166                                | 0.0738                    | 1.5582                                    | 98.1645                           |
| 64         | 19.0104                                | 0.0719                    | 1.3660                                    | 87.4235                           |
| 65         | 17.1260                                | 0.7500                    | 12.8445                                   | 834.8927                          |
| 66         | 4.1271                                 | 0.5000                    | 2.0636                                    | 136.1958                          |
| 67         | 3.0203                                 | 0.5000                    | 1.5101                                    | 101.1800                          |
| 68         | 1.4748                                 | 0.5000                    | 0.7374                                    | 50.1424                           |
| 69         | 0.7186                                 | 0.5000                    | 0.3593                                    | 24.7929                           |
| 70         | 0.3492                                 | 1.0000                    | 0.3492                                    | 24.4432                           |
| Total      |                                        |                           | 31.1876                                   | 1,977.7005                        |
| Average    |                                        |                           |                                           | 63.41                             |

Schedule SB, Part V - Summary of Plan Provisions  
Restated Pension Plan for Hourly-Rated Employees of AMG Vanadium LLC  
EIN 20-2931565 Plan No. 001

This report reflects the maximum benefit limits under Internal Revenue Code (IRC) Section 415 and maximum compensation limits under IRC Section 401 in effect on the first day of each plan year.

The following is a summary of plan provisions and does not alter the intent or meanings of the provisions contained in the contract or plan document. This report reflects the provisions of the plan review signed 05/22/2017.

Plan eligibility

**Class** Employees of AMG Aluminum North America, LLC at Cambridge, Ohio represented for collective bargaining purposes by United Steelworkers of America, AFL-CIO, Local No. 5050.

Participation is frozen after April 15, 2014.

Normal retirement benefit

**Age** Attained age 65 with 5 years of vesting service.

**Form** Monthly annuity payable for life (optional forms may be elected in advance of retirement).

**Amount (accrued benefit)** For accrual service before April 16, 2014, \$23 multiplied by accrual service up to 20 years and \$30 multiplied by accrual service in excess of 20 years.  
For accrual service on and after April 16, 2014, \$30 multiplied by accrual service up to 20 years and \$37 multiplied by accrual service in excess of 20 years.

Early retirement benefit

**Age** Attained age 60.

**Service** Completed 15 years of vesting service.

**Form** Same as normal retirement benefit.

**Amount** Accrued benefit on early retirement date reduced to recognize that the early retirement date precedes normal retirement date.  
Accrued benefit is unreduced at the earlier of attained age 62 with 15 years or 30 years of vesting service.

Late retirement benefit

**Age** No maximum age.

**Form** Same as normal retirement benefit.

**Amount** Accrued benefit on late retirement date.

Termination benefit

|                           |                                                                                      |
|---------------------------|--------------------------------------------------------------------------------------|
| <b>Vesting percentage</b> | 100% after five years of vesting service.                                            |
| <b>Form</b>               | Same as normal retirement benefit with income deferred until normal retirement date. |
| <b>Amount</b>             | Accrued benefit on date of termination multiplied by the vesting percentage.         |

Disability benefit

|                    |                                                                                                                                            |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Eligibility</b> |                                                                                                                                            |
| <b>Service</b>     | 15 years of vesting service.                                                                                                               |
| <b>Form</b>        | Immediate monthly income payable until normal retirement, death, or recovery and a deferred annuity payable at the normal retirement date. |
| <b>Amount</b>      | Accrued benefit on date of disability.                                                                                                     |

Survivor annuity death benefit (a vested benefit)

|                    |                                                                                                                                                                                                                                                                                                                                                                                                             |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Eligibility</b> | Qualified married participant fully or partially vested in an accrued benefit.                                                                                                                                                                                                                                                                                                                              |
| <b>Form</b>        | Monthly annuity payable to spouse, deferred to participant's earliest retirement date if later than the date of death.                                                                                                                                                                                                                                                                                      |
| <b>Amount</b>      | <p>If death occurs, the amount paid to the surviving spouse is equal to the amount that would have been paid had the participant terminated employment on the date of death and survived to his/her earliest retirement age, retired with a qualified joint and 50% survivor annuity in effect, then died the next day.</p> <p>Benefit is reduced for each year the employee elects this death benefit.</p> |

Supplemental surviving spouse death benefit (a vested benefit)

|                |                                                                                                        |
|----------------|--------------------------------------------------------------------------------------------------------|
| <b>Service</b> | 10 years of vesting service.                                                                           |
| <b>Form</b>    | Monthly annuity payable immediately to spouse on first day of the month following participant's death. |
| <b>Amount</b>  | 50% of participant's accrued benefit as though participant had retired on the date of death.           |

#### Definitions

**Optional forms of benefit payments**

The optional forms of benefit payments are:

- Monthly annuity payable for life.
- Monthly annuity payable as a survivorship life annuity with survivorship percentages of 50, 75, or 100.

The optional form conversion basis is 5.0% interest and the 1976-1980 Group Mortality Table (1971 GAM projected to 1978 with Scale E).

The optional form conversion basis uses the applicable interest rate and applicable mortality table as set forth in Code Section 417 for lump sum payments. The applicable interest rate uses the first calendar month preceding the first day of the stability period which is the plan year.

#### Changes in Principal Eligibility or Benefit Provisions

There have been no changes in principal eligibility or benefit provisions since the last valuation.

#### Significant Event

The enrolled actuary has not been made aware that any significant events have occurred during the year.

Schedule SB, Line 25 – Change in Method  
Restated Pension Plan for Hourly-Rated Employees of AMG Vanadium LLC  
EIN 20-2931565 Plan No. 001

A change in funding method has occurred since last year due to a change in the enrolled actuary and the business organization providing actuarial services to the plan. This change meets the automatic approval requirements under Announcement 2010-3, I.R.B. 2010-4.

Schedule SB, Line 24 – Change in Actuarial Assumptions  
Restated Pension Plan for Hourly-Rated Employees of AMG Vanadium LLC  
EIN 20-2931565 Plan No. 001

Certain non-prescribed assumptions have been changed since last year. These assumptions were changed to better reflect the anticipated experience of your plan.

The assumed asset return for the current year has decreased from 7.50% to 6.50%. This rate is used in the calculation of the actuarial value of plan assets.

The marriage assumption has changed from 80% to assume 75% of males and females are married.